SECTION 10

BODY

CONTENTS OF THIS SECTION

| | Page |
|--|-------|
| Corvair 500, 600, 700 and 900 Series. | 10-1 |
| Corvair Convertible (Models 667 and 967) | 10-25 |
| Corvair 95 and Greenbrier | 10-51 |
| Special Tools | 10-56 |

CORVAIR 500, 600, 700 and 900

INDEX

| | Page |
|--|------|
| General Description | 10-2 |
| Service Operations | 10-2 |
| Cleaning Soft Trim | 10-2 |
| Procedure for Cleaning Fabrics with Volatile | |
| Cleaners | 10-2 |
| Cleaners. Procedure for Cleaning Fabrics with Syn- | |
| thetic Detergents. | 10-3 |
| Precautions for Cleaning Fabrics | 10-3 |
| Procedure for Cleaning Genuine Leather and | 100 |
| Coated Fabrics | 10-3 |
| Coated Fabrics Procedure for Cleaning Polyurethane Foam | 200 |
| Material | 10-3 |
| Procedure for Cleaning Vicodec Folding Top | 100 |
| Material. | 10-3 |
| Procedure for Cleaning Floor Carpets | 10-4 |
| Instructions for the Removal of Specific | 10 1 |
| Stains from Automotive Upholstery | |
| Materials | 10-4 |
| Battery Acids. | 10-4 |
| Blood | 10-4 |
| Candy | 10-4 |
| Chewing Gum | 10-4 |
| Fruit, Fruit Stains, Liquor and Wine | 10-5 |
| Grease and Oil | 10-5 |
| Ice Cream | 10-5 |
| Nausea. | 10-5 |
| Shoe Polish and Dressings | 10-5 |
| Tar | 10-5 |
| Urine | 10-5 |
| Lipstick | 10-5 |
| Front End. | 10-5 |
| Instrument Panel | 10-5 |
| Cover Retainer Molding | 10-5 |
| Radio Speaker Opening Finishing | |
| Molding | 10-6 |
| Cover Assembly. | 10-6 |
| Doors. | 10-6 |
| Front and Rear Doors | 10-6 |
| | 10-6 |
| Arm Rests | |
| Weatherstrip Assemblies | 10-7 |
| Pinchweld Finishing Strips | 10-8 |
| Outside Handle Assembly | 10-8 |
| Window Glass Run Channel Inner and | |
| Outer Strip Assemblies | 10-9 |

| | Page |
|---|--------|
| Front Doors | 10-9 |
| Front Doors. Window Inner Panel Cam—"27" Style | 10-9 |
| Window Assembly | 10-9 |
| Window Adjustments | 10-9 |
| Lock Assembly | 10-10 |
| Lock Remote Control Assembly | 10-10 |
| Headlining | 10-11 |
| Rear Quarter | 10-13 |
| Window or Regulator Assembly | 10-13 |
| Window Adjustments | 10-14 |
| Window Front Glass Run Channel | 10-14 |
| Window Rear Glass Run Channel | 10-14 |
| Rear End | 10-14 |
| Back Window Assembly_"69" Style | 10-14 |
| Rear End. Back Window Assembly—"69" Style Back Window Assembly—"27" and | 10 1 1 |
| "69" Styles | 10-15 |
| Back Window Reveal Moldings— | 10 10 |
| "60" Style | 10-15 |
| Boyon Molding Clip | 10-15 |
| "69" Style Reveal Molding Clip Back Window Upper and Lower | 10.10 |
| Reveal Moldings | 10-15 |
| Back Window Side Reveal Moldings | 10-16 |
| Engine Compartment | 10-16 |
| Lid Adjustment | 10-16 |
| | 10-16 |
| Lid HingeLid Front Gutter Weatherstrip (On Body). | 10-16 |
| Ela Front Gutter weathersulp (On Dody). | 10-17 |
| Exterior Moldings General Information | 10-17 |
| | 10-17 |
| General Precautions. | 10-17 |
| Sealing Operation | 10-17 |
| Tools and Care. | 10-19 |
| Molding Removal Chart. | 10-13 |
| Seats | 10-20 |
| Full Width Type Front Seats | 10-20 |
| Rear Seat. | 10-20 |
| Cushion Assembly | 10-20 |
| Back Assembly Bucket Type Front Seats | 10-20 |
| Bucket Type Front Seats. | 10-20 |
| Seat Assembly (Driver or Passenger) | 10-21 |
| Seat Adjusters (Driver or Passenger) | 10-21 |
| Back Assembly | 10-21 |
| Body Shell. | 10-21 |
| Body Alignment. | 10-21 |
| Horizontal Dimensions. | 10-22 |
| Vertical Dimensions. | 10-24 |

GENERAL DESCRIPTION

Throughout this section, the various body styles will be referred to by number. The following chart lists these numbers and relates them to body descriptions. If service information refers only to one particular body style, or group of body styles, it will be so stated in the headings (large size type) preceding each service outline. Service procedures not covered herein may be performed as outlined in the 1961 shop manual.

Provisions for rapid and easy front seat belt installation are standard equipment on all Corvair models.

| | Series | Number | Description | |
|-----|--------|--------|-------------|---------------------|
| 500 | 600 | 700 | 900 | |
| | | 769 | | 4 Dr. Sedan—6 Pass. |
| | | | 969 | 4 Dr. Sedan—5 Pass. |
| 527 | | | | Club Coupe—5 Pass. |
| | 627 | | 927 | Club Coupe—4 Pass. |
| | 667 | | 967 | Convertible—4 Pass. |

SERVICE OPERATIONS

CLEANING SOFT TRIM

There are four general types of trim materials used in automotive bodies:

- 1. Fabrics that may be either plain fabrics (broadcloth, gabardine, etc.) or pattern fabrics which are manufactured with natural or synthetic (nylon, orlon, rayon, viscose, etc.) fabrics.
- 2. Genuine leather.
- 3. Coated fabrics (vinyl or mylar).
- 4. Polyurethane foam.

Dust and dirt particles that accumulate on the upholstery of a car should be removed every few weeks, or oftener if the car is given constant hard use. This is done with a whisk broom or vacuum cleaner.

CAUTION: Do not use a whisk broom on fabrics having raised tapestry patterns since damage to the fine threads may result. On polyurethane foam material use only a soft bristle brush do not use a whisk broom or vacuum cleaner.

Before attempting to remove spots or stains from upholstery fabrics, determine as accurately as possible:

- 1. Nature and age of the spot or stain.
- 2. The effect of stain removing agents on the color structure and general appearance of the fabric.

For best results, stains should be removed from upholstery as soon as possible after they have been made. If they are allowed to stand for some time, they often become set, and removal becomes more difficultfrequently, impossible.

There are three basic types of acceptable cleaners available:

- 1. Volatile cleaners (colorless liquids).
- 2. Synthetic detergents.
- 3. Neutral soap (nonalkaline).

The volatile cleaners are recommended since they have great solvent powers for grease, oils and general road grime. Synthetic detergents generally loosen up stains satisfactorily, however, the use of improper type detergents involves risk of damage to the color or finish of fabrics.

PROCEDURE FOR CLEANING FABRICS WITH VOLATILE CLEANERS

Care should be taken not to use too much solvent and to apply it only with clean cloths. It is the solvent that does the work—so only a minimum of pressure should be applied.

- 1. Brush away all loose particles of dirt and soil.
- 2. Dampen a clean cloth (cheese cloth may be used) with the volatile cleaner. Open the cloth and allow a portion of the cleaner to evaporate so that the cloth is just slightly damp.
- 3. Using very light pressure and circular lifting motion, rub the stained area, starting at the outer edge and working toward the center until the entire area has been covered. Change to a clean portion of the cloth every few strokes.
- 4. Before proceeding, wait several minutes to allow most of the volatile cleaner to evaporate. This will avoid the danger of the cleaner penetrating to the padding under the upholstery. Certain cleaners will deteriorate sponge rubber which is often used as padding.
- 5. It may be necessary to repeat Steps No. 2, 3, and 4 several times before the stain has been satisfactorily removed. Each time a clean cloth should be used.
- 6. If a ring should form on the fabric when removing a stain, the entire area of the trim assembly should be cleaned as described in the preceding steps.

7. The cleaned upholstery should be allowed to dry completely before using.

Some volatile cleaners are toxic and harmful; therefore, the following safety precautions should be used:

- 1. Always use a well ventilated area. Car windows and garage doors must be open when such cleaners are used.
- 2. Avoid prolonged or repeated breathing of vapors from cleaner.
- 3. Avoid prolonged or repeated contact with the skin.
- 4. Keep away from eyes and mouth.
- 5. Some cleaners are flammable, and every precaution and care must be exercised in handling these cleaners.

PROCEDURE FOR CLEANING FABRICS WITH SYNTHETIC DETERGENTS

- 1. Make a solution of the synthetic detergent in lukewarm water, working up a thick, frothy suds.
- 2. With a clean cloth or sponge, dampened with lukewarm water, apply *suds only* to the surface of the upholstery using light to medium pressure, repeating several times, applying more suds with a clean portion of the cloth or sponge.
- 3. With a second clean cloth, dampened with lukewarm water, rub over the area with medium pressure to remove excess detergent and loose material.
- 4. With a clean dry cloth, wipe off all excess moisture. A vacuum cleaner may also be used.
- 5. Allow the upholstery to dry partially; then repeat the above treatment if necessary to remove stain.
- 6. When the upholstery is satisfactorily cleaned, allow to dry completely before using.

PRECAUTIONS FOR CLEANING FABRICS

- 1. Solutions containing water are not recommended for general cleaning of broadcloths. Water has great destructive powers on the high face or high gloss finish of broadcloths, causing the nap to curl and roughen to such an extent that the finish is destroyed or made very unsightly. However, in some cases where it is necessary to use a solution containing water to remove a stain, the resultant disturbance to the finish of the material may be preferable to the stain.
- 2. Do not use as a cleaning solvent any gasoline which is colored or which contains tetraethyl lead.
- 3. Do not use solvents such as acetone, lacquer thinners, enamel reducers and nail polish remover, as a cleaning solvent.
- 4. Do not use laundry soaps, bleaches or reducing agents, such as the following: chloride of lime, javelle water, hydrogen peroxide, sodium hydro-

sulphite, potassium permanganate, chlorine or chlorine water, sulphurous acid (sulphur dioxide), sodium thiosulphate (Photographers' hypo). The use of these agents tends to weaken fabric and to change its color.

5. Do not use too much cleaning fluid; some interior trim assemblies are padded with rubber, and volatile cleaners are generally solvents for rubber. The application of too much cleaner may destroy these rubber pads.

PROCEDURE FOR CLEANING GENUINE LEATHER AND COATED FABRICS

Care of genuine leather and coated fabrics (includes vinyl coated formed headlining) is a relatively simple but important matter. The surface should be wiped occasionally with a dry cloth, and whenever dirt accumulates, the following cleaning instructions should be used:

- 1. Lukewarm water and a neutral soap should be used. Apply a thick suds, worked up on a piece of gauze or cheesecloth, to the surface.
- 2. The operation should be repeated, using only a damp cloth and no soap.
- 3. The surface should then be wiped dry with a soft cloth.

Polishes and cleaners used for auto body finishes, volatile cleaners, furniture polishes, oils, varnishes or household cleansing and bleaching agents should never be used.

PROCEDURE FOR CLEANING POLYURETHANE FOAM MATERIAL

Normal soilage such as dirt and finger prints can be removed with a cleaning solution of approximately two (2) ounces of white detergent powder mixed in a gallon of water. Immerse a clean cellulose sponge in cleaning solution. Wring the sponge out thoroughly leaving suds only; then clean soiled area carefully. Rinse off the cleaned area with sponge and clean water -DO NOT soak the cleaned area.

Soilage such as cements, sealers, and grease can be removed by first cleaning the soiled area with a detergent solution as described above—DO NOT RINSE. Leaving suds on the soiled area, clean area with a clean cloth that has been dipped in a good volatile upholstery cleaner and thoroughly wrung out. Then clean soiled area with detergent suds and rinse as described above.

PROCEDURE FOR CLEANING VICODEC FOLDING TOP MATERIAL

The top should be washed frequently with neutral soap suds, lukewarm water and a brush with soft bristles. Rinse top with sufficient quantities of clear water to remove all traces of soap.

If the top requires additional cleaning after using soap and water, a mild foaming cleanser can be used. Rinse the whole top with water; then apply a mild foaming type cleanser on an area of approximately two square feet. Scrub area with a small soft bristle hand brush, adding water as necessary until the cleanser foams to a soapy consistency. Remove the first accumulated soilage with a cloth or sponge before it can be ground into the top material. Apply additional cleanser to the area and scrub until the top is clean. Care must be exercised to keep the cleanser from running onto body finish as it may cause streaks if allowed to run down and dry. After the entire top has been cleaned, rinse the top generously with clear water to remove all traces of cleanser. If desired, the top can be supported from the underside during the scrubbing operations.

After cleaning always be sure the top is thoroughly dry before it is lowered. Lowering the top while it is still wet or damp may cause mildew and unsightly wrinkles.

Do not use volatile cleaners or household bleaching agents on the top material.

PROCEDURE FOR CLEANING FLOOR CARPETS

Thoroughly brush or vacuum the floor carpet. In many instances the floor carpet may require no further cleaning. If carpet is extremely soiled remove carpet from car and thoroughly vacuum to remove loose dirt; then with a foaming type upholstery cleaner, clean approximately one (1) square foot of carpet at a time. After each area is cleaned, remove as much of the cleaner as possible with a vacuum cleaner. After cleaning the carpet use an air hose to "fluff" the carpet pile, then dry the carpet. After the carpet is completely dried, use an air hose to again fluff the carpet pile.

NOTE: If the carpet is not extremely soiled, the carpet may be cleaned in the car by applying a sparing amount of foaming type upholstery cleaner with a brush.

If oil or grease spots are still present on the carpet they may be removed by using a volatile cleaner.

INSTRUCTIONS FOR THE REMOVAL OF SPECIFIED STAINS FROM AUTOMOTIVE UPHOLSTERY MATERIALS

Some types of stains and soilage, including blood, ink, chewing gum, etc., require special consideration for most satisfactory results. For these, and other stains, specific instructions are outlined in succeeding paragraphs. It must be expected, particularly where water treatment is specified, that discoloration and finish disturbance may occur. In some cases fabric disturbance may be considered preferable to the stain itself. By following the procedures outlined with normal care and caution, reasonably satisfactory results can be expected.

Battery Acids

Apply ordinary household ammonia water with a brush or cloth to the affected area, saturating it thoroughly. Permit the ammonia water to remain on the spot about a minute, so that it will have ample time to neutralize the acid. Then rinse the spot by rubbing with a clean cloth saturated with cold water.

This treatment will suffice for both old and new stains. However, no type of treatment will repair damage to fibers resulting from the action of the acids on the fibers—particularly after the spot has dried.

Blood

Do not use hot water or soap and water on blood stains since they will set the stain, thereby making its removal practically impossible.

Rub the stain with a clean cloth saturated with cold water until no more of the stain will come out. Care must be taken so that clean portions of cloth are used for rubbing the stain.

This treatment should remove all of the stain. If it does not, apply a small amount of household ammonia water to the stain with a cloth or brush. After a lapse of about one minute, continue to rub the stain with a clean cloth dipped in clear water.

If the stain remains after the use of water and ammonia, a thick paste of corn starch and cold water may be applied to the stained area. Allow the paste to remain until it has dried and absorbed the stain. Then pick off the dry starch. Brush the surface to remove starch particles that remain. For bad stains, several applications of starch paste may be necessary.

Candy

Candy stains, other than candy containing chocolate, can be removed by rubbing the affected area with a cloth soaked with very hot water. If the stain is not completely removed, rub area lightly (after drying) with a cloth wet with a volatile cleaner. This will usually remove the stain.

Candy stains resulting from cream and fruit-filled chocolates can be removed more easily by rubbing with a cloth soaked in lukewarm soap-suds (mild neutral soap) and scraping, while wet, with a dull knife. This treatment is followed with a rinsing by rubbing the spot with a cloth dipped in cold water.

Stains resulting from chocolate or milk chocolate can be removed by rubbing the stain with a cloth wet with lukewarm water. After the spot is dry, rub it lightly with a cloth dipped in a volatile cleaner.

Chewing Gum

Harden the gum with an ice cube, and scrape off particles with a dull knife. If gum cannot be removed completely by this method, moisten it with a volatile cleaner and work it from the fabric with a dull knife, while gum is still moist.

Fruit, Fruit Stains, Liquor and Wine

Practically all fruit stains can be removed by treatment with very hot water. Wet the stain well by applying hot water to the spot with a clean cloth. Scrape all excess pulp, if present, off the fabric with a dull knife; then rub vigorously with a cloth wet with very hot water. If the stain is very old or deep, it may be necessary to pour very hot water directly on the spot, following this treatment with the scraping and rubbing. Direct application of hot water to fabrics is not recommended for general use since discoloration usually results.

If the above treatments do not remove stain, allow fabric to dry thoroughly; then rub lightly with a clean cloth dipped in a volatile cleaner. This is the only further treatment recommended.

Soap and water are not recommended since they will probably set the stain and cause a permanent discoloration. Drying the fabric by means of heat (such as the use of an iron) is not recommended.

Grease and Oil

If grease has been spilled on the material, as much as possible should be removed by scraping with a dull knife or spatula before further treatment is attempted.

Grease and oil stains may be removed by rubbing lightly with a clean cloth saturated with a volatile cleaner. Be sure all motions are toward the center of the stained area to decrease the possibility of spreading the stain.

Ice Cream

The same procedure is recommended for the removal of ice cream stains as that used in removing fruit stains.

If the stain is persistent, rubbing the spot with a cloth wet with warm soap suds (mild neutral soap) may be used to some advantage after the initial treatment with hot water. This soap treatment should be followed with a rinsing, by rubbing with a clean cloth wet with cold water. After this dries, rubbing lightly with a cloth wet with volatile cleaner will clear up the last of the stain, by removing fatty or oily matter.

Nausea

Sponge with a clean cloth, dipped in clear cold water. After most of the stain has been removed in this way, wash lightly with soap (mild neutral), using a clean cloth and lukewarm water. Then rub with another clean cloth dipped in cold water. If any of the stain remains after this treatment, gently rub clean with a cloth moistened with a volatile cleaner.

Shoe Polish and Dressings

On types of shoe dressings which contain starch or dextrine or some water soluble vehicle, allow the polish to dry; then brush the spot vigorously with a brush. This will probably be all the treatment that is necessary. If further treatment is required moisten the spot with cold water and after it has dried, repeat the brushing operation.

Paste or wax type shoe polishes may require using a volatile cleaner. Rub the stain gently with a cloth wet with a volatile cleaner until the polish is removed. Use a clean portion of the cloth for each rubbing operation and rub the stained area from outside to center.

Tar

Moisten the spot slightly with a volatile cleaner, and then remove as much of the tar as possible with a dull knife. Follow this operation by rubbing the spot lightly with a cloth wet with the cleaner until the stain is removed.

Urine

Sponge the stain with a clean cloth saturated with lukewarm soap suds (mild neutral soap) and then rinse well by rubbing the stain with a clean cloth dipped in cold water. Then saturate a clean cloth with a solution of one part household ammonia water and five parts water. Apply the cloth to the stain and allow solution to remain on affected area for one minute; then rinse by rubbing with a clean wet cloth.

Lipstick

The compositions of different brands of lipsticks vary, making the stains very difficult to remove. In some instances a volatile cleaner may remove the stain. If some stain remains after repeated applications of the volatile cleaner, it is best to leave it rather than try other measures.

FRONT END

INSTRUMENT PANEL

Cover Retainer Molding

Removal and Installation

- 1. Remove screws securing molding and remove molding.
- 2. To install, reverse removal procedure.

Radio Speaker Opening Finishing Molding

Removal and Installation

- 1. From underside of instrument panel, remove nuts securing molding and remove molding.
- 2. To install, reverse removal procedure.

Cover Assembly

Removal

- 1. Place protective coverings over front seat assembly.
- 2. Prior to removing instrument panel cover, remove following hardware items:
 - a. Windshield lower side and center garnish moldings.
 - b. Radio speaker opening finishing molding.
 - c. Ash tray assembly.
 - d. Instrument center panel (at instrument cluster area).
 - e. Instrument panel finishing molding.
 - f. Instrument panel cover retainer molding.
- 3. Carefully detach cemented areas of cover assembly (fig. 1) from instrument panel and remove cover.

CAUTION: The pre-formed, one piece instrument panel cover is subject to permanent damage if the following precautions are not observed:

- a. Handle with care. Bending or distorting causes permanent damage.
- b. Keep clean and free from cement.

Installation

- 1. Clean off cementing surface of instrument panel.
- 2. Apply a thin coat of an approved neoprene-type weatherstrip adhesive to cementing surfaces of instrument panel cover corresponding to areas indicated by "1" (fig. 1).
- NOTE: Cementing area along forward edge of cover increases from 2" at forward edge of radio speaker grille opening at centerline of cover to 6" at outboard ends of cover. At radio speaker grille and ash tray cut-outs, a 1" wide area of cement is to be applied.
- 3. Apply a heavy coat of an approved neoprene-type weatherstrip adhesive to corresponding surfaces of instrument panel.

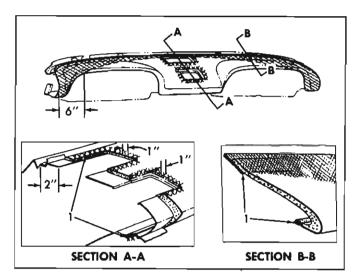


Fig. 1—Instrument Panel Cover

4. Immediately following application of adhesive, carefully position cover along rear edge of instrument panel making certain cut-outs in cover line up with openings in instrument panel; then firmly and evenly press cover to instrument panel along rear edge of cover, around ash tray opening and along forward edge of cover.

CAUTION: This adhesive is fast drying, therefore, perform this operation quickly while the adhesive is still wet.

- 5. If necessary, trim cover at finishing and retaining moldings.
- 6. Remove rubber seal from instrument center panel if present; then install all previously removed parts and remove protective covering.

DOORS

FRONT AND REAR DOORS

Arm Rests

All door arm rests are the applied type and are secured to the door inner panel by two (2) attaching screws. When a door arm rest is removed it may be necessary to reseal the attaching screw holes with body caulking compound prior to installation.

Removal and Installation

- 1. Remove screws securing arm rest assembly to door inner panel and remove assembly.
- 2. To install, reverse removal procedure.

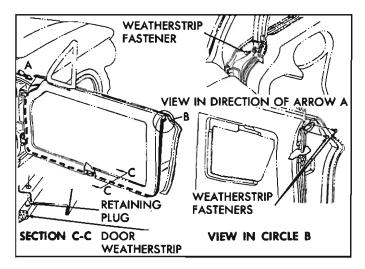


Fig. 2—"67" Style Front Door Weatherstrip Attachment

Weatherstrip Assemblies

A new type of door weatherstrip is used which eliminates the necessity of sealing plugs and wire retaining clips. This weatherstrip is of a vinyl construction and does not require lubrication. The new weatherstrip is retained by a series of hard-core integral sealing and retaining plugs which fit into pierced holes in the door panels.

Removal

- 1. On "67" styles, remove weatherstrip fasteners at top of hinge and lock pillar panels as depicted in Figure 2.
- 2. With a flat-bladed tool, carefully break cement bond at hinge and lock pillar areas on all styles, on all styles except convertibles, break cement bond along door window frame, and at lower front corner of front doors (fig. 3).
- 3. After all cement bonds have been broken, carefully pry the weatherstrip retaining plugs loose with aid of a putty knife or other suitable flatbladed tool.

Installation

- 1. Clean off old cement from door to insure a clean cementing surface. Mineral spirits or a volatile cleaner are recommended for this cleaning operation.
- 2. Check weatherstrip retaining plugs for proper contour. If a plug becomes damaged, trim off shoulders with a sharp knife or razor blade so that plug can be installed by hand and cement plug into its respective attaching hole with "Vinyl Weatherstrip Adhesive" or its equivalent. If a retaining plug is missing, run a bead of vinyl weatherstrip adhesive two (2) inches long on door

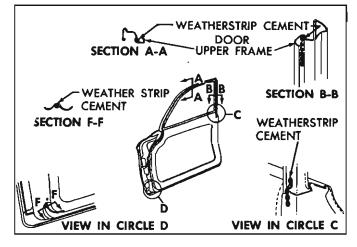


Fig. 3—Front Door Weatherstrip Cement Application

panel—one (1) inch on either side of attaching hole, and firmly press weatherstrip into place. If an excessive number of weatherstrip carrots become damaged or are missing, replacement of the entire weatherstrip may be necessary.

3. With the new vinyl type door weatherstrips, a vinyl weatherstrip adhesive must be used. This cement will effectively adhere to the vinyl weatherstrip without attacking the paint finish. Prior to installation of weatherstrip, apply a continuous bead of vinyl weatherstrip adhesive along entire length of channel in door upper frame except convertibles. On all styles, apply a bead of vinyl weatherstrip adhesive for a minimum length of eight (8) inches on door hinge pillar (cove area), and a minimum length of one (1) inch on door lock pillar (fig. 4).

NOTE: When applying weatherstrip cement, follow manufacturer's directions.

4. Using a putty knife, or other suitable flat-bladed tool, install door weatherstrip into door window frame assembly (except on "67" styles).

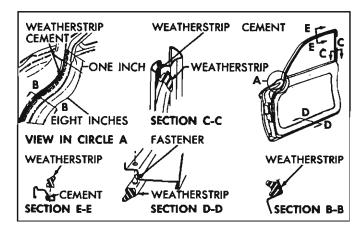


Fig. 4—Front Door Weatherstrip Installation

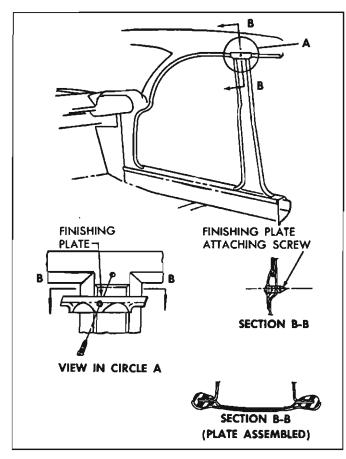


Fig. 5—"69" Style Center Pillar to Roof Rail Finishing Plate

5. Beginning at either side of door, install weatherstrip retaining plugs into door weatherstrip piercings with tool J-9442.

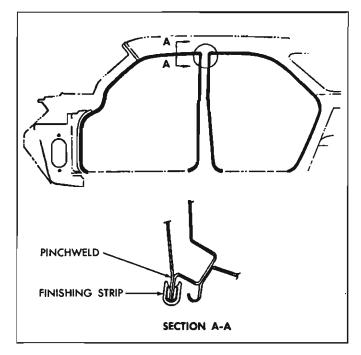


Fig. 6—Pinchweld Finishing Strip Installation

CAUTION: Tool J-9442 is specifically designed for installation of this weatherstrip. An attempt to install vinyl weatherstrip without this tool will probably result in damaged weatherstrips.

NOTE: The door weatherstrip piercings are equally spaced every four (4) inches while the weatherstrip retaining plugs are equally spaced every 3⁴/₄ inches. This requires a ¹/₄ inch stretching of the weatherstrip between each plug during installation. This stretching helps to effect a tight weatherstrip seal. The only exception to this weatherstrip plug spacing is in the cove area where an extra retaining plug has been added for more effective retention.

CAUTION: Any excess sealer should be cleaned off immediately to avoid paint damage.

Pinchweld Finishing Strips

All styles use a pinchweld finishing lace around door openings. All strip assemblies are reinforced by a full length metal insert and are retained by integral lips of the finishing strip.

Removal and Installation

- 1. On "69" styles, remove center pillar-to-roof rail finishing plate (fig. 5).
- 2. On all styles, remove door sill plate.
- 3. Beginning at either end of pinchweld finishing strip carefully pull assembly from body.
- 4. To install, reverse removal procedure. A rubber mallet may be used if necessary. Figure 6 shows the installation of a finishing strip assembly on "69" styles but is typical of all styles.

Outside Handle Assembly

Removal and Installation

- 1. Raise door window, remove door trim assembly and detach upper rear corner of inner panel water deflector sufficiently to gain access to door outside handle attaching bolts (fig. 7).
- 2. Remove two bolts (through large access hole) which secure handle to door outer panel.

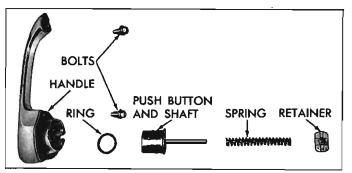


Fig. 7—Door Outside Handle

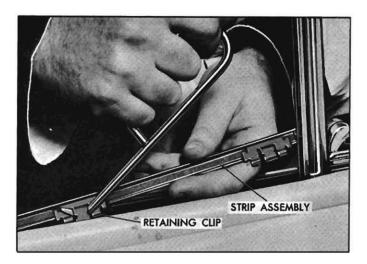


Fig. 8—Glass Run Channel Strip (Outer Shown)

- 3. Remove door lock handle and gaskets from outside of body.
- 4. To install, reverse removal procedure.

Window Glass Run Channel Inner and Outer Strip Assemblies

Glass run channel strip assemblies are used on all doors on all styles incorporating a dropping window and are designed to prevent cold air and water from entering the body between the door window lower sash channel and door inner and outer panels. Strip assemblies are similar to those used on past models and are secured to the door inner and outer panels by a series of attaching clips.

Removal and Installation

- 1. Lower door window and apply masking tape to door panel adjacent to strip assembly being removed to protect paint finish.
- 2. Insert a pointed hooked tool between strip assembly to be removed and door panel at clip locations and pull up to disengage clips from door panel and remove strip assembly (fig. 8).
- 3. To install, position assembly and secure clips in slots in door panel. Remove protective tape.

FRONT DOORS

Window Inner Panel Cam "27" Style

On all two door models, a double arm window regulator is used to give more rigidity to door glass during its normal operating cycle. The balance arm of a double arm regulator operates within an inner panel cam. The inner panel cam must be removed when removing the window or regulator.

Removal and Installation

- 1. Remove door trim assembly and detach inner panel water deflector.
- 2. Remove two (2) bolts securing cam to inner panel; slide cam forward to disengage cam from balance arm roller and remove cam through large access hole.
- 3. To install, reverse removal procedure. Prior to installation, lubricate entire length of inner panel cam with 630AAW lubriplate or equivalent.

Window Assembly

The front door glass is a solid tempered safety plate glass. The glass fits into a lower sash channel assembly which incorporates a welded-on lower sash channel cam. With this type of design the door glass, lower sash channel and sash channel cam are removed from the door as a unit.

Removal and Installation

- 1. Remove door trim assembly and detach inner panel water deflector.
- 2. Remove front door ventilator assembly.

CAUTION: After ventilator has been removed, door glass should be held or otherwise suitably supported as lower sash channel cam could roll off of regulator arms causing damage to door glass.

- 3. On "27" styles, slide glass forward to disengage lower sash channel from regulator lift arm roller (See View "A" of Figure 9); then, tilt rear edge of glass upward and slide window lower sash channel off regulator balance arm roller (See View "B" of Figure 9) and remove window assembly from door.
- 4. On "69" styles, tilt rear edge of glass upward to slide regulator lift arm roller off window lower sash channel cam and remove glass from body. To install, reverse removal procedure. After installation of window assembly, lubricate entire length of lower sash channel cam and inner panel cam with 630 AAW Lubriplate or its equivalent.

Window Adjustments

1. To adjust the hinge pillar (front) edge of glass, lower door window and loosen ventilator division channel adjusting stud and nut; turn adjusting stud in or out or position lower end of channel fore or aft (as required) and tighten stud nut (See Figure 10).

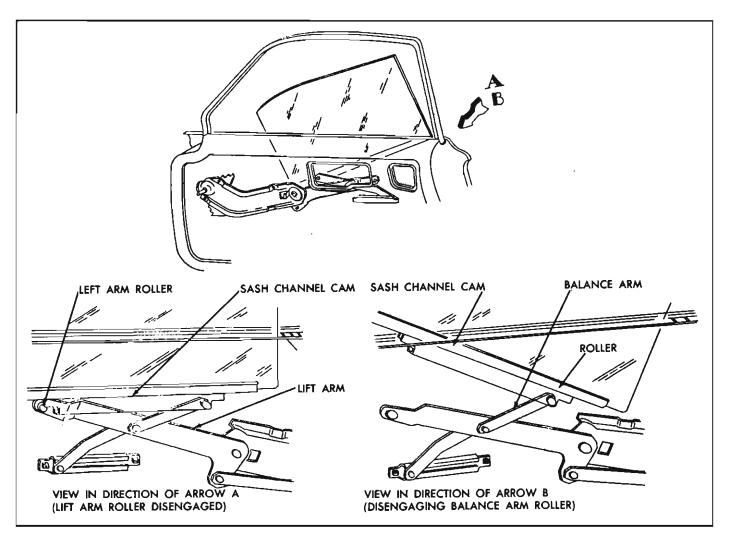


Fig. 9—Front Door Window Removal

2. A rotated (cocked) condition of door glass can be corrected by adjusting the inner panel cam on "27" styles. A slight up or down adjustment of door window can also be obtained at the inner panel cam.

Lock Assembly

Locks are the rotary-bolt type with the safety interlock feature. With the interlock feature, it is very important that the lock extension engages properly in the door lock striker notch and that, where necessary, striker spacers are added or removed to obtain proper engagement.

Removal and Installation

- 1. Raise door window, remove door trim pad and detach inner panel water deflector.
- 2. Disengage spring clip securing connecting rod to door lock remote control lever and disconnect rod from lock (See View "B" in Figure 11).
- 3. Remove three screws securing lock to door lock pillar panel and remove lock through door inner panel access hole (fig. 12).

4. To install, reverse removal procedure. Prior to installation of door lock, lubricate entire assembly with 630 AAW Lubriplate or its equivalent. Check operation of lock prior to installation of door trim and inside hardware.

Lock Remote Control Assembly

Removal and Installation

- 1. Raise door window, remove door trim pad and detach inner panel water deflector. Refer to Figure 10 for sedan styles.
- 2. Remove three bolts securing remote control assembly to door inner panel (See View "A" of Figure 11).
- 3. While holding remote control connecting rod, rotate remote control approximately ¼ turn to disengage remote retainer from slot in connecting rod (See View "C" in Figure 11).
- 4. To install, reverse removal procedure. After installation, lubricate remote at connecting rod location with 630 AAW Lubriplate or its equivalent.

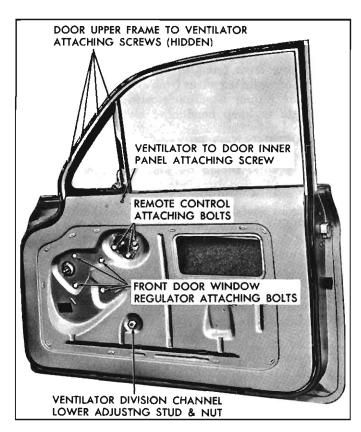


Fig. 10—Front Door Ventilator Attachment

Check operation of remote control assembly before installing inner panel water deflector.

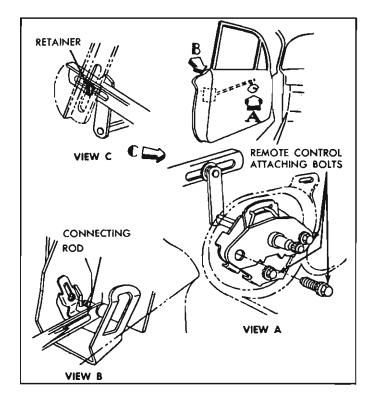


Fig. 11—Front Door Remote Control Assembly Removal

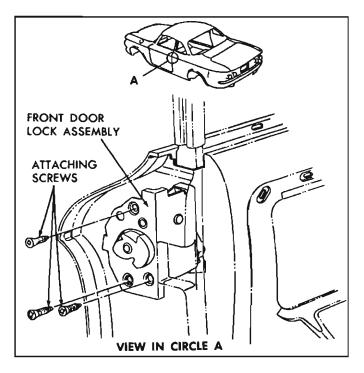


Fig. 12—Front Door Lock Assembly

HEADLINING

The headlining is formed to the contour of the roof panel by five concealed listing wires. Four of the listing wires are installed into holes in the side roof rails. The No. 3 listing wire and listing wire pocket are held in place by metal tabs on the front roof bow. The rear listing wire is additionally supported in the center by a metal tab on the rear roof bow.

The headlining is secured at the windshield and back window by cement and tacks or staples. Along the side roof rails on the "69" styles, the headlining is cemented around the flange of the roof inner rail. The headlining is cemented along the roof inner rail of the door opening and cemented and stapled or tacked at the quarter window on the "27" styles.

CAUTION: Clean hands are essential when working with headlining material.

Headlining Assembly

Removal

- 1. Place protective coverings over seat cushions and backs.
- 2. Prior to removing headlining, remove following hardware and trim assemblies:
 - a. Rear view mirror support.
 - b. Sunshade support assembly(s).
 - c. Windshield upper garnish moldings.
 - d. Back window upper garnish moldings.
 - e. Center pillar-to-roof rail finishing plates.
 - f. Dome lamp.

- g. Pinchweld finishing strip along top of each door opening sufficiently to expose edge of head-lining.
- h. Rear quarter window upper garnish moldings on "27" styles.
- 3. On "27" styles, remove tacks securing forward edge of rear quarter filler upper foundation assembly (View H, Figure 13). Turn back trim and with suitable flat-bladed tool carefully break cement bond between foundation assembly and pillar and remove assembly.
- 4. Carefully detach cemented edge of headlining from side roof rail at each door opening. (View F, Figures 13 and 14). Remove staples or tacks at quarter window opening and detach cemented edge of headlining on "27" styles (View H, Figure 13).
- 5. Carefully remove tacks or staples securing head-

lining at windshield and back window openings; then carefully detach cemented edges.

6. Working from front to rear of body, disengage headlining listing wires from side roof rails gathering or rolling headlining with listing wires on outside to keep headlining clean.

IMPORTANT: Note into which holes ends of listing wires are installed in side roof rails. Listing wires should be placed in same hole when replacing headlining.

- 7. At front roof bow, bend down metal tabs (View C, Figures 13 and 14). At center of back window, bend down tab securing center of rear listing wire (View B, Figures 13 and 14).
- 8. Remove headlining assembly from body.
- 9. If replacing headlining, remove listing wires from pockets of headlining.

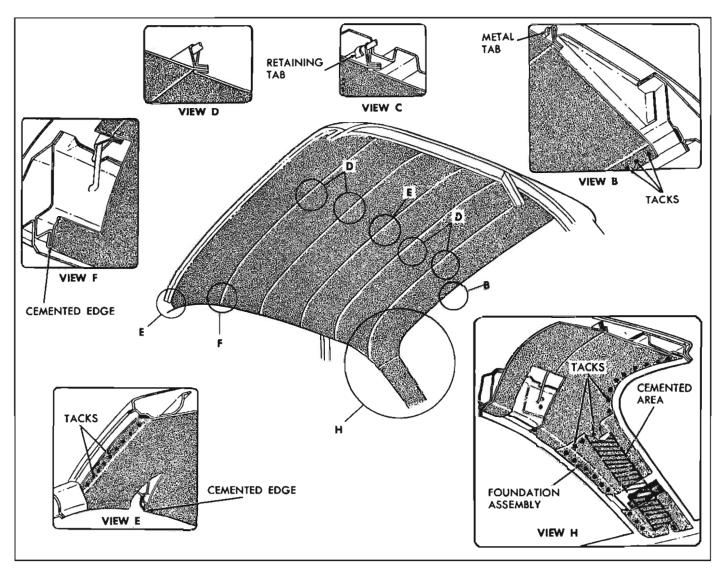


Fig. 13-"27" Style Headlining Installation

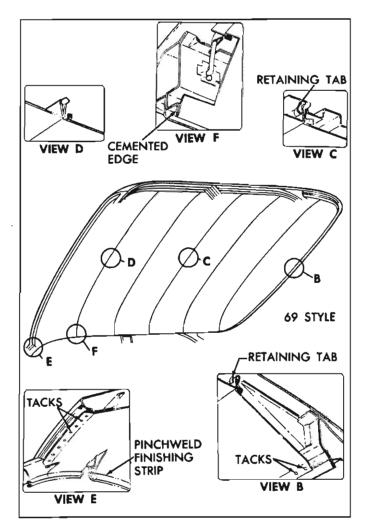


Fig. 14—"69" Style Headlining Installation

IMPORTANT: Listing wires removed from old headlining must be installed in corresponding pockets of new headlining.

Installation

- 1. If previously removed, install listing wires into headlining listing pockets and lift entire assembly into body.
- 2. Install rear listing wire. Center and align rear of headlining in relation to back window and side roof rails, then bend up tab securing center of rear listing wire (See View B, Figures 13 and 14). Working forward, install ends of listing wires into listing wire holes in side roof rails.

NOTE: Each listing wire SHOULD rest against roof deadener after it is installed. Listing wires may be adjusted up or down by placing in appropriate holes.

3. At front roof bow, check headlining for proper centering and bend tabs over listing wire (View C, Figures 13 and 14). Install remaining listing wire into holes in side roof rails.

- 4. Center and align headlining in relation to windshield opening, sunshade locations and back window location. Then apply trim cement to headlining tacking surfaces at windshield and back window openings, and stretch and stay-tack headlining at these locations.
- 5. Apply trim cement to edge of headlining along side roof rails. Also apply trim cement to both sides of roof inner rail flange and at attaching locations of quarter window openings on "27" styles.
- 6. Carefully secure headlining at cemented areas making certain to remove all "fullness" and "draws" from material.
- Remove any "fullness" and "draws" in headlining material at windshield and back window openings and permanently tack headlining to tacking strips.
- 8. Using headlining inserting tool, permanently install edge of headlining around roof inner rail flange (View F, Figures 13 and 14). At quarter window on "27" styles, permanently tack or staple headlining (View H, Figure 13).
- 9. Trim excess material from edge of headlining around entire perimeter.
- 10. On "27" styles, apply trim cement to foundation assembly attaching surface at quarter window and carefully cement and tack forward edge of assembly to tacking strip (View H, Figure 13).
- 11. Install all previously removed hardware and trim assemblies and remove protective coverings.

REAR QUARTER

Window or Regulator Assembly

Removal and Installation

- 1. Remove rear quarter trim assembly and inner panel water deflector.
- 2. Operate window to half-down position. Remove snap-ring retainer securing regulator lift arm to window assembly (fig. 15) and, while supporting window assembly with one hand, disengage regulator lift arm.
- Allow window to drop until it rests at bottom of inner panel. This will disengage nylon guide on window front sash channel from front glass run channel.
- 4. If window is to be removed, remove glass run inner strip assembly (fig. 8); then raise window, front edge first, and remove it from between the panels at the belt line.
- 5. If regulator is to be removed, remove regulator attaching screws (fig. 15) and remove regulator through large access hole.

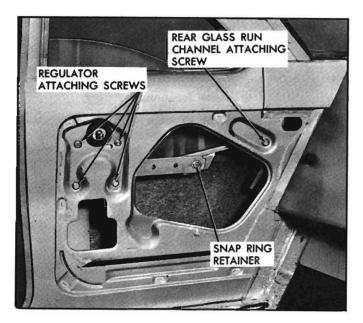


Fig. 15—Rear Quarter Hardware Attachment "27" Styles

6. To install either window assembly or window regulator, reverse removal procedure.

Window Adjustments

The only adjustments necessary for proper operation and appearance of the rear quarter window can be made at the window regulator or rear glass run channel lower attaching screw.

- To properly align the window in the opening, operate the window to the "full-up" position and loosen the window regulator attaching screws (fig. 15). Position the window so the front sash channel is in proper alignment with the front glass run channel and tighten the regulator attaching screws.
- 2. To adjust the window so that it seats properly in the run channels, first align it with the front glass run channel as described in Step 1. Then operate the window to the "full down" position and loosen the rear glass run channel lower attaching screw (fig. 15). Adjust the run channel so that it bears slightly against the rear edge of the glass and tighten the run channel attaching screw. Operate the window through several complete cycles to check for proper operation.

Window Front Glass Run Channel

Removal and Installation

- 1. Remove quarter window front and rear garnish moldings. Remove rear quarter trim assembly and rear quarter water deflector.
- 2. Operate window to half down position and remove snap-ring retainer securing regulator lift arm to window lower sash channel assembly (fig. 15).

- 3. Disengage window assembly from regulator lift arm and lower window so it will lay against quarter outer panel.
- Remove glass run inner strip assembly at belt line as described under "Window Glass Run Inner or Outer Strip Assembly-Removal and Installation."
- 5. Disengage upper forward end of rear glass run channel from side roof rail and bend it inboard sufficiently to allow removal of front glass run channel.
- 6. Using a flat-bladed tool, pry run channel away from lock pillar to disengage snap-in clips and remove run channel from body.
- 7. To install, first apply a bead of body caulking compound to body lock pillar to effect a watertight seal when run channel is installed; then reverse removal procedure.

Window Rear Glass Run Channel

Removal and Installation

- 1. Remove rear quarter window rear garnish molding, rear quarter trim assembly, inner panel water deflector, and glass run inner strip assembly.
- 2. Remove glass run channel attaching screw (fig. 15).
- 3. Using a flat-bladed tool, pry run channel away from side roof rail to disengage snap-in type clips and remove run channel from body.
- 4. To install, reverse removal procedure. Prior to installation apply a bead of body caulking compound to rabbet of side roof rail to effect a watertight seal when run channel is installed. When installing run channel, make certain to engage locating tab on channel with slot in side roof rail at belt line.

REAR END

Back Window Assembly "69" Styles

Installation

Window sealing procedures outlined in the 1961 Shop Manual, page 10-45, steps 4 and 5, are revised as follows:

 Apply a continuous bead (approximately 1/8" in diameter) of medium-bodied sealer to corner of back window rabbet completely around opening ("1", Figure 16).

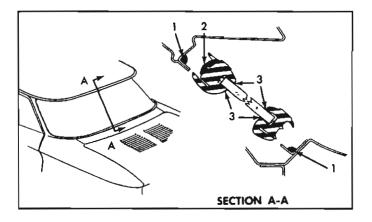


Fig. 16—Back Window Sealing—"69" Styles

5. Apply a continuous ribbon (approximately $\frac{3}{16}''$ thick x $\frac{1}{2}''$ wide) of medium-bodied sealer to the base of the rubber channel ("2", Figure 16) across the top and down the sides.

Sealing of Back Window with Glass Installed

Sealing procedure outlined in 1961 Shop Manual, page 10-45, Step 2, is revised as follows:

 The seal between rubber channel and body-pull back inner lip of rubber channel, then using a pressure type gun, apply medium-bodied sealer between rubber channel and pinchweld or retaining flange, across top and down sides of window.

Back Window Assembly "27" and "69" Styles

The glass used in the back window is solid tempered safety plate glass. It is retained in the body opening by a conventional rubber channel. All except the "500" series styles incorporate back window reveal moldings. The 769 and 969 style back window reveal moldings are retained in a cavity in the back window rubber channel requiring removal of the back window assembly to remove the moldings. The 627 and 927 style upper and lower back window reveal moldings are secured by clips attached to the body opening pinchweld flange requiring removal of the moldings to remove the back window assembly. The side reveal moldings on these styles are secured by bolt and clip assemblies necessitating removal of the back window assembly to remove the molding. These side reveal moldings, however, do not have to be removed to remove the back window assembly.

Back Window Reveal Moldings "69" Styles

The back window reveal moldings are retained in a cavity in the rubber channel by an "L" shaped flange on the moldings. To remove the back window reveal moldings it is necessary to remove the back window assembly. With the back window assembly removed the reveal moldings can be removed as a bench operation. Prior to reinstalling the moldings, lubricate the molding cavity in the rubber channel with a liquid soap and water solution to facilitate installation.

Reveal Molding Clip

"627" and "927" Styles

The back window reveal molding clip snaps over the back window opening pinchweld or retaining flange and retains the molding with barbed prongs that engage the flange of the molding inserted between the clip and body metal. To disengage the clip from the molding, proceed as follows:

Insert pointed end of Tool J-7898-01 between rubber channel and molding and slide tool towards clip to engage point of tool between clip and molding (fig. 17). Swing tool slightly (parallel to glass) to disengage barbed prongs of clip from molding. Repeat this procedure at each clip location.

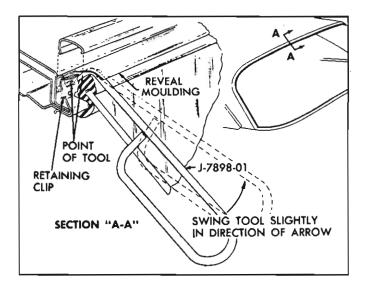


Fig. 17-Removing Back Window Reveal Molding Clip

NOTE: Do not lift excessively on molding. If clip is disengaged, molding will lift free of clip easily. If clip is not disengaged, any excessive lift on molding will cause prongs of clip to bite harder on molding. If difficulty is experienced in disengaging clip, push molding at clip location to relieve pressure of clip prongs on molding while continuing use of tool to disengage clip.

Back Window Upper and Lower Reveal Moldings "627" and "927" Styles

Removal and Installation

1. Using Tool J-7898-01 and starting at inner end of right molding (centerline of body), disengage molding from pinchweld type retaining clips.

- 2. When all clips have been disengaged pull molding towards centerline of body to disengage it from overlapping side reveal molding.
- 3. Repeat operation to remove left molding except when removing left molding only; then disengage right molding only sufficiently to allow removal of left molding.
- 4. To install, reverse removal procedure.

Back Window Side Reveal Moldings

"627" and "927" Styles

Removal and Installation

- 1. Remove back window upper and lower reveal moldings and back window assembly (see "Back Window-Removal").
- 2. From inside body, remove nut from bolt and clip assembly at lower end of side reveal molding.
- 3. At upper end of molding, remove screw inserted through molding flange into body metal and remove molding.

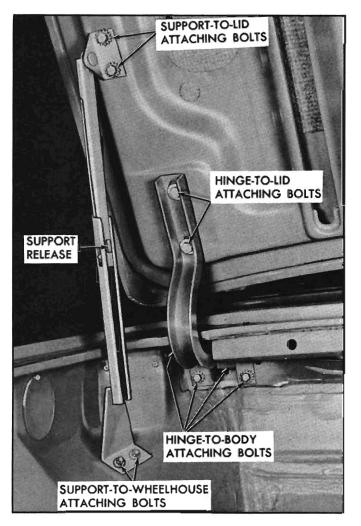


Fig. 18—Engine Compartment Lid Hinge and Support

4. To install, reverse removal procedure. Use selfsealing screws and adequate sealer to make certain of watertight seal at screw and clip locations.

ENGINE COMPARTMENT

Lid Adjustment

- 1. To adjust the engine compartment lid forward, rearward or sideways in the body opening, loosen hinge strap-to-lid attaching bolts (fig. 18) and shift lid to required position, then tighten bolts.
- 2. To adjust the front of the lid up or down or to adjust the lid sideways, loosen hinge-to-body attaching bolts (fig. 18), then shift lid to required position and tighten bolts.
- 3. To adjust compartment lid bumpers for proper contact with rear end panel, loosen exposed hex nuts; adjust bumpers by turning threaded shaft into lid or out of lid, as required, then tighten hex nuts.

LID HINGE

Removal and Installation

- 1. Open engine compartment lid and provide support for lid on side from which hinge is to be removed.
- 2. Mark position of hinge on body panel and position of hinge strap on compartment lid inner panel.
- 3. Remove hinge strap to lid attaching bolts and hinge to body attaching bolts (fig. 18) and remove hinge from body.
- 4. To install, reverse removal procedure. Prior to installation, lubricate hinge pin with Lubriplate or its equivalent.

Lid Front Gutter Weatherstrip (On Body)

Removal and Installation

- 1. Using a flat-bladed tool, break (cut) cement bond between weatherstrip and engine compartment front gutter and remove weatherstrip.
- 2. To install, first clean out gutter to provide a clean cementing surface; then apply (brush) a coat of neoprene type weatherstrip adhesive along bottom and outer surfaces of gutter contacted by weatherstrip.

Install weatherstrip and apply a second bead of weatherstrip adhesive between **forward** edge of weatherstrip and compartment gutter. Press or roll weatherstrip for good adhesion. Allow sufficient time for adhesive to dry before closing compartment lid.

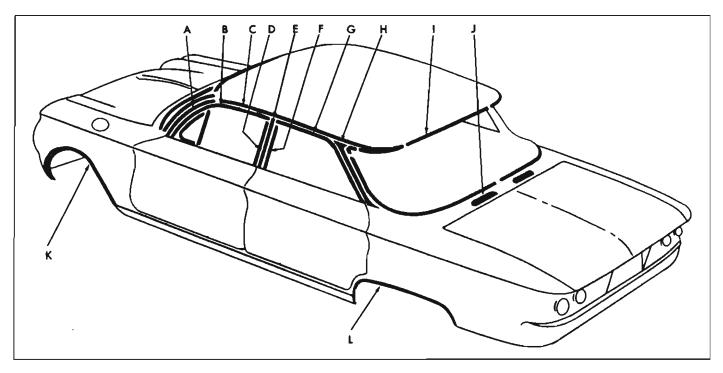


Fig. 19-Body Exterior Molding-969 Model

- A. Windshield Pillar Drip Molding
- B. Front Door Window Frame Upper Scalp Molding
- C. Roof Drip Molding Front Scolp
- D. Front Door Frame Vertical Scalp Molding
- E. Center Pillar Scalp Molding
- F. Rear Door Window Frame Vertical Scalp Molding

EXTERIOR MOLDINGS

GENERAL INFORMATION

The exterior moldings are identified in Figure 19. The moldings are secured to the body by any one or a combination of the following attachments:

- a. attaching screws.
- b. bolt and clip assemblies with attaching nuts
- c. integral studs with attaching nuts
- d. bath tub type snap-on clips
- e. snap-in studs to pre-installed retainers
- f. snap-in clips

Figure 20 illustrates typical attachments for body side moldings and cross sectional views for some scalp and reveal moldings.

Before using the molding charts the following information will be helpful when installing or removing exterior moldings.

 Screw locations—the exact location for each screw is not shown or mentioned, but when hidden, the general location is indicated by naming the molding or other part which conceals the screw and therefore must be removed to gain access to the screw.

- G. Rear Door Window Frame Upper Scalp Molding
- H. Rear Body Lock Pillar Scalp Molding
- I. Roof Drip Molding Rear Scalp Molding
- J. Rear Compartment Front Panel Ornament Grille
- K. Front Wheel Opening Molding
- L. Rear Wheel Opening Molding
- 2. When a molding is overlapped the overlapping molding is indicated in the "Engages with other molding" column and must be removed first.

GENERAL PRECAUTIONS

When removing or installing any body exterior molding certain precautions should be exercised.

- 1. Adjacent finishes should be protected with masking tape to prevent damage to finish.
- Proper tools and care should be employed to guard against molding damage.

SEALING OPERATION

Although detailed sealing operations for each individual molding are not described on the "Molding Removal Chart" the following information is given to permit a satisfactory sealing operation.

Medium-bodied sealer or body caulking compound are the sealers most frequently used to provide a watertight seal or for anti-rattle measures.

Holes in body panels for screws, bolts, or clips that would permit water to enter the interior of the body

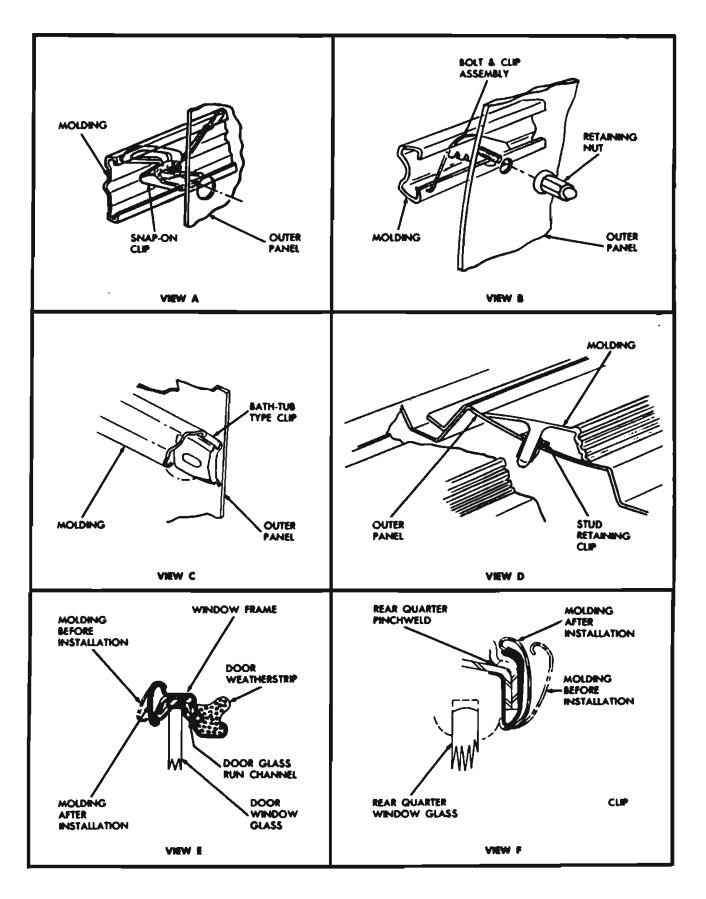


Fig. 20-Melding Attachment

should be sealed with body caulking compound or presealed screws, nuts or clips.

Drip moldings require a $\frac{1}{4}$ bead of medium-bodied sealer along the full length of the inner attaching surface. Door window scalps and center pillar scalps require a $\frac{1}{3}$ x $\frac{1}{4}$ x $\frac{1}{4}$ bead of caulking compound at 5" intervals for anti-rattle purposes. Pinchwelds require medium-bodied sealer on both sides when pinchweld clips are used. The exception is the rear quarter pinchweld on convertible styles which requires waterproof tape over the entire pinchweld, prior to clip installation.

TOOLS AND CARE

For ease of molding removal it is sometimes important to start the removal at a particular location which is generally the "front" or "rear" of the molding. This position is indicated when necessary in the "Starting Location" column of the molding chart.

The following groups of moldings are listed with the name or description of the tool which it suitable for molding removal.

Roof Drip Scalps-pointed hook tool.

Door Window Scalps-thin flat-bladed tool (putty knife).

| | | Method of Retention | | | | | | |
|-------------------------------------|--------------------|---------------------|-------------------------------|--|-----------------------------------|---|--|----------------------|
| Molding Name | Styles | Screws | Spring (Seif- Retained) | Snap-On Clips Or Retainers On Panel | Snap-On Clips On Molding | Engages With Other Moldings | Remove Hardware Or Trim | Starting Location |
| Windshield Pillar Drip | All Ex- cept 67 | x | ~ | - | - | Roof Drip Molding | - | - |
| Windshield Pillar Finishing | 967 | x | _ | _ | - | Windshield weather- strip retainer windshield glass rubber channel | _ | _ |
| Roof Drip Molding | 669 | — | x | _ | — | _ | · | Front lower |
| Front Scalp | 969 | | | | | | | edge |
| Roof Drip Molding | 669 | — | x | _ | _ | Roof drip front | _ | Front lower |
| Rear Scalp | 969 | | | | | scalp | | edge |
| Roof Drip Molding Scalp | 627 927 | — | x | | - | - | — | - ⁻ |
| Front Door Window | 627, 927 | _ | x | <u> </u> | _ | _ | _ | Rear lower |
| Frame Upper Scalp | 969 | | View E | | | | | edge |
| Front Door Window | 627, 927 | | x | _ | _ | Door window frame | _ | Upper inne |
| Frame Vertical Scalp | 969 | | View E | | | upper scalp | | edge |
| Front Fender Lower | 700 | | VIEW L | × | _ | | | euge |
| rion render tower | Series | | _ | View C | | - | _ | - |
| Front Door Outer | 700 | | | | | | | |
| Panel Lower | | — | _ | , × a | - | - | - | - |
| | Series | | | View C | | | | |
| Center Pillar Scolp | 969 | x | - | - | — | — | — | |
| Rear Door Window | 969 | — | × | _ | - | — | — | Front lower |
| Frame Upper Scalp | | | View E | | | | | edge |
| Rear Door Window | 969 | — | x | _ | — i | Door window frame | — | Upper inne |
| Frame Vertical Scalp | | | View E | | • | upper scalp | | edge |
| Quarter Window Front | All 27 | × | - | _ | _ | Quarter window | — | _ |
| Reveal | Styles | | | | | upper reveal | | |
| Quarter Window Upper | Ail 27 | — | | x | ~ | · | Quarter Win- | _ |
| Reveal | Styles | | | View F | | | dow on 527 | |
| Rear Body Lock Pillar Scalp | 969 | x | - | _ | - | Back window side reveat | Back window | |
| Rear Quarter Pinchweld Finishing | 667 967 | x | | × | _ | - | Partially lower top to relieve tension on back curtain | At rodius |
| Rear Fender Lower | 700 | | | x View C | x View A | - | _ | - |
| Rear Compartment Front | 900 | _ | _ | x | | _ | _ | |
| Panel Ornament Grille | Series | | | View D | | | | |
| Rear Compartment Lid | 700 | — | — | x View C | | - | - | — |
| Front Wheel Opening | 600 900 | x | — | - | — | - | _ | - |
| Rear Wheel Opening | 600 900 | × | _ | — | — | - | _ | - |
| Rear Door Outer Panel Lower | 769 | × | - | x View C | ~ | - | _ | - |

MOLDING REMOVAL CHART

Snap-on Clips-thin flat-bladed tool (putty knife).

If it is necessary to replace a damaged "bath-tub" molding clip, use the following procedure for removal and installation:

1. Insert sharp edge of flat-bladed tool, such as a putty knife, under edge of clip and hammer tool until base of clip is cut approximately half-way through (fig. 21) then disengage clip from hole.

NOTE: In some cases, it may be necessary to cut clip at opposite end of base also.

2. No special tool is needed to install new plastic clip.

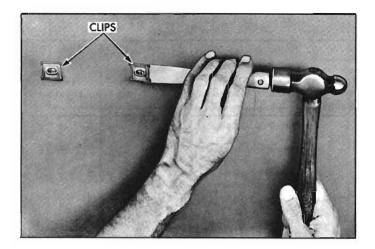


Fig. 21—Removing "Bath-Tub" Clip

SEATS

FULL WIDTH TYPE FRONT SEATS

Manually operated front seat adjusters provide fore and aft movement of the seat. When the lever at the left seat adjuster is pushed rearward the seat adjusters unlock, permitting horizontal travel of the seat. When the seat is in the desired position, the lever is released and the seat is locked.

Seat Assembly

Removal and Installation

- 1. Turn back floor carpeting, where necessary, to expose seat adjuster-to-seat support attaching bolts.
- 2. Operate seat to full rearward position.
- 3. At front adjusters, loosen adjuster-to-floor pan attaching bolts.
- 4. Operate seat assembly to full forward position.
- 5. At rear of adjusters, remove adjuster to-floor pan attaching bolts.
- 6. With aid of helper, slide seat assembly rearward until front legs of adjuster are disengaged from under front attaching bolts. Remove seat assembly from body.
- 7. To install, reverse removal procedure.

NOTE: Make certain front legs of adjusters are completely engaged under retaining bolts before installing or tightening bolts.

REAR SEAT Cushion Assembly

Removal

- 1. Push lower forward edge of cushion rearward and pull cushion upward until protrusions on seat bottom frame disengage from floor pan stops.
- 2. Pull cushion forward and carefully remove from body.

Installation

- 1. Carefully lift cushion into body to avoid damaging adjacent trim.
- 2. Position rear edge of cushion under rear seat back assembly.
- 3. Center protrusions on seat bottom frame with stops on floor pan assembly.

IMPORTANT: If seat bottom frame protrusions are not properly centered in relation to floor pan stops, proper engagement and placement of cushion will be extremely difficult.

 Push forward edge of cushion rearward and downward until protrusions are properly engaged behind floor pan stops.

Back Assembly

Removal and Installation

- 1. Remove rear seat cushion assembly.
- 2. At bottom of the seat back on all styles except convertibles, bend out the two (2) tabs that secure the seat back to the floor panel. On convertibles, remove the two (2) screws securing the seat back to the floor panel and at back of seat remove screws securing folding top compartment side trim panels to seat back assembly.
- 3. Pull seat back assembly out at bottom until seat back clears body tabs; then, raise seat back upward until disengaged from hangers on the seat back panel support.
- 4. Remove seat back assembly from body.
- 5. To install, reverse removal procedure, making certain that all attaching body tabs and hangers have industrial body tape applied to them to act as an anti-squeak.

BUCKET TYPE FRONT SEATS

Figure 22 is typical of bucket seat installation with driver and passenger seat assemblies equipped with manually operated seat adjusters.

All seat adjusters and stationary supports are bolted to the seat bottom frame; however, a combination of bolts and nuts are used to retain the adjusters or stationary supports to the floor pan assembly.

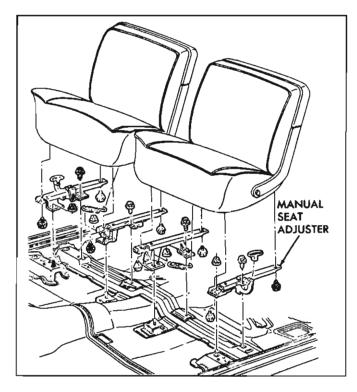


Fig. 22—Bucket Seat Assembly

All adjusters are equipped with assist springs which are attached to the outboard adjuster.

Seat Assembly (Driver or Passenger)

Removal and Installation

- 1. Turn back floor carpeting sufficiently to expose seat adjuster-to-floor pan attaching nuts or bolts.
- 2. Operate seat assembly to rearward position.
- 3. Loosen adjuster to floor pan attaching nuts or bolts.
- 4. Operate seat assembly to full forward position.
- 5. At rear of seat, remove adjuster to floor pan attaching nuts or bolts.
- 6. Carefully slide seat assembly rearward until front adjusters are removed from under front attaching nuts or bolts.
- 7. With aid of helper, remove seat assembly with attached adjusters from body.
- 8. To install, reverse removal procedure. Be sure adjusters are properly engaged under front attaching nuts or bolts prior to installing rear attaching bolts.

Seat Adjusters (Driver or Passenger)

Removal and Installation

- 1. Remove front seat assembly as previously described and place upside down on a clean, protected surface.
- 2. If adjuster to be replaced is equipped with an assist spring, remove spring from adjuster.

- 3. Operate adjuster so that both front and rear attaching bolts are accessible.
- 4. Remove adjuster-to-seat bottom frame front and rear attaching bolts and remove adjuster from seat assembly.
- 5. To install, reverse removal procedure.

Back Assembly

Removal and Installation

1. Using a flat-bladed tool, carefully remove retainer from outer hinge pin (fig. 23).

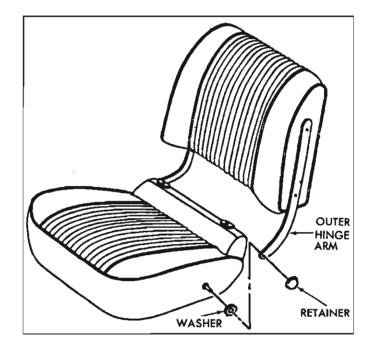


Fig. 23—Bucket Seat—Back Removal

- 2. At inboard side, remove retainer from inner hinge pin.
- 3. Carefully disengage inner and outer front seat back hinge arms from pins, then, remove seat back assembly from body.
- 4. To install, reverse removal procedure. Prior to installation of back assembly, be sure inner and outer washers are installed over the hinge pins. In addition, inspect hinge arm retainers. If retainers are damaged, replace retainer using new parts.

BODY SHELL

BODY ALIGNMENT

The following body alignment reference point dimensions reflect the changes made to the Corvair underbody. Before attempting to check body alignment, carefully read pages 10-2 through *Body Tram Gauge*, on page 10-6 of the 1961 Corvair Shop Manual. Also see page 10-9 of that book.

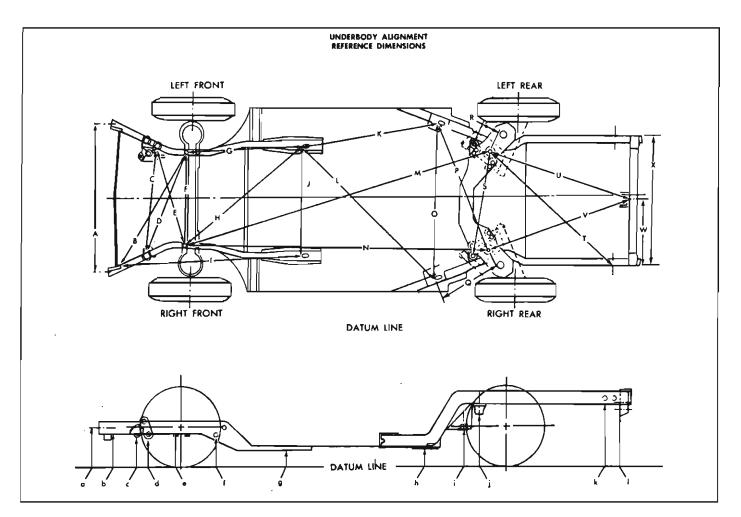


Fig. 24—Underbody Alignment Dimensions

Underbody Alignment Reference Point Dimensions

Dimensions to gauge holes and other unthreaded holes are measured to dead center of the holes and flush to the adjacent surface metal. Dimensions to body front and rear tie down slots are measured to the front centerline edge of the slot. Dimensions to bolt or bolt hole locations are measured to the dead center of the thread diameter of the bolt or bolt hole.

The dimensions and locations presented below are illustrated in Figure 24, Figure 25, Figure 26, Figure 27 and Figure 28.

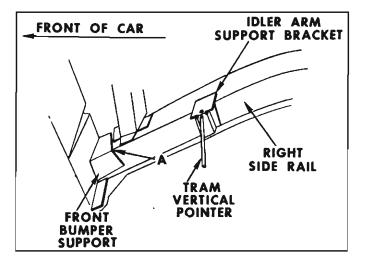


Fig. 25—Alignment Reference Points at Idler Arm Support Bracket

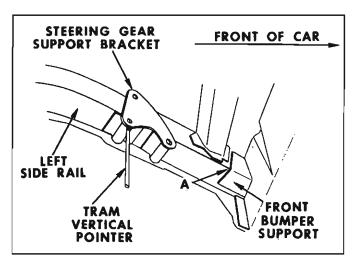
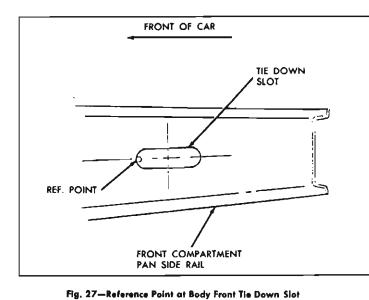


Fig. 26—Reference Points at Steering Gear Support Bracket

BODY 10-23



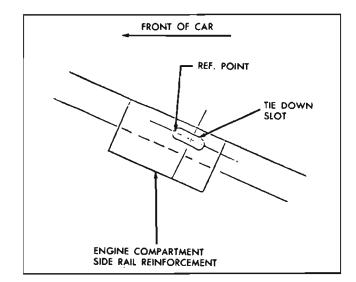


Fig. 28—Reference Point at Body Rear Tie Down Slot

| Figure Reference | Dimension | Location | |
|---------------------|---|--|--|
| A | 42 ⁵ / ₃₂ " | Center of bumper bracket lower attaching bolt holes. | |
| В | 35 ¹ % ₃₂ " | ront suspension crossmember front attaching bolt and front compartment side rail mer lower corner at rear of bumper support bracket (See point "A", fig. 25 and fig. 26). | |
| С | 305⁄ ₈ ″ | Lower inner surface of idler arm support lower bracket at a point directly below center of the attaching bolt hole (See fig. 25) and lower edge of steering gear reinforcement plate at a point directly below center of the rear attaching bolt hole (See fig. 26). | |
| D | 30 ³ 1/32″ | Lower inner surface of idler arm support lower bracket at a point directly below center of the attaching bolt hole (See fig. 25) and center of front crossmember front attaching bolt on left side rail. | |
| E | 29 ² 7⁄ ₃₂ ″ | Lower edge of steering gear reinforcement plate at a point directly below center of the rear attaching bolt hole (See fig. 26) and center of front crossmember front attaching polt on right side rail. | |
| F | 27 ¹ 7⁄ ₃₂ ″ | Front suspension crossmember front attaching bolts. | |
| G H | 29 ¹ 5/ ₃₂ " 42 ⁵ / ₃₂ " | Front of slot at body front tie-down strap location and front suspension crossmember front attaching bolts (See fig. 27). | |
| I | 44 ⁵ / ₈ " | Front of slot at body front tie-down strap location and front compartment frame side rail inner lower corner at rear of bumper support bracket (See point "A" in fig. 25 and fig. 26). | |
| J | 33½ ["] | Body front tie-down strap locations (Front of slot-See fig. 27). | |
| K L | 597 _{/32} " 70 ²⁵ /32" | Body front tie-down strap location and body rear tie-down strap location (Front of Slot —See fig. 28). | |
| M N | 107½″ 103¾″ | Center of front suspension crossmember front attaching bolt and center of rear suspen- sion crossmember rear mounting bolt. | |
| 0 | 45½″ | Front of slot at body rear tie-down strap locations (See fig. 28). | |
| P Q | 415/16" 163⁄4" | Front of slot at body rear tie-down strap locations and center of rear suspension cross- member rear mounting bolt. | |

HORIZONTAL DIMENSIONS

.

HORIZONTAL DIMENSIONS

| Figure Reference | Dimension | Location |
|---------------------|---|---|
| R | 85/32 ^{'''} | Center of rear suspension front mounting bolt hole to center of rear suspension rear mounting bolt hole on same side of car (engine and suspension system removed). |
| S | 335%" | Center of rear suspension front mounting bolt to center of rear suspension rear mounting bolt on opposite side of car. |
| Т | 49 ¹⁵ /16" | Center of rear suspension crossmember rear mounting bolt and engine compartment side rail outer flange at a point directly under the center of the rear bumper bracket front attaching bolt hole. |
| U V | 43 ¹ ¹ / ₁₆ " 43 ⁷ / ₁₆ " | Center of rear suspension crossmember rear mounting bolt or bolt hole and front lower edge of rear crossrail. |
| W | 19¾ ₁₆ ″ | Engine compartment right side rail outer flange and front lower edge of rear crossrail. |
| х | 39″ | Engine compartment side rail outer flanges at rear bumper bracket forward attaching bolt holes. |

VERTICAL DIMENSIONS

| VERTICAL DIMENSIONS | | | |
|---------------------|---|--|--|
| Figure Reference | Dimension | Location | |
| Α | 135/32" | Center of bumper bracket lower attaching bolt holes. | |
| В | 10% ₂ ″ | Front compartment side rail inner lower corner at rear of bumper support bracket (See point "A" in fig. 25 and fig. 26). | |
| С | 9 ¹⁷ / ₃₂ ″ | Lower inner surface of idler arm support lower bracket at a point directly below center of the attaching bolt holes (See fig. 25). | |
| D | 9 ¹ ³ / ₃₂ " | Lower edge of steering gear reinforcement plate at a point directly below center of the rear attaching bolt hole (See fig. 26). | |
| E *E | $\frac{10\%2''}{9^{2}5\%2''}$ | Front compartment side rail at front suspension crossmember front attaching bolt hole. Center of lower surface of front suspension crossmember front attaching bolt head. | |
| F | 9 ³ / ₁₆ ″ | Center of stabilizer support bracket lower attaching bolt. | |
| G | 4″ | Body front tie-down strap location. Bottom surface of rail assembly. | |
| н | 5%2″ | Body rear tie-down strap location. Bottom surface of rail assembly. | |
| I | 9 ²³ ⁄ ₃₂ ″ | Lower surface of rear seat pan reinforcement panel at rear suspension front mounting location. For vertical check with engine and suspension system removed. | |
| J *J | 15¼″ 13½″ | Rear suspension crossmember rear mounting support at attaching bolt hole. Lower surface of rear suspension crossmember outer mounting attaching bolt head. | |
| K | 16 ¹ / ₃₂ " | Lower surface of engine compartment side rail outer flange at a point directly under the center of the rear bumper front attaching bolt hole. | |
| L | 9½″ | Front lower edge of rear crossrail at a point directly below center of lower attaching bolt hole for engine rear mount bracket. | |

* With Suspension Systems Installed.

.

CORVAIR CONVERTIBLE

(MODELS 667 and 967)

INDEX

| | Page | | Page |
|------------|-------|--------------|-------|
| Doors | 10-25 | Rear Quarter | 10-29 |
| Windshield | 10-27 | Folding Top | 10-27 |

GENERAL DESCRIPTION

This section provides body information necessary for the proper servicing of the Corvair Convertible (models 667 and 967). Service procedures required for adjustment and replacement of the Corvair Convertible top are covered in detail; also included are recommended procedures for removal and installation of the body hardware and trim assemblies that are peculiar to this convertible style.

The method of operating the folding top, as well as information on care and maintenance of the folding top material and plastic rear window is contained in booklets titled, "Operation and Care of the Folding Top." Chevrolet Assembly Plants place these owner instruction booklets in the glove compartment of all convertibles.

DOORS

A phantom view of a Corvair Convertible door, with hardware installed, is shown in Figure 29. The illustration also identifies the door hardware attachments and locates the various adjusting points.

WEDGE PLATES

Door wedge plates are used as a positive "hold" of front doors with doors in the closed position. Wedge plates are retained by two screws and are installed at the top section of door and body lock pillars. The body wedge plate is constructed of metal and the door wedge plate is constructed of nylon. If necessary, shims

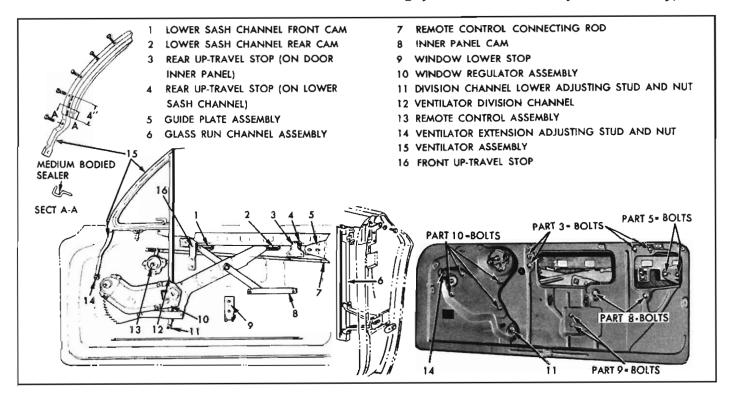


Fig. 29—Corvair Convertible Door Hardware

can be installed under the door wedge plate. These shims are available as a service part.

Removal and Installation

1. Remove two screws securing wedge plate to body panel and remove wedge plate (See Figure 30).

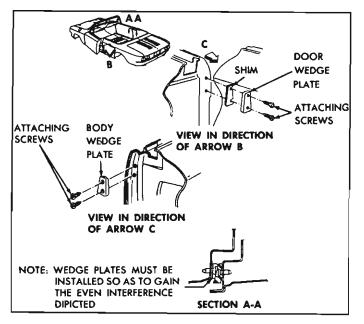


Fig. 30—Door Wedge Plates

DOOR VENTILATOR CASTING REPLACEMENT

- 1. Remove door trim pad and detach inner panel water deflector at forward section.
- 2. Remove ventilator casting to door hinge pillar and attaching bolt.
- 3. Remove door ventilator casting to inner panel adjusting stud nut.
- 4. Remove four vent casting to vent frame screws. Remove casting from door.
- 5. To install, reverse removal procedure. Prior to installation, apply a ribbon of medium bodied sealer to vent casting as indicated in Section "A-A."
- 6. A slight in and out adjustment of the vent casting can be obtained at the lower adjusting stud and nut.

DOOR VENTILATOR ASSEMBLY REPLACEMENT

- 1. Remove door trim assembly and detach inner panel water deflector.
- 2. Remove vent division channel lower adjusting stud and nut.
- 3. Remove door ventilator casting. Remove vent frame to inner panel screw.
- 4. Tilt ventilator assembly forward until vent division channel clears door window glass and remove ventilator assembly.

CAUTION: After ventilator assembly has been removed, door glass must be suitably retained in position to prevent damage.

5. To install, reverse removal procedure.

DOOR WINDOW REPLACEMENT

The door window is a solid tempered safety plate glass. The glass is pressed into a lower sash channel assembly which incorporates riveted front and rear lower sash channel cams. With this type of design, the door glass, lower sash channel and sash channel cams are removed from the door as a unit.

- 1. Remove door trim pad and detach inner panel water deflector.
- 2. Lower window approximately one-third of the way down.
- 3. Remove door inner panel window front and rear up-stops.
- 4. Remove door window lower sash channel guide plate.
- 5. Lower window and remove door window inner and outer strip assemblies.
- 6. Roll window up to high point and slide window rearward to disengage lower sash channel front and rear cams from regulator balance and lift arm rollers.
- 7. To install, reverse removal procedure. After installation, lubricate lower sash channel and inner panel cam.

Adjustments

- 1. To adjust the lower section of the vent division channel in or out or fore or aft, lower door window and loosen division channel adjusting stud nut. Turn adjusting stud in or out or position lower end of channel fore or aft, as required, and tighten stud nut.
- 2. An up or down adjustment of the window assembly is available at the front and rear up-stops located on inner panel.
- 3. A rotated or cocked door window can be corrected by adjusting the inner panel cam if necessary by individual adjustments of the inner panel window up-stops.
- 4. A slight fore and aft adjustment of the glass is available at the door window lower sash channel guide plate.
- 5. Some in and out adjustment (at rear of glass) is available at the lower attaching bolt of the rear run channel.

DOOR WINDOW REGULATOR REPLACEMENT

- 1. Remove door window.
- 2. Remove ventilator assembly adjusting stud.

- 3. Remove inner panel cam. Remove regulator assembly.
- 4. To install, reverse removal procedure. Cycle window several times to insure proper operation.

DOOR REAR RUN CHANNEL REPLACEMENT

- 1. Remove trim pad and water deflector. Remove door window lower sash channel guide plate.
- 2. With glass in full up position, remove upper and lower attaching bolts of rear run channel and remove assembly through door inner panel access hole. To install, reverse removal.

WINDSHIELD UPPER HEADER MOLDINGS

The upper header moldings consist of right and left ends and a center molding. The moldings are secured to the windshield header by screws. The header moldings are installed before the windshield assembly, but may be removed without removing the windshield (fig. 31).

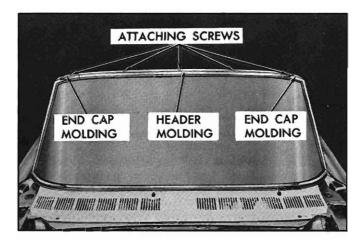


Fig. 31-Windshield Header Assembly

Removal and Installation

- 1. Place protective covering over front seat and instrument panel.
- 2. Remove rear view mirror support.
- 3. Remove sunshade supports.
- 4. Remove attaching screws and moldings.
- 5. Remove header end moldings and header center molding.
- 6. Remove lower end moldings.
- 7. Remove lower center moldings.
- 8. To install, apply a $\frac{3}{16}''$ bead of medium-bodied sealer the entire length of the windshield header before installing the center header molding. Apply additional sealer to underside of each end molding to insure a watertight seal to the junction of the center molding (fig. 31). Clean off excess sealer and reverse removal procedure for all other moldings.

MINOR WATERLEAKS AT WINDSHIELD

In many instances, minor waterleaks around the windshield may be corrected by performing the following operations:

- 1. Leaks between rubber channel and glass.
 - a. Using a pressure applicator (plews oiler or equivalent) with a narrow tip, apply an approved weatherstrip adhesive (black) between glass and rubber channel on the outside of the glass completely around the perimeter of glass.
- 2. Leaks between rubber channel and body.
 - a. Use a pressure applicator with a narrow tip. Working from outside of body, apply mediumbodied sealer under outer lip of rubber channel around entire perimeter of body opening.

SUNSHADE SUPPORT

Removal and Installation

- 1. Raise top, remove attaching screws and supports.
- 2. To install, reverse removal procedure.

NOTE: Support must be adjusted so that hole in support will receive guide pin on folding top front rail.

BODY REAR QUARTER

REAR QUARTER WINDOW REPLACEMENT

1. Lower folding top and operate rear quarter window to half down position. Remove rear quarter upper trim assembly, belt finishing molding, and inner panel access hole cover.

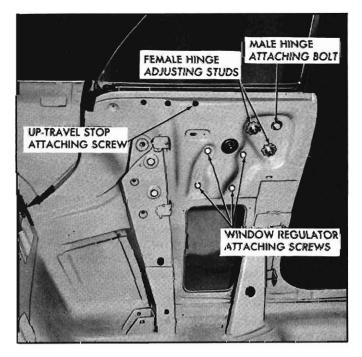


Fig. 32—Rear Quarter Hardware Attachment

CORVAIR SHOP MANUAL SUPPLEMENT

- 2. Remove male hinge attaching bolt (fig. 32). Disengage window male hinge from female hinge plate; then raise window to disengage window lower sash channel cam from roller on window regulator lift arm and remove window.
- 3. Prior to window installation, lubricate pivot hinge and lower sash channel cam with lubriplate or its equivalent. To install rear quarter window, reverse removal procedure.

Adjustments

1. To adjust the limit of the rear quarter window uptravel, loosen the up-travel stop attaching screw (fig. 32), then, operate window to desired position and tighten screw.

NOTE: In order to perform any of the following adjustments it is necessary to remove the folding top compartment side trim panel assembly, rear quarter trim assembly, and belt finishing molding to gain access to the adjusting locations.

- a. "Up or Down" "Fore or Aft" Adjustment-Loosen male hinge attaching bolt and both adjusting stud nuts (fig. 32). Adjust window to desired position and tighten pivot bolt and stud nuts.
- b. "In or Out" Adjustment of Top of Window-Loosen lower adjusting stud nut and slightly loosen rear stud nut. Adjust lower stud "in or out" as required and tighten both stud nuts.
- c. "In or Out" Adjustment of Rear of Window-Loosen pivot hinge rear adjusting stud nut and slightly loosen lower adjusting stud nut. Adjust hinge rear adjusting stud "in or out" as required and tighten both hinge adjusting stud nuts.

NOTE: After performing any rear quarter window adjustments, seal all attaching screws which have been disturbed as specified under "Rear Quarter Inner Panel Sealing."

QUARTER WINDOW REGULATOR REPLACEMENT

- 1. Operate window to full down position. Remove rear quarter upper assembly trim and inner panel access hole cover.
- 2. Remove regulator attaching screws (fig. 32). Disengage regulator lift arm roller from window lower sash channel and remove regulator assembly through access hole. To install regulator, reverse removal procedure.

REAR QUARTER INNER PANEL SEALING

Whenever the seals in the rear quarter area have been disturbed, the location must be resealed before the rear quarter trim is installed. Following are the rear quarter inner panel openings and hardware attaching locations that must be sealed to prevent water leakage and possible trim damage. The numbers of the items refer to corresponding numbers on Figure 33.

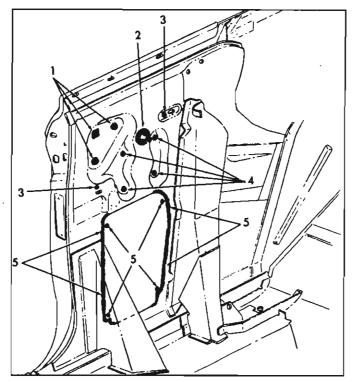


Fig. 33—Rear Quarter Inner Panel Sealing

NOTE: When body caulking compound is used, work compound firmly to metal surfaces and feather-edges out to obtain good adhesion.

- 1. Window Hinge Attaching Bolt and Adjusting Studs-Apply body caulking compound over bolt head and adjusting stud nuts to completely seal openings.
- 2. Window Regulator Spindle Hole Sealing Washer-Apply weatherstrip adhesive (black) over exposed surface of washer to seal pores of sponge rubber and joint between inner panel and washer.
- Belt Finishing Molding Attaching Screw Holes-Apply body caulking compound over holes to effect a seal when attaching screws are installed.
- Window Regulator Attaching Screws Apply weatherstrip adhesive (black) over attaching screws.
- 5. Inner Panel Access Hole Cover-Prior to installation of access hole cover, apply a bead of body caulking compound across upper corners and down sides of inner panel along flange contacted by cover. After installation of cover, apply body caulking compound to lower corners where cover flange transition to inside of quarter panel occurs and to cover attaching screws.

REAR QUARTER BELT FINISHING MOLDING

Removal and Installation

- 1. Remove rear quarter upper trim assembly. Disengage pinchweld finishing strip that overlaps belt finishing molding front edge.
- 2. Remove screws securing belt finishing molding to quarter inner panel (fig. 34). Lift molding upward and inboard and remove it from body.

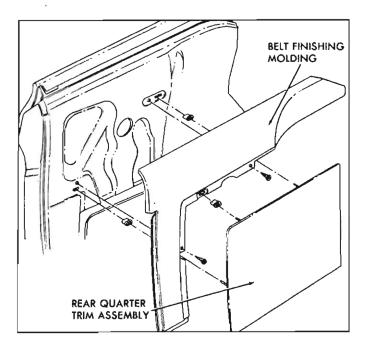


Fig. 34-Rear Quarter Trim Assembly

3. To install belt finishing molding, reverse removal procedure. Prior to installation, seal attaching screw locations as described in "Rear Quarter Inner Panel Sealing."

REAR QUARTER UPPER TRIM ASSEMBLY

Removal and Installation

- 1. Remove folding top compartment side trim panel assembly and window regulator handle.
- 2. Protect painted surfaces on belt finishing molding adjacent to upper trim assembly with masking tape.
- 3. Using trim panel removing Tool J-6335, carefully disengage trim panel from inner panel at retaining nail locations (fig. 34).
- 4. To install rear quarter upper trim assembly, reverse removal procedure.

FOLDING TOP

The folding top linkage consists of a front roof rail and hinged three-section right and left side roof rails interconnected by three roof bows. The top linkage is attached to the body at each rear quarter by a male hinge bolted to a folding top compartment brace. The front roof rail is fastened to the windshield header by two hook type locks which are operated by locking handles concealed above the side roof rails.

The folding top manual lift assembly utilized as regular production incorporates a dual-action heavy duty spring which helps compensate for the weight of the folding top mechanism when the top is at or near the full "up" or full "down" positions. When the top is in the up position the spring is under tension; when it is in the folded or stacked position the spring is extended and under compression.

FOLDING TOP ADJUSTMENTS

To correct some top variations or linkage misalignment, only a single adjustment is required; other top variations require a combination of adjustments. In conjunction with adjustment of the folding top, it may be necessary to adjust the door, door glass, rear quarter glass, trim sticks or side roof rail weatherstrips.

The front roof rail is fabricated of a die cast metal. Because of this feature, the contour of the front roof rail assembly cannot be changed by bending or reforming as the rail assembly may crack or become permanently damaged.

On the manually operated top, folding top catch clips snap over the folding top side roof center rails when the top is being lowered to the folded or stacked position. The catch clips prevent the spring-loaded manual lift arms from raising the top from this position. In order to raise the top, both catch clips must be disengaged from the side roof center rails. Each catch clip is attached to the top compartment side trim panel by two screws. Any adjustments made to change stack height of the folding top will require corresponding adjustments to the catch clips.

CAUTION: When operating a manually operated folding top, hands must be kept clear of side roof rail hinges and connecting linkage. Do not attempt to detach the manual top lift assembly when counterbalance spring is under tension or compression.

Front Roof Rail Lock Adjustment

If the locking action of top is unsatisfactory, the hook lever on the lock assembly may be adjusted as follows:

- 1. To tighten or increase locking action, turn lock hook clockwise.
- 2. To reduce or decrease locking action, turn lock hook clockwise.

Adjustment of Folding Top Front Roof Rail Guide

If the front roof rail guides do not properly engage with the striker assemblies with the top in an "up" or

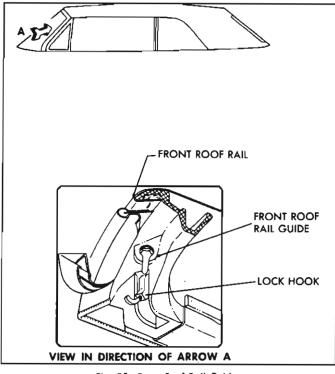


Fig. 35—Front Roof Rail Guide

raised position, the guides may be adjusted laterally as follows:

- 1. Raise top assembly to half open position.
- Loosen guide sufficiently to permit adjustment (fig. 35). Shift guide to desired position and retighten.

NOTE: The sunshade support and striker assembly is not adjustable. In addition, adjustment of guide is limited. If additional adjustment is required, particularly fore and aft movement of the front roof rail, it can be obtained by adjusting the front roof rail and/or folding top male hinge.

Adjustment of Top at Front Roof Rail

If the top, when in a raised position, is too far forward or does not move forward enough to allow the guide studs on the front roof rail to enter holes in the striker assemblies, proceed as follows:

- 1. Unlatch top and raise it above windshield header. Remove side roof rail weatherstrip front attaching screws.
- Loosen side roof front rail attaching bolts and adjust front roof rail fore or aft as required (fig. 36). Repeat on opposite side if necessary.

NOTE: This adjustment is limited. If additional adjustment is required, it can be made at the folding top male hinge.

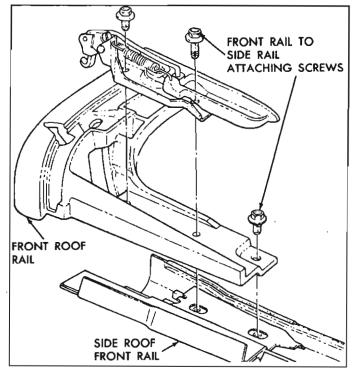


Fig. 36—Front Roof Rail Adjustment

3. When front roof rail is properly adjusted, tighten attaching bolts. Check forward section of side roof rail front weatherstrip. Refit and recement as required; then install weatherstrip attaching screws.

Top Adjustment at Control Link Adjusting Plate

- 1. With top in up position, if joint between front and center side roof rail is too high or too low, proceed as follows:
 - a. Remove folding top compartment side trim panel and scribe location of control link adjusting plate on folding top compartment brace.
 - b. Loosen two bolts securing control link adjusting plate sufficiently to permit adjustment of plate (fig. 37).
 - c. Without changing fore and aft location of adjusting plate, adjust side roof rail up or down allowing adjusting plate to move up or down over serrations on support as required; then tighten bolts.
- 2. If top assembly does not stack properly when top is in down position, proceed as follows:
 - a. Scribe location of control link adjusting plate on folding top compartment brace.
 - b. Loosen bolts securing control link adjusting plate sufficiently to permit adjustment of plate.

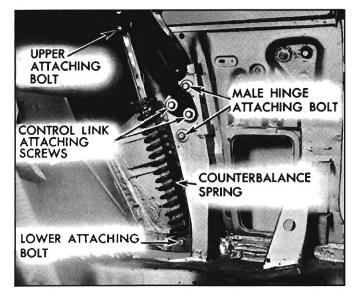


Fig. 37—Top Lift Linkage Attachment at Rear Quarter

- c. Without changing the up or down location of adjusting plate, move adjusting plate forward or rearward (horizontally) over serrations as required to obtain desired height; then tighten bolts.
- d. On styles equipped with a manually operated folding top, adjust both folding top catch clips as required.

Top Adjustment at Male Hinge Support

Prior to making any adjustment of top linkage at male hinge, loosen two bolts securing folding top rear quarter trim stick to rear quarter panel. This will prevent any possible damage to top when it is raised after adjustment. After making an adjustment at male hinge, check folding top at rear quarter area for proper fit and, if necessary, adjust trim stick assembly.

- 1. If there is an excessive opening between side roof rail rear weatherstrip and rear of rear quarter window, or if front roof rail is too far forward or rearward, proceed as follows:
 - a. Scribe location of male hinge attaching bolt washers and control link assembly on folding top compartment brace.

- b. Loosen male hinge assembly and control link attaching bolts (fig. 37).
- c. Move hinge fore or aft as required to obtain proper alignment between side roof rail rear weatherstrip and rear quarter window; then tighten bolts.
- d. Lock front roof rail to windshield, (where required, adjust front roof rail as previously described) and check fit of top material at rear quarter trim stick area. If necessary, adjust trim stick; then tighten trim stick attaching bolts.
- e. Check top assembly for proper stack height. Where required, adjust control link adjusting plate as previously described (see step #2 under "Top Adjustment at Control Link Adjusting Plate").
- f. On styles equipped with manually operated folding top adjust both folding top catch clips as necessary.
- 2. If side rail is too high or too low at rear quarter window area, proceed as follows:
 - a. Scribe location of male hinge attaching bolt washers and control link on folding top compartment brace.
 - b. Loosen male hinge assembly and control link attaching bolts (fig. 37).
 - c. Without changing fore and aft location of male hinge, adjust male hinge up or down as required to obtain proper alignment between side roof rails and rear guarter windows.
 - d. Tighten attaching bolts, while maintaining proper alignment of scribe marks.
 - e. Check fit of top material at rear quarter trim stick area and, if necessary, adjust trim stick. If adjustment is not necessary, tighten trim stick attaching bolts.
 - f. Check top assembly for proper stack height. Where required, adjust control link adjusting plate as previously described (see step 2 under "Top Adjustment at Control Link Adjusting Plate").
 - g. On styles equipped with manually operated folding top, adjust folding top catch clips as necessary.

FOLDING TOP MISALIGNMENT AND ITS CORRECTION

The following chart describes various types of folding top misalignment conditions, their causes and the recommended procedure for their correction. To correct some top variations, only a single adjustment is required; other top variations require a combination of adjustments.

| | Condition | Apparent Cause | Correction |
|----|--|---|--|
| A. | Difficult locking action at front roof rail. | Lock hook lever improperly ad- justed. Misaligned front roof rail front weatherstrip. Front roof rail misaligned. | Adjust lock hook counterclockwise. Loosen, realign and retack front roof rail front weatherstrip. Adjust front roof rail. |
| B, | Top does not lock tight enough to windshield header. | Lock hook lever improperly adjusted. Misaligned front roof rail front weatherstrip. Front roof rail misaligned. | Adjust lock hook clockwise. Loosen, realign and retack front roof rail front weatherstrip. Adjust front roof rail. |
| C. | Top travels too far for- ward. | Front roof rail misaligned. Male hinge assembly misaligned. | Adjust front roof rail rearward (fig. 36). Adjust male hinge assembly rearward (fig. 37). |
| D. | Top does not travel for- ward far enough. | Front roof rail misaligned. Male hinge assembly misaligned. Improper spacing between rear trim stick and body metal. | Adjust front roof rail forward (fig. 36). Adjust male hinge assembly forward (fig. 37). Install an additional spacer between rear trim stick and body metal at each attaching bolt location. |
| E. | Side roof rail rear weatherstrip too tight against top of rear quarter window. | Male hinge assembly misaligned. | Adjust male hinge assembly rear- ward (fig. 37). |
| F. | Gap between side roof rail rear weatherstrip and rear of rear quar- ter window. | Male hinge assembly misaligned. | Adjust male hinge assembly forward (fig. 37) and/or shim side roof rail rear weatherstrip forward as re- quired. |
| G. | Side roof rail rear weatherstrip too tight against top of rear quarter window. | Male hinge misaligned. | Adjust male hinge upward (fig. 37). |
| H. | Gap between side roof rail rear weatherstrip and top of rear quarter window. | Male hinge misaligned. | Adjust male hinge downward and/or shim side roof rail rear weatherstrip downward as required. |
| I. | Sag at front to center side roof rail joint. | Control link adjusting plate mis- aligned. Center side roof rail hinge adjust- ing screw improperly adjusted. | Adjust control link adjusting plate downward (fig. 37). Adjust screw counterclockwise. (See View "B" in Figure 38). |
| J. | Front and center side roof rails bow upward at hinge joint. | Control link adjusting plate mis- aligned. Center side roof rail hinge adjust- ing screw improperly adjusted. | Adjust control link adjusting plate upward (fig. 37). Adjust screw clockwise (See View "B" in Figure 38). |

| | Condition | Apparent Cause | Correction |
|----|---|---|---|
| К | Folding top dust boot is difficult to install. | Improper stack height due to misaligned control link adjusting plate. Misaligned folding top dust boot | Adjust control link plate rearward or forward as required (fig. 37). Where possible, align female with |
| | | female fastener. 3. Rear seat back assembly is too far forward. | male fastener. Relocate rear seat back rearward un- til dimension between upper rear edge of rear seat back to forward edge of pinchweld finishing molding is $125\%''$ ($\pm 1_{16}''$). The dimension is measured at approximate center line of body. |
| | | Excessive build-up of padding in side roof rail stay pads. On manual tops, due to improp- | Repair side stay pads as required. Adjust catch clips downward as re- |
| | | erly adjusted catch clips. | quired. |
| L. | Folding top dust boot fits too loosely. | 1. Improper stack height due to misaligned control link adjusting plate. | Adjust control link plate forward as required (fig. 37). |
| | | 2. Rear seat back assembly is too far rearward. | Relocate rear seat back panel for- ward until dimension between upper rear edge of rear seat back to for- ward edge of pinchweld finishing molding is $125\%''$ ($\pm 1/16''$). The di- mension is measured at approximate centerline of body. |
| | | 3. On manual tops, due to improp- erly adjusted catch clips. | Adjust catch clips upward as re- quired. |
| M. | Top material is too low over windows or side roof rails. | Front roof bow improperly shimmed. Excessive width in top material. | *Install one or two 1/8" shims from be- tween front roof bow and slat iron. (See View "B" in Figure 38.) If top is too large; detach binding along affected area, trim off exces- sive material along side binding as required; then hand sew binding to top material. |
| N. | Top material is too high over windows or side roof rails. | Front roof bow improperly shimmed. Front roof bow felt silencer too high. | *Remove one or two ¼" shims from between front roof bow and slat iron. (See View "B" in Figure 38.) Trim silencer to within ½" of top of front roof bow. (See View "B" in Figure 38.) |
| О. | Top material has wrin- kles or draws. | Rear quarter trim stick improperly adjusted. Top material improperly installed to center of rear quarter trim stick. | Adjust rear quarter trim stick on side affected. Retack top materials as required. |
| Р. | Wind whistle or water leak along front roof rail. | Top does not lock tight enough to windshield header. Misaligned front roof rail front weatherstrip. | Adjust lock hook clockwise. Retack front weatherstrip to front roof rail. |

| Condition | Apparent Cause | Correction |
|--|---|--|
| Q. Wind whistle or air leak between top ma- terial and side roof rail stay pad. | Top material hold-down cables improperly adjusted. | Adjust top material hold-down cables as required. |

*When no shims are required or when installing only one shim, use attaching screw part #4412844 (¼-20 x 5%" oval head with external tooth lock washer, type "T-T" tapping screw, chrome finish).

When two shims are required, use attaching screw part #4412619 ($\frac{1}{4}-20 \times \frac{3}{4}''$ oval head with external tooth lock-washer, type "T-T" tapping screw, chrome finish).

FRONT ROOF RAIL LOCK REPLACEMENT

2. With top in a half open position, remove lock at-

1. Unlock top from windshield header.

taching screws; then remove lock assembly from front roof sail (see View "A" in Figure 38).

3. To install, reverse removal procedure.

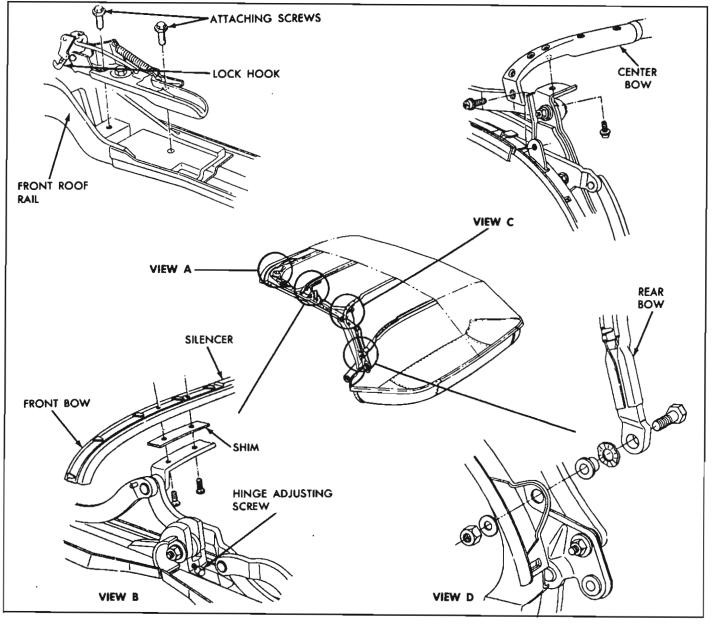


Fig. 38—Folding Top Linkage

REPLACEMENT OF MANUAL TOP COUNTERBALANCE LIFT ASSEMBLY

- 1. Remove rear seat cushion and back and folding top compartment side trim panel assembly.
- 2. Move top to midway position to relieve the manual lift springs. If both lift assemblies are to be serviced, have helper support folding top or place supporting props under front roof rail.
- 3. Remove upper and lower attaching bolts; then remove lift assembly from body (fig. 37).
- 4. To install manual lift assembly, reverse removal procedure. Operate top assembly several times through its complete cycle to insure proper operation.

FOLDING TOP COMPARTMENT SIDE TRIM PANEL ASSEMBLY

Removal and Installation:

- 1. Remove rear seat cushion and seat back assemblies.
- 2. Remove attaching screws at front, bottom, and rear of side trim panel assembly; remove by lifting trim panel upward and inboard.
- 3. To install side trim panel assembly, reverse removal procedure.

FOLDING TOP TRIM REPLACEMENT

The Corvair convertible incorporates a top material hold-down cable along the right and left side roof rails. The cables are installed through a retaining pocket in the top material and are fastened at the front and rear side rails by attaching screws. The cables are designed to hold the top material tight against the side roof rail stay pads, thus minimizing air leakage between the top material and the stay pads.

The back curtain assembly incorporates, as an integral part of the back curtain upper valance, a 20 inch piece of elastic webbing. The elastic webbing is located in the upper right hand corner of the curtain. The elastic webbing reduces tension on the zipper assembly at the radius, providing improved zipper operation.

Removal of Folding Top and Back Curtain Trim Assembly

- 1. Place protective covers on all exposed panels which may be contacted during trim removal.
- 2. Remove following trim and hardware items:
 - a. Rear seat cushion and back.
 - b. Folding top compartment side trim panel assemblies.
 - c. Side roof rail rear weatherstrips; then loosen folding top quarter flaps from rails.
- 3. At front of body, raise front roof rail and remove

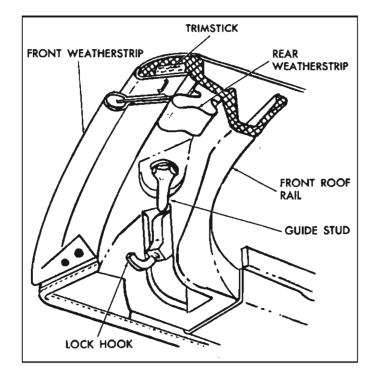


Fig. 39—Front Roof Rail Assembly

front weatherstrips; then detach top material from front roof rail (fig. 39).

- 4. Loosen front end of each side roof rail front weatherstrip sufficiently to detach top material flaps which are cemented to rails (fig. 40).
- 5. At right and left side roof front and rear rails, remove hold-down cable front and rear attaching screws (Views "A" and "B" in Figure 41).

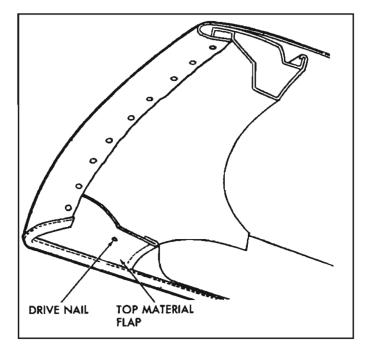


Fig. 40—Top Material at Front Roof Rail

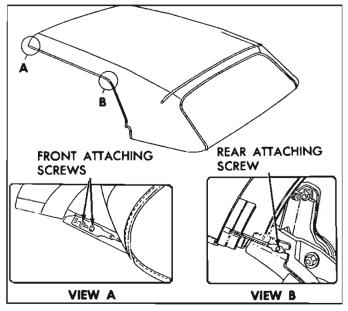


Fig. 41—Hold-down Cable Attaching Screws

- 6. At each side roof rear rail, pull hold-down cable forward until cable is completely removed from top material retaining pocket.
- 7. Detach folding top compartment bag from rear seat back panel, thus exposing rear quarter and rear trim stick attaching bolts. Forward end of top compartment bag may be tied or wired to center roof bow to provide ready access to attaching bolts (fig. 42).
- 8. At each rear quarter area remove attaching bolts securing rear quarter trim stick assembly to rear quarter inner panel (fig. 43).
- 9. Remove rear trim stick attaching bolts; then lift trim assembly with attached quarter and rear trim sticks on top of rear compartment front panel.

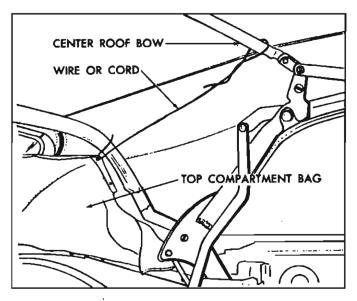


Fig. 42—Top Compartment Bag Tied to Center Roof Bow

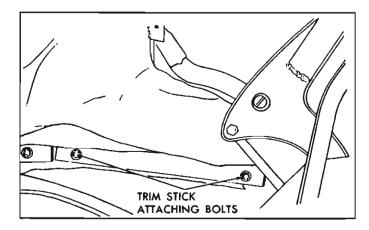


Fig. 43—Rear Quarter Trim Stick

10. To establish relationship of right and left inner vertical edge of old top material to back curtain assembly at rear trim stick location, mark back curtain vinyl at both locations with a grease pencil (fig. 44). Reference marks should be transferred to new back curtain when step 7 of installation procedure is performed.

NOTE: Reference marks must be made below upper edge of rear trim stick.

11. To establish relationship of old top material to its position on rear trim sticks, cut selvage end of top material off flush with lower edge of trim sticks.

CAUTION: When cutting top material, be careful not to cut lower selvage edge of back curtain assembly.

- 12. Using a pencil, mark both ends of rear and rear quarter trim sticks on vinyl surface of top material (fig. 45). Reference marks for trim sticks should be transferred to new top material when step 27 of installation procedure is performed.
- 13. Remove screw securing escutcheon clip at each end of wire-on binding on rear bow. Remove wire-

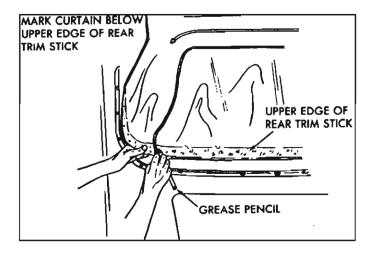


Fig. 44-Locating Edge of Top Material

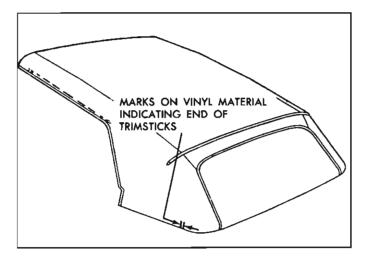


Fig. 45—Marking Top Material

on binding from rear bow. Detach top material from rear roof bow and from trim sticks, then remove top cover assembly.

14. Lock top to windshield header. Install radius end of each adjustable spacer stick to fit against center roof bow. Install opposite end of spacer stick so that metal plate fits under rear roof bow (fig. 46). Spacer sticks should be installed along inboard edge of side stay pad or approximately 18½" outboard from centerline dimple of rear roof bow. While exerting rearward pressure on rear bow to draw side stay pads taut, extend spaced sticks until they fit snugly between center bow and rear roof bow, then tighten wing nuts.

NOTE: Spacer sticks may be made as shown in Figure 47.

- 15. Temporarily tie or tape rear bow to rear side roof rails (fig. 46). Detach side stay pads and back curtain assembly from rear bow.
- 16. Remove rear trim stick with attached back curtain assembly and top compartment bag from body and place on clean, protected surface.

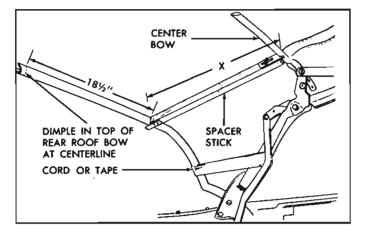


Fig. 46—Installation of Spacer Sticks

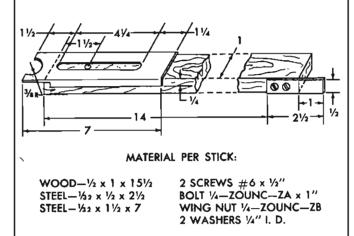


Fig. 47—Spacer Stick Dimensions

- 17. Using chalk, or other suitable material, mark ends of rear and rear quarter trim sticks on vinyl surface of back curtain material (fig. 63). Reference marks for trim sticks should be transferred to new back curtain material when step 7 of installation procedure is performed.
- Remove back curtain assembly from rear and rear quarter trim sticks.
- 19. Remove side stay pads. Stay pads are attached to front roof rail and front and rear bows with tacks; to center bow with screws.

Installation of Folding Top and Back Curtain Trim Assembly

- 1. If a new top is being installed, but it was impossible to perform step 14 of removal procedure, preset spacer sticks to shortest length and install between center and rear roof bow (fig. 46). Adjust sticks so that dimension "X" (measured along spacer stick from front upper rolled edge of rear roof bow to center of center bow) is $15'' (\pm \frac{1}{4}'')$. Tie or tape rear bow to rear side roof rails.
- In all cases, dimension "X", previously described, must be between 14¾" and 15¼" and equal on both sides. The dimension may be changed slightly within tolerances to correspond with new top after tryout.
- 3. Tack side stay pads in conventional manner to rear roof bow and stay tack pads to front roof rail. Make sure inboard edge of pad is properly aligned within depressions in bow and rail. Stay tack pads to front bow. Inboard edge of pad should be located within ¼" of outboard edge of front bow felt silencer. Install pad to center bow with screws. Make sure inboard edge of pad is properly aligned within depression in bow. Install stay pad wadding (fig. 48) in conventional manner using an approved trim cement.

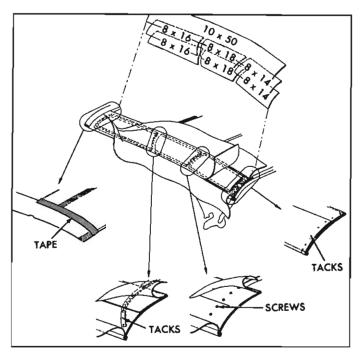


Fig. 48—Side Stay Pad Installation

- 4. Trim selvage end of side stay pads just forward of rear rolled edge of rear roof bow (fig. 49).
- 5. Distance from center of center bow to roller forward upper edge of rear bow is 15" ($\pm \frac{1}{4}$ "). Readjust spacer sticks and side roof rail pads as required if rear bow does not come within this position range.
- 6. Place new back curtain window assembly on a

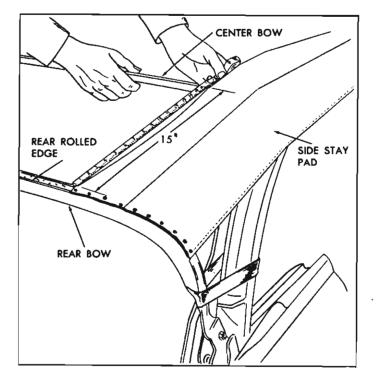


Fig. 49—Positioning Rear Bow

clean covered work bench with interior (vinyl) surface of back window valance facing down.

7. Carefully lay removed back curtain assembly over new back curtain assembly. Using a grease pencil, mark vinyl surface of new back curtain, using marked edge of old curtain as a guide. (See steps 10 and 17 of removal procedure.) In addition, mark trim stick bolt hole locations on new back curtain assembly.

CAUTION: Where a grease pencil or similar material is used for marking back curtain vinyl, marks must be below trim stick so that they will not show after curtain is installed in body.

8. Center and position back curtain assembly to rear trim stick over attached compartment bag.

NOTE: Notch in back curtain vinyl at lower edge indicates centerline of back curtain assembly (fig. 50). In addition, back curtain lower edge should extend $\frac{1}{2}$ " below lower edge of trim sticks.

 Tack curtain to rear and rear quarter trim sticks. On right side, tack zipper tape to forward edge of rear quarter trim stick. (See View "A" in Figure 50).

Zipper stop should be above upper edge of rear quarter trim stick. Zipper tape should not be pulled taut after back curtain has been installed to rear roof bow as zipper assembly may show through top material after top has been properly installed.

10. Tack remainder of back curtain material to rear quarter trim stick.

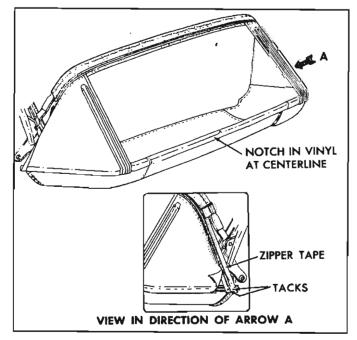


Fig. 50—Back Curtain Installation

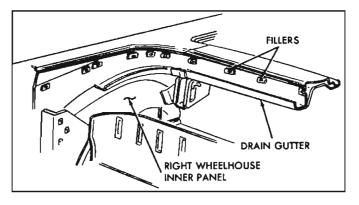


Fig. 51-Checking Trim Stick Filler

- 11. Tacks securing back curtain assembly to trim sticks should be placed close to each side of every bolt hole in trim sticks. Then pierce or punch back curtain assembly for each trim stick bolt.
- 12. Inspect rubber trim stick fillers cemented to body below pinchweld. Recement if necessary (fig. 51).
- 13. Install rear trim stick with attached back curtain assembly into body. Make sure that all trim stick bolts are driven completely in to represent a finished condition.
- 14. Secure back curtain assembly with one tack to rear of bow, to prevent damage to plastic sheet (fig. 52).
- 15. Working from body center progressively outboard to right and left sides, tack back curtain upper valance to rear bow. Make sure all fullness has been drawn from back curtain assembly. Fold excess back curtain upper valance material rearward and tack to rear bow (fig. 53).

CAUTION: Do not cut off excess upper valance material, as material may unravel.

- 16. Check contour of back curtain assembly at rear roof bow and at pinchweld molding.
- 17. Where required, place reference chalk mark on

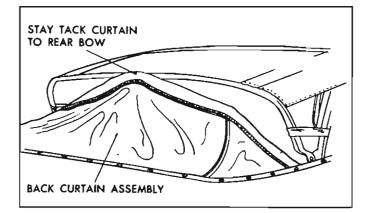


Fig. 52—Stay Tacking Back Curtain at Rear Bow

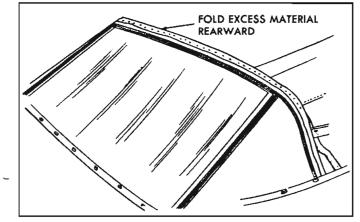


Fig. 53—Back Curtain Installed

outer surface of back curtain along pinchweld finishing molding. Readjust back curtain assembly as required (fig. 54).

- 18. Where required, adjust side stay pads; then tack side stay pads to front roof rail and front bow. Attach side stay pads to center bow with screws. Trim selvage end of side stay pads at front roof rail. Install stay pad covering material in conventional manner using an approved trim cement.
- 19. Detach rear trim stick with attached back curtain assembly from body.
- 20. Lay out new top material on a clean protected surface with outer layer of material exposed.
- Using a pencil, mark top material (mark should be approximately ½" in length) at deck seam 4¼" from edge of top material upper valance binding (fig. 55).

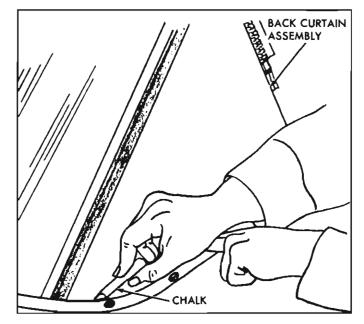


Fig. 54—Marking Back Curtain

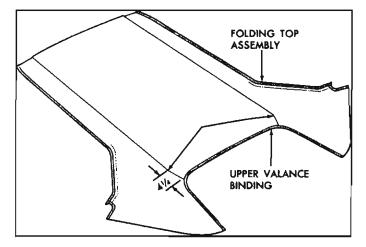


Fig. 55—Marking Top Material

- 22. Fold new top material in half so that inner lining of top material is exposed (fig. 56). Install a 6" piece of tape on inner surface at centerline fold of new top material (fig. 56). Using a pencil, mark the approximate centerline of new top material along entire length of tape. Be sure back will be visible inside of body after new top is installed on convertible top framework.
- Along forward surface of rear roof bow install a 1" piece of tape at centerline dimple of rear roof bow. Using a pencil, mark centerline of rear bow on tape (fig. 57).
- 24. Remove rear bow spacer sticks and positioning tape or cord.
- 25. Check position of rear roof bow in relation to new folding top trim assembly by placing new top trim over folding top framework. With quarter flaps properly folded over rear side roof rails (edge of rails should match stitch lines of quarter flap seams), marks on deck seam should be in center of rear roof bow.

NOTE: The deck seam mark will vary slightly $(\pm 4'')$ depending upon position of rear roof

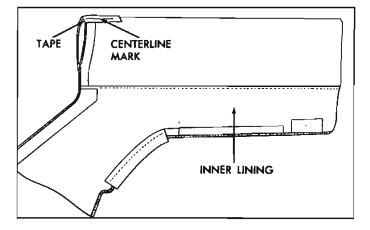


Fig. 56—Marking Folding Top Assembly

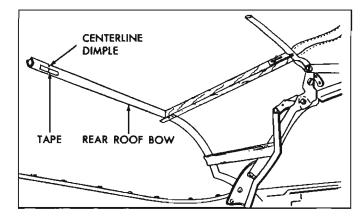


Fig. 57-Marking Rear Roof Bow

bow. Also check centerline mark on inner lining of top material. Mark should correspond to centerline mark on rear roof bow.

- 26. Remove top trim material.
- 27. Carefully lay removed top, which was marked at lower edge of trim stick prior to removal, over new top. Align old top with new top. Using a pencil, mark vinyl surface of new top using marked edge of old top as a guide. Also mark edges of trim sticks on vinyl surface of new top material. (See steps 11 and 12 of removal procedure).
- 28. Position top trim on framework and center assembly both fore and aft and side to side.
- 29. On right side of top material, at front of holddown cable pocket, install cable through pocket in top assembly.

Welding rod or similar material may be bent at one end to form a hook. Then at rear of holddown pocket slip hooked end of rod into pocket. Pussh rod through pocket until hooked end of rod is exposed at front of pocket. Install rear end of cable attaching bracket over hooked portion of rod; then pull cable through pocket. When cable attaching bracket is exposed at rear end of holddown pocket, disengage hooked portion of rod from cable attaching bracket. Repeat above operation on opposite side of top assembly.

- 30. After cables have been filtered or pulled through hold-down pockets in top material, securely install front and rear cable attaching brackets to side roof front and rear rails (fig. 55).
- 31. Check position of top trim at rear roof bow and at side roof rear rails. With quarter flaps properly folded over rear side roof rails (edge of rails should match stitch lines of quarter flap seams), marks on deck seam should be in center of rear roof below.

NOTE: The deck seam mark will vary slightly $(\pm \frac{1}{4}'')$ depending upon position of tear roof bow. Also check centerline mark on inner lining of top material. Mark should correspond to centerline mark on rear roof bow (fig. 57).

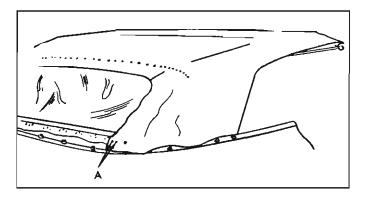


Fig. 58—Tacking Top Material

- 32. Using a nitrile cement or neoprene-type weatherstrip adhesive, fasten rear quarter flaps to side roof rear rails. Make sure that quarter flap seam breaks at forward edge of side roof rear rail. Material may have to be stretched from side to side to insure proper fit of top material flaps to side roof rear rails and to remove wrinkles from top material along rear roof bow.
- 33. Cut or pierce flaps for side roof rail rear weatherstrip attaching bolts. Install side roof rail rear weatherstrip to help maintain position of quarter flaps while adhesive is drying.
- 34. Using previously marked lines (ends of trim stick) as locating reference, tack top material to rear and rear quarter trim sticks. "A" in Figure 58 shows top material installed to rear trim stick at inboard edge.
- 35. Cut or punch hole in top material for each trim stick attaching bolt.
- 36. Install top material into body. Make sure rear and rear quarter trim stick attaching bolts are completely driven in to represent finished condition.
- 37. Check fit of top material. Rear quarter trim sticks may be adjusted downward to remove minor wrinkles in top material in rear quarter area.
- 38. Where required, remark top material; then make necessary adjustments to top material by repositioning rear quarter trim sticks and/or by retacking top material to rear and/or rear quarter trim tickets.

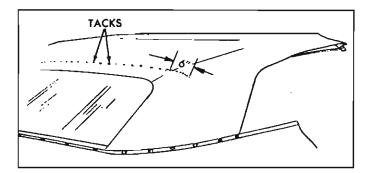


Fig. 59—Tacks at Outboard of Seams

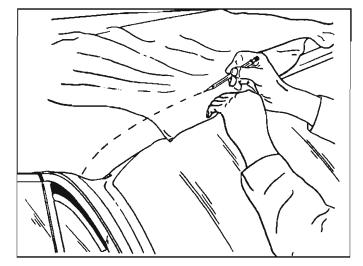


Fig. 60—Marking Top Material of Front Roof Rail

NOTE: In extreme cases, adjustment of top material at rear or rear quarter trim sticks may have to be performed several times before desired fit of top material is obained.

- 39. Remove trim sticks with attached top material from top compartment well. Back curtain should extend ½" below trim sticks (see step 9 of installation procedure). In addition, top material must extend ½" to %" below trim sticks to minimize water wicking on inner lining of back curtain material. Trim top material as required.
- 40. Install trim sticks with attached top material into top compartment well and tighten side and rear trim stick attaching bolts.
- 41. Recheck side roof rail flaps. Make sure mark at deck seams is in center of rear bow. Also recheck centerline mark on inner surface of top material at rear bow.
- 42. Where required, remove side roof rail rear weatherstrips. Readjust top material at side roof rails and reinstall weatherstrips.
- 43. While pulling top material slightly rearward, stay tack top material along rear roof bow.

CAUTION: Tacks must be installed along a straight line in center of rear bow (fig. 59). Tacks outboard of deck seams should be restricted to distance not to exceed six inches, which is length wire-on binding extends past seam.

- 44. At front roof rail, pull top trim material forward to desired tension. While maintaining tension on top trim, place a pencil mark on outer surface of trim material along forward edge of front roof rail (fig. 60).
- 45. Unlock top from windshield header and apply nitrile cement or neoprene-type weatherstrip adhesive to tacking area of front roof rail and corresponding surface of top material. Pull top trim material slightly forward so that pencil marks are on underside of front edge of front roof rail.

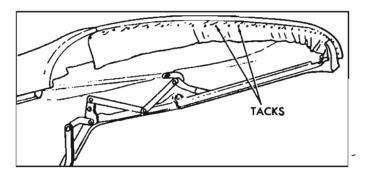


Fig. 61—Installation of Top Material to Front Roof Rail

Fasten top trim to cemented area and stay tack trim to rail (fig. 61).

- 46. Apply neoprene-type weatherstrip adhesive to front flaps and to corresponding areas on side roof front rails. Fasten flaps to side of roof front rail (fig. 40).
- 47. Lock top to windshield header. Check appearance of top trim as well as operation and locking action of top. (If additional tension is desired in top trim, unlock top from header and reposition top trim by pulling trim further forward. Stay tack and recheck top appearance.)
- 48. Complete tacking of top trim to front roof rail and trim off excess material.
- 49. Permanently tack top material to rear roof bow. Apply a bead of neoprene-type weatherstrip adhesive around each tack head, and into two holes pierced into top material for wire-on binding clip escutcheons.

NOTE: Any tack holes made in top material as a result of stay tacking material to rear roof bow should also be sealed using neoprenetype weatherstrip adhesive.

50. When completed, folding top should be free from wrinkles and draws. Install all previously removed trim and hardware and clean any soilage from top material, back curtain or pads.

Replacement of Back Curtain Trim—Only

Extra care in positioning new curtain at some location on trim stick as old curtain, and aligning of trim stick attaching bolt holes in top material with holes in trim stick, will allow reinstallation of top material to its original position with a minimum of refitting.

Removal

- 1. Perform steps 1, 2, 7, 8, 9 and 10 described in "Removal of Folding Top and Back Curtain Trim Assembly."
- 2. Using a pencil, mark both ends of rear and rear quarter trim sticks on vinyl surface of top material (fig. 45).
- Remove screw securing escutcheon at each end of wire-on binding on rear bow and remove wire-on binding from rear bow.

- 4. Detach folding top trim from rear roof bow and from rear and rear quarter trim sticks.
- 5. Carefully slide top trim forward exposing tacked edge of back curtain at rear roof bow.
- 6. Detach back curtain from rear roof bow; then remove back curtain assembly with attached trim sticks and top compartment bag from body and place on a clean, protected surface.
- Perform steps 17 and 18 as described in "Removal of Folding Top and Back Curtain Trim Assembly."

Installation

- 1. Install spacer sticks as described in steps 1 and 2 of "Installation of Folding Top and Back Curtain Trim Assembly."
- Seal and install back curtain assembly as described in steps 7 through 16 of "Installation of Folding Top and Back Curtain Trim Assembly."
- 3. Where required, place reference chalk mark on outer surface of back curtain along pinchweld finishing molding. Detach rear trim stick with attached back curtain assembly from body. Readjust back curtain assembly as required (fig. 54).
- 4. Install top trim cover assembly. NOTE: Extra care in positioning new curtain at same location on trim stick as old curtain, and aligning of trim stick attaching bolt holes in top material with holes in trim stick, will allow reinstallation of top material to its original position with a minimum of refitting.,
- 5. Install all previously removed trim and hardware.

Replacement of Folding Top Trim—Only

- 1. Remove folding top trim as described in steps 1 through 13 of "Removal of Folding Top and Back Curtain Trim Assembly."
- Prior to installation of new trim material, check contour of back curtain and side stay pad assemblies. Where required, adjust back curtain and/or side stay pads.
- 3. Install new folding top trim as described in steps 20 through 23 and 25 through 38 of "Installation of Folding Top and Back Curtain Trim Assembly."
- 4. Remove trim stick with attaching top material from top compartment well. Top material must extend 1/2" to 5/4" below trim sticks to minimize water wicking on inner lining of back curtain material. Trim top material as required.
- 5. Perform steps 40 through 50 as described in "Installation of Folding Top and Back Curtain Trim Assembly."

BACK CURTAIN ZIPPER REPLACEMENT

If only the back curtain zipper is being replaced use the Removal and Installation procedure for "Back Curtain Trim Assembly (Complete)" and perform the following additional operations after the back curtain assembly has been removed from body (after step 13 of removal procedure).

- 1. Using a chalk or similar material, on old zipper tape mark location of zipper in relation to edges of back curtain vinyl and upper valance webbing.
- 2. Cut stitches securing zipper tape to back curtain assembly and to upper valance webbing.
- 3. Transfer reference marks to new zipper assembly.
- 4. Sew new zipper tape to back curtain vinyl and upper valance webbing.

NOTE: Zipper tape may be stapled to back curtain and upper valance webbing to aid in holding zipper in proper position during sewing operation.

5. Install back curtain assembly as described under Installation procedure for "Back Curtain Trim Assembly (Complete)".

BACK CURTAIN VINYL REPLACEMENT (Includes Transfer of Zipper to New Vinyl)

Removal

- 1. Place protective covers on all exposed panels which may be contacted during procedure.
- 2. Remove rear seat cushion and back.
- 3. Remove folding top compartment side trim panel assemblies and side roof rail rear weatherstrips; then detach folding top quarter flaps from side roof rear rails.
- 4. Detach top compartment bag from seat back panel and remove all trim stick attaching bolts.

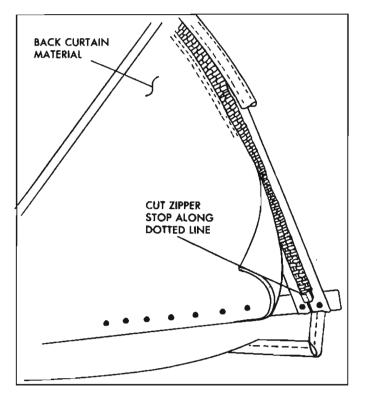


Fig. 62—Back Curtain Vinyi Replacement

- 5. To establish the relationship of right and left inner vertical edge of old top material to back curtain assembly at rear trim stick location, mark back curtain vinyl at both locations with a grease pencil (fig. 44). Reference marks should be transferred to new back curtain when step 4 of installation procedure is performed.
- 6. Using a pencil, mark both ends of rear and rear quarter trim sticks on vinyl surface of top mate-
- rial. Reference marks should be used as a guide when installing top material to trim sticks after new back curtain has been installed.
- 7. Remove folding top material from rear and rear quarter trim sticks; then carefully slide top trim forward sufficiently to expose back curtain zipper.
- 8. Detach zipper tape from rear quarter trim stick.
- 9. Using a pair of wire cutting shears or other suitable tool, cut zipper stop along dotted line and remove both halves of stop from zipper (fig. 62).
- 10. Operate slide fastener off zipper assembly.
- 11. Remove rear and rear quarter trim sticks with attached back curtain and compartment bag material from body and place on a clean, protected surface.
- 12. Using chalk, or other suitable material, mark ends of rear and rear quarter trim sticks on vinyl surface of back curtain material (fig. 63). Reference marks for trim sticks should be transferred to new back curtain material when step 4 of installation procedure is performed.
- 13. Using chalk or similar material, mark zipper tape at upper edge of vinyl (fig. 64).
- 14. Remove back curtain assembly from rear and rear quarter trim sticks.
- 15. As a bench operation, cut stitches securing half of zipper assembly to back curtain vinyl.

NOTE: Back curtain vinyl and extensions (less zipper) are available as a service part.

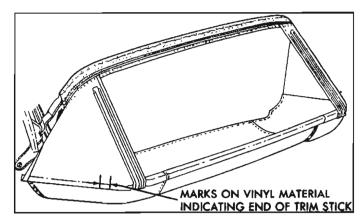


Fig. 63—Marking Back Curtain Material

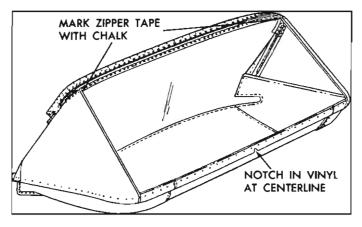


Fig. 64-Marking Zipper Tape

Installation:

- Using a chalk mark as guide, locate rear half of zipper to new back curtain vinyl. Zipper tape may be stapled to new back curtain to aid in holding zipper in proper position during sewing operation.
- 2. Sew zipper to new back curtain assembly.
- Place back curtain window assembly on clean covered work bench with interior (vinyl) surface of back window balance facing down. Transfer marks on old back curtain to new back curtain assembly. See steps 5 and 12 of removal procedure.
- 4. Center and position back curtain assembly to rear trim stick over attached compartment bag.

NOTE: Notch in back curtain vinyl at lower edge indicates centerline of back curtain assembly (See Fig. 64). In addition, back curtain lower edge should extend $\frac{1}{2}$ " below lower edge of trim sticks.

- 5. Tack curtain to rear and rear quarter trim sticks.
- 6. Tacks securing back curtain assembly to trim sticks should be placed close to each side of every bolt hole in trim sticks. Then pierce or punch curtain assembly for each trim stick bolt.
- 7. Inspect rubber trim stick fillers cemented to body below pinchweld. Re-cement if necessary.
- 8. Install slide fastener onto zipper assembly.
- 9. Staple both sections of zipper tape together. Staples will aid in preventing zipper scoops from disengaging and also serve as a stop for the slide fastener (fig. 65).
- 10. Operate slide fastener to closed position.
- 11. Tack zipper tape to rear quarter trim stick (fig. 65). Zipper tape should not be pulled taut as zipper teeth may show through top material after top has been properly installed.
- 12. Install trim sticks with attached back curtain assembly into body.

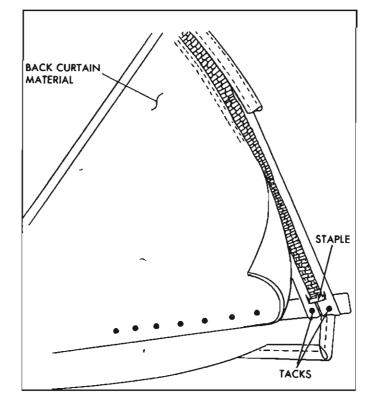


Fig. 65—Back Curtain Zipper Installation

NOTE: Make sure that all trim stick bolts are driven completely in to represent finished condition.

- 13. Check contour of back curtain assembly at pinchweld molding. Where required, place reference chalk mark on outer surface of back curtain along pinchweld finishing molding. Readjust back curtain assembly by retacking curtain to rear or rear quarter trim sticks as required.
- Detach rear trim stick with attached back curtain assembly from body.
- 15. Carefully replace top in position in rear quarter area.
- 16. Using nitrile cement or neoprene-type weatherstrip adhesive, fasten rear quarter flaps to side roof rear rails. Make sure that rear quarter flap seam is even with forward edge of side roof rear rail. Install side roof rail rear weatherstrip to help maintain position of quarter flaps while adhesive is drying.
- 17. Using previously marked lines (end of trim sticks) and bolt hole locations in top material as a locating reference, tack top material to rear and rear quarter trim sticks.
 - Install top material into body. Make sure rear and rear quarter trim stick attaching bolts are completely driven in to represent finished condition.
 - 19. Check fit of top material. Rear quarter trim sticks may be adjusted downward to remove minor

wrinkles in top material in rear quarter area.

- 20. Where required, re-mark top material; then make necessary adjustments to top material by repositioning rear quarter trim sticks or by retacking top material to rear or rear quarter trim sticks.
- 21. After desired fit of top material has been obtained, install trim sticks with attached top material into top compartment well and tighten side and rear trim stick attaching bolts.
- Where required, remove side roof rail rear weatherstrips. Re-adjust top material at side roof rails and reinstall weatherstrips.
- 23. When completed, folding top and back curtain assembly should be free from all wrinkles and draws. Install all previously removed trim and

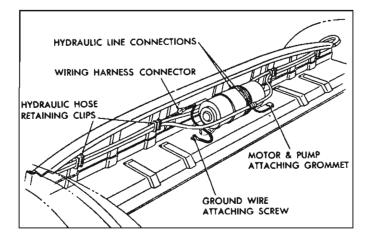


Fig. 66-Hydro-Lectric Motor and Pump Assembly

hardware and clean any soilage from top material or back curtain assembly.

HYDRO-LECTRIC SYSTEM

The high pressure hydro-lectric unit used in the convertible bodies, consists of a 12 volt reversible type motor, a rotor-type pump, two hydraulic lift cylinders, and an upper and lower hydraulic hose assembly. The unit is installed in the body directly behind rear seat back (fig. 66).

Figure 67 illustrates and identifies the individual parts of the motor and pump assembly.

NOTE: When servicing the motor assembly or pump end plate assembly, it is extremely important that the small motor shaft "O" ring seat is properly installed over the motor armature shaft and into the pump end plate assembly prior to installing the pump rotors or the motor shaft drive ball.

Motor and Pump Assembly

Removal

- 1. Operate folding top to full "up" position.
- 2. Disconnect positive battery cable.
- 3. Place protective covering over rear seat cushion and back.
- 4. Working inside body, detach front edge of folding top compartment bag from rear seat back panel.
- 5. Remove clips securing wire harness and hydraulic hose to rear seat back panel (fig. 66).

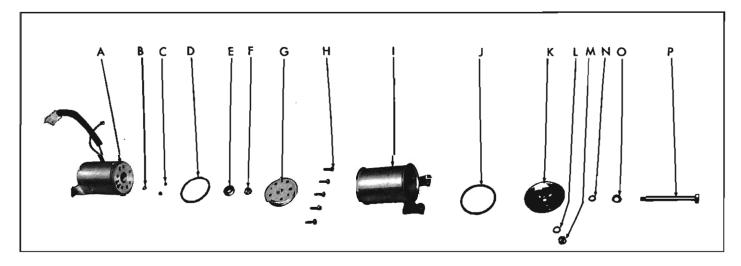


Fig. 67—Hydro-Lectric Motor and Pump Disassembled

- A. Motor Assembly
- B. Motor Shaft "O" Ring Seal
- C. Fluid Control Valve Balls
- D. Reservoir Seal
- E. Outer Pump Rotor
- F. Inner Pump Rotor
- G. Pump Cover Plate Assembly
- H. Pump Cover Attaching Screws

- I. Reservoir Tube and Bracket Assembly
- J. Reservoir Seal
- K. Reservoir End Plate
- L. Reservoir Filler Plug "O" Ring Seal
- M. Reservoir Filler Plug
- N. Reservoir End Plate Attaching Bolt "O" Ring Seal
- O, Reservoir End Plate Attaching Bolt Washer
- P. Reservoir End Plate Attaching Bolt

- 6. Disconnect motor leads from wire harness and ground attaching screw.
- 7. To facilitate removal, apply a rubber lubricant to pump attaching grommets; then carefully disengage grommets from floor pan.
- 8. Place absorbent rags below hose connections and end of reservoir.
- 9. With a straight-bladed screwdriver, vent reservoir by removing filler plug; then reinstall plug.

NOTE: Venting reservoir is necessary in this "sealed-in" unit to equalize air pressure in reservoir to that of the atmosphere. This operation prevents the possibility of hydraulic fluid being forced under pressure from disconnected lines and causing damage to trim or body finish.

10. Disconnect hydraulic lines and cap open fittings to prevent leakage of fluid. Use a cloth to absorb any leaking fluid, then remove unit from rear compartment.

Installation

- 1. If a replacement unit is being installed, fill reservoir unit with specified Delco No. 11 Hydraulic Fluid (G. M. Hydraulic Brake Fluid Super No. 11 or its equivalent). See "Filling of Hydro-Lectric Reservoir."
- 2. Connect hydraulic hoses, engage attaching grommets in panel and connect wiring.
- 3. Connect battery and operate top through its up and down cycles until all air has been "bled" from hydraulic circuit. See "Filling of Hydro-Lectric Reservoir."
- 4. Check connections for leaks and recheck fluid level in reservoir.
- 5. Install previously removed parts.

Reservoir Tube

Disassembly from Motor and Pump Assembly

- 1. Remove motor and pump assembly from body.
- 2. Scribe a line across pump end plate, reservoir tube and reservoir tube end plate to insure a correct assembly of parts.
- 3. With a straight-bladed screwdriver, remove reservoir filler plug. Note sealing ring around plug.
- 4. Drain fluid from reservoir into a clean container.
- 5. With suitable tool remove bolt from end of assembly and remove reservoir end plate and tube. Note sealing rings around bolt, reservoir end plate, and between end of reservoir tube and pump cover plate assembly.

Assembly to Motor and Pump Assembly

1. Position sealing ring on pump and assemble reservoir tube to pump according to scribe marks.

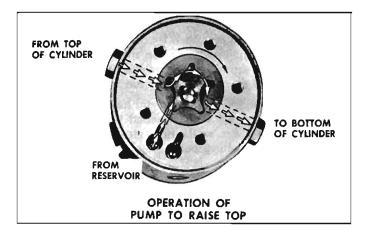


Fig. 68—Operation of Pump to Raise Top

NOTE: Bracket assembly on tube should be located at outer end when tube is assembled to pump.

- 2. Position sealing ring on tube end plate and position end plate on reservoir tube, according to scribe marks. Install and tighten attaching bolt.
- 3. Place unit in horizontal position and fill with fluid until fluid level is within ¼ inch of lower edge of filler plug hole.
- 4. Make sure that sealing ring is on filler plug before installing filler plug.

Operation of Folding Top

When the control switch is actuated to the "up" position, the battery feed wire is connected to the red motor lead and the motor and pump assembly operate to force the hydraulic fluid through the hoses to the lower ends of the double-acting cylinders. The fluid forces the piston rods in the cylinders upward, thus raising the top. The fluid in the top of the cylinders returns to the pump for recirculation to the bottom of the cylinders. When the control switch knob is actuated to the "down" position, the feed wire is connected to the dark green motor lead and the motor and pump assembly operate in a reversed direction to force the hydraulic fluid through the hoses to the top of the cylinders. The fluid forces the piston rods in the cylinders downward, thus lowering the top. The fluid in the bottom of the cylinders returns to the pump for recirculation to the top of the cylinders.

Operation of Pump Assembly

The motor-type pump assembly is designed to deliver a maximum pressure in the range of 340 psi to 380 psi. The operation of the pump assembly when raising the top is as follows:

1. Raising the Top. When the red motor lead is energized the motor drive shaft turns the rotors clockwise as indicated by the large arrow in Figure 68. The action of the pump rotors forces the fluid

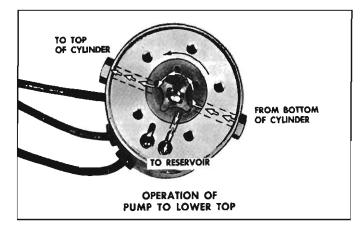


Fig. 69—Operation of Pump to Lower Top

under pressure to the bottom of each cylinder forcing the piston upward. This action causes the fluid above the piston in each cylinder to be forced into the pump, which recirculates the fluid to the bottom of the cylinders. The additional fluid required to fill the cylinder due to piston rod displacement is drawn from the reservoir.

2 Lowering the Top. When the green motor lead is energized the motor drive shaft turns the rotors counterclockwise as indicated by the large arrow in Figure 69. The action of the pump rotors forces the fluid under pressure to the top of each cylinder. This action causes the fluid below the piston in each cylinder to be forced into the pump which recirculates the fluid to the top of each cylinder. The surplus hydraulic fluid due to piston rod displacement flows into the reservoir.

Fluid Control Valve

The fluid control valve consists of a rocker arm installed in the pump cover plate, and two steel balls. Figure 70 shows the top surface of the pump cover plate. The dotted lines indicate the cavities on the bottom side of the cover plate. The cavities are designed to permit fluid flow between pump rotors and the reservoir.

Figures 71 and 72 illustrate the operation of the fluid control valve.

Mechanical Checking Procedure

If there is a failure in the hydro-lectric system and the cause is not evident, the mechanical operation of the top should first be checked. If the folding top assembly appears to have a binding action, disconnect the top lift cylinder piston rods from the top linkage and then manually raise and lower the top. The top should travel through its up and down cycle without any evidence of a binding action. If a binding action is noted when the top is being locked at the header, check the alignment of the door windows, ventilators and rear quarter windows with relation to the side

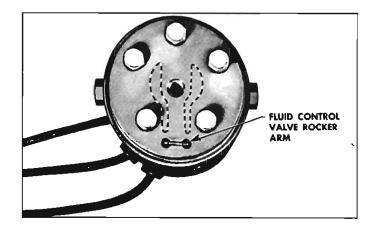


Fig. 70—Pump Cover Plate

roof rail weatherstrips. Make all necessary adjustments for correct top alignment. See "Folding Top Adjustments". If a failure continues to exist after a check for mechanical failure has been completed, the hydrolectric system should then be checked for electrical or hydraulic failures.

Electrical Checking Procedure

If a failure in the hydro-lectric system continues to exist after the mechanical operation has been checked, the electrical system should then be checked. A failure in the electrical system may be caused by a low battery, breaks in wiring, faulty connections, mechanical failure of an electrical component, or wires or components shorting to one another or to body metal. Before beginning checking procedures, check battery according to recommended procedure.

- 1. Checking for Current at Folding Top Control Switch.
 - a. Disengage terminal block from rear of switch.
 - b. Connect light tester to central feed terminal of switch terminal block.
 - c. Ground light tester ground lead to body metal.

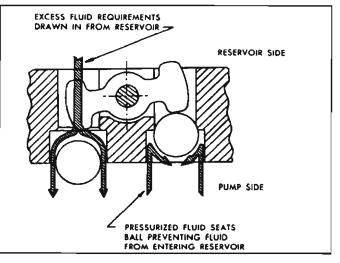


Fig. 71—Fluid Controt Valve

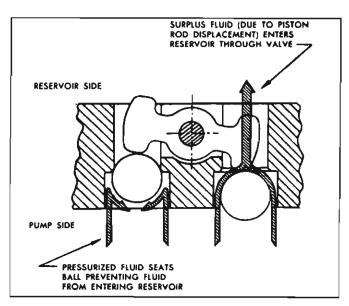


Fig. 72—Fluid Control Valve

- d. If light tester does not light, there is an open
 or short circuit between power source and switch.
- 2. Check the Folding Top Control Switch.

If there is current at the feed wire terminal of the terminal block, operation of switch can be checked as follows:

- a. Place a No. 12 jumper wire on switch terminal block between center terminal (feed) and one motor wire terminal. If motor operates with jumper wire but did not operate with switch, switch is defective.
- b. Connect jumper wire between center terminal and other motor wire terminal on switch terminal block. If motor operates with jumper wire, but did not operate with switch, switch is defective.

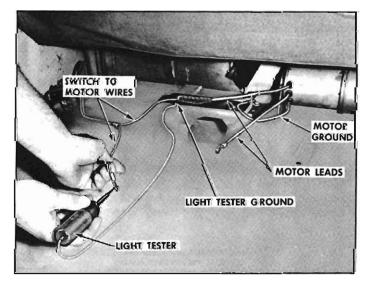


Fig. 73-Checking Motor Wiring

3. Checking Switch to Motor Lead Wires.

If switch is found to be operating properly, the switch to motor lead wires can be checked as follows: See Figure 73.

- a. Disconnect green switch-to-motor wire from motor lead in rear compartment.
- b. Connect a light tester to green switch-to-motor wire terminal.
- c. Ground light tester ground lead to body metal.
- d. Actuate switch to "down" position. If tester does not light, there is an open or short circuit in wire.
- e. Disconnect red switch-to-motor wire from motor lead.
- f. Connect light tester to red switch-to-motor wire terminal.
- g. Actuate switch control knob to "up" position. If tester does not light, there is an open or short circuit in wire.
- 4. Checking the Motor Unit.
 - If a light tester indicates current at the motor lead terminals of the switch-to-motor wires, but motor unit does not operate from switch, a final check of the motor unit can be made as follows:
 - a. Check connection of motor ground wire to body metal (fig. 66).
 - b. Connect a No. 12 jumper wire from battery positive pole to motor lead terminal that connects to green switch-to-motor wire. The motor should operate to lower top.
 - c. Connect jumper wire to motor lead terminal that connects to red switch-to-motor wire. The motor should operate to raise top.
 - d. If motor fails to operate on either or both of these checks, it should be repaired or replaced.
 - e. If motor operates with jumper wire but will not operate from switch-to-motor wires, the trouble may be caused by reduced current resulting from damaged wiring or poor connections.

Hydraulic Checking Procedure

Failures in the hydraulic system can be caused by lack of hydraulic fluid, leaks in hydraulic system, obstructions or kinks in hydraulic hoses or faulty operation of a cylinder or pump.

- 1. Checking Hydraulic Fluid Level in Reservoir.
 - a. Operate top to raised position.
 - b. At rear compartment, remove pump and motor shield.
 - c. Place absorbent rags below reservoir at filler plug.

- d. With a straight-bladed screwdriver, remove filler plug. Fluid level should be within ¼ inch of lower edge of filler plug hole.
- e. If fluid is low, add Delco No. 11 Hydraulic Fluid (G.M. Hydraulic Brake Fluid Super No. 11 or its equivalent) to bring to specified level. See "Filling of Hydro-Lectric Reservoir".
- f. Reinstall filler plug and pump and motor shield.
- 2. Checking Operation of Lift Cylinders.
 - a. Remove rear seat cushion and folding top compartment side panel assemblies.
 - b. Operate folding top control switch and observe lift cylinders during "up" and "down" cycles for these conditions:
 - (1) If movement of cylinder is not coordinated or sluggish when the motor is actuated, check hydraulic hoses from motor and pump to cylinder for kinks.
 - (2) If one cylinder rod moves slower than the other, cylinder having slower moving rod is defective and should be replaced.
 - (3) If both cylinder rods move slowly or do not move at all, check the pressure of the pump. See "Checking the Pressure of the Pump".

NOTE: To insure proper operation of the lift cylinders, the top lift cylinder rods should be cleaned and lubricated at least twice a year. To perform these operations, raise top to "up" position and wipe exposed portion of each top lift cylinder piston rod with a cloth dampened with brake fluid to remove any oxidation and/or accumulated grime. With another clean cloth apply a light film of brake fluid to the piston rods to act as a lubricant.

CAUTION: Exercise care so that brake fluid does not come in contact with any painted or trimmed parts of the body.

- 3. Checking Pressure at the Pump.
 - a. Remove motor and pump assembly from rear compartment.
 - b. Install plug in one port, and pressure gauge in port to be checked. See Figure 74.
 - c. Actuate motor with applied terminal voltage within range of 9.5 volts to 11.0 volts. Pressure gauge should show a pressure between 340 psi and 380 psi.
 - d. Check pressure in other port.

NOTE: A difference in pressure readings may exist between the pressure port for top of cylinders and pressure port for bottom of

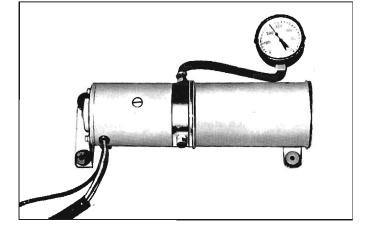


Fig. 74-Checking Pump Pressure

cylinders. This condition is acceptable if both readings are within the limit of 340 and 380 psi.

e. If the pressure is not within specified limits, unit is defective and should be repaired or replaced, as required.

Folding Top Lift Cylinder Replacement

- 1. Lock top to windshield header.
- 2. Disconnect positive battery cable to prevent accidental operation of motor and pump particularly when hydraulic hoses are disconnected from cylinder.
- 3. Remove rear seat cushion and seat back.
- 4. Remove folding top compartment side trim panel assembly on side affected.
- 5. Remove attaching nut, bolt, bushing and washer from upper end of cylinder.
- 6. Remove nut and bolt securing lower end of cylinder to lift cylinder lower support.
- 7. Move cylinder sufficiently to gain access to upper and lower hydraulic hose to cylinder connections.
- 8. Prior to disconnecting hydraulic connections, place suitable wiping rags under connections to absorb any drippage of hydraulic fluid.
- 9. Disconnect hydraulic connections from old cylinder and transfer to new cylinder assembly.
- 10. Install cylinder to lower cylinder support.
- 11. Connect positive battery cable to battery terminal.
- 12. Using power, raise cylinder piston rod to extend position.
- 13. Attach upper end of cylinder to folding top linkage using previously removed nut, bolt, bushing and washer.
- 14. Operate folding top assembly down and up several times; then check and correct level of hydraulic fluid in reservoir. See "Filling of Hydro-Lectric Reservoir."

Filling Hydro-Lectric Reservoir

This procedure virtually eliminates discharge or spillage of hydraulic fluid and possible trim damage while filling and bleeding system.

- 1. Filler Plug Adapter
 - a. Drill ¼ inch diameter hole through center of spare reservoir filler plug.
 - b. Install two inch length of metal tubing ($\frac{1}{4}$ " O.D. x $\frac{3}{16}$ " I.D.) into center of filler plug and solder tubing on both sides of filler plug to form air tight connection. See Figure 75.

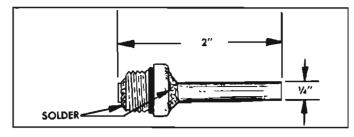


Fig. 75-Reservoir Filler Plug Adapter

- 2. Filling and Bleeding Reservoir
 - a. With top in raised position, remove folding top compartment bag material from rear seat back panel. Remove pump and motor shield.
 - b. Place absorbent rags below reservoir at filler plug. Using a straight-bladed screwdriver, slowly remove filler plug from reservoir.

IMPORTANT: When installing new or overhauled motor and pump assembly, as a bench operation, fill reservoir to specified level with hydraulic fluid. This operation is necessary as pump must be primed prior to operation to avoid drawing excessive amount of air into hydraulic system.

c. Install filler plug adapter to reservoir and attach four or five foot length of $\frac{3}{16}$ inch I.D. rubber tubing or hose to filler plug tubing.

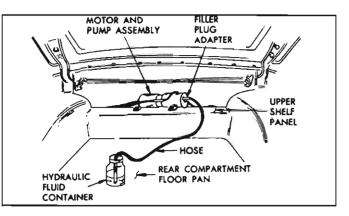


Fig. 76—Filling Hydraulic System

d. Install opposite end of hose into a container of G.M. Hydraulic Brake Fluid Super No. 11 or equivalent. See Figure 76.

NOTE: Container should be placed in rear compartment area of body, below level of fluid in the reservoir. In addition, sufficient fluid must be available in container to avoid drawing air into hydraulic system.

- e. Operate top to down or stacked position. After top is fully lowered continue to operate motor and pump assembly (approximately 15 to 20 seconds), or until noise level of pump is noticeably reduced. Reduction in pump noise level indicates that hydraulic system is filling with fluid.
- f. Operate top several times or until operation of top is consistently smooth in both up and and down cycles.
- g. Remove hose from filler plug tubing and remove filler plug adapter from reservoir.
- h. Check level of fluid in reservoir and re-install original filler hole plug.

NOTE: Fluid level should be within ¼ inch of lower edge of filler plug hole.

D = = =

CORVAIR 95 AND GREENBRIER 1200 SERIES

INDEX

Daga

| | r age |
|-----------------------------|-------|
| General Description | 10-51 |
| Maintenance and Adjustments | 10-51 |
| Side Double Doors | 10-51 |
| Striker Plate Adjustment. | 10-51 |
| Door Interlock Adjustment | 10-51 |
| Pull Rod Adjustment | 10-51 |
| Service Operations. | 10-53 |
| Side Double Doors | 10-53 |
| | |

| | Page |
|-----------------------------|-------|
| Side Intermediate Door Lock | 10-54 |
| Removal | 10-54 |
| Installation | 10-54 |
| Side Rear Door Lock | |
| Removal | 10-55 |
| Installation | 10-55 |
| Seats | |
| Auxiliary Right Front Seat | 10-55 |

GENERAL DESCRIPTION

The 1964 Corvair 95 and Greenbrier remain basically unchanged from the 1961 design except for the side double door locks, soft trim appearance and the availability of an optional right hand folding seat for the Corvan models.

All components not covered herein may be serviced as outlined in the 1961 Corvair Shop Manual.

MAINTENANCE AND ADJUSTMENTS

SIDE DOUBLE DOORS (FIG. 77)

Striker Plate Adjustment

Striker plates must be adjusted so that upper and lower slam bolts engage either at the same time (preferred) or with the lower slam bolt leading slightly in cases where difficulty is found in obtaining engagement at the lower plate.

To obtain the desired spacing shown in Figure 78, striker plates may be moved inboard or outboard by loosening retaining bolts and moving plates within limits of slotted holes.

Door Interlock Adjustment (fig. 77)

After correct door-to-body spacing is obtained, door interlocks should be adjusted to freely enter interlock casting.

Loosen interlock retaining screws and move interlock up or down as required. Do not bend interlock to accomplish adjustment.

Pull Rod Adjustment (fig. 79)

- If working on intermediate door of 1205 model, rod trunnions may be reached by removing access plate located on inner surface of door. All other models will require removal of the trim panel shown in Figure 80.
- If rods and trunnions are disassembled, screw rods into trunnions until a pre-set dimension of 1%" is obtained as shown in Figure 79.
- 3. Remove slack from linkage by pulling the rods toward lock levers (do not pull hard enough to move latch bolt). Note that latch bolt must be in locked position.
- 4. Adjust trunnions to be one turn short of entering holes in lock levers. Insert trunnions in levers.
- 5. Install spring clips and trim or access panel.

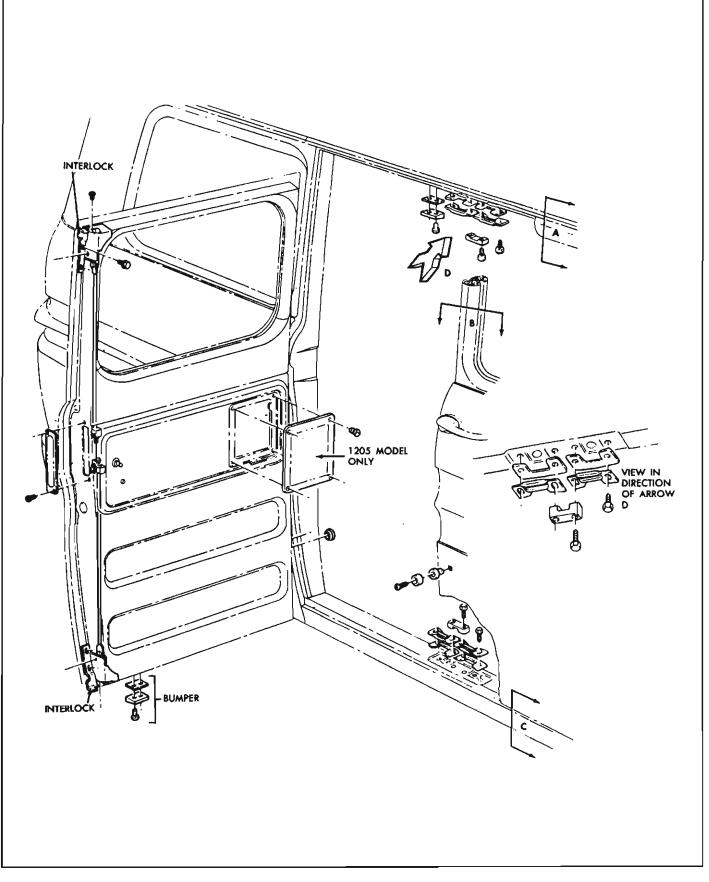


Fig. 77—Side Door Details

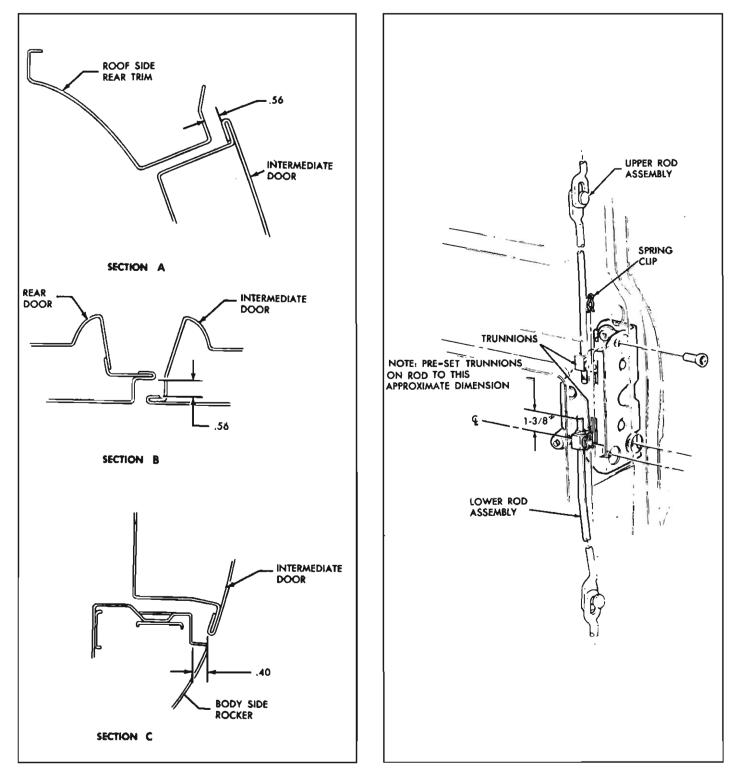


Fig. 78—Sectional Views of Figure 77

Fig. 79-Pull Rod Adjustment

SERVICE OPERATIONS

SIDE DOUBLE DOORS

The locking knob on the inner panel of the side intermediate door has been removed and replaced with the conventional plunger-type push button lock found on the rear doors of 500, 600, 700 and 900 Series vehicles. The "squeeze" type door release has been replaced by a conventional door handle placed on the inside surface of the side rear door. Other changes of note are the elimination of the key lock formerly located in side intermediate door and the modification of the door lock striker plates which now have a "two stage" catch groove, providing added safety.

Side Intermediate Door Lock

The side intermediate door lock is serviced in much the same manner as is 1961, except that all 1961 references to door lock cylinder and inside locking knob mechanism should be disregarded. Figure 81 illustrates the outer door handle assembly.

The plunger-type push button lock remote control and its linkage is shown in Figure 82. Remove and install lock remote control as follows:

Removal

- 1. Remove plunger knob from push rod by turning knob to the left as viewed from the top.
- 2. Remove access panel on 1205 models; trim panel on all others (see fig. 80).
- 3. Remove lever assembly from panel by removing two retaining screws.
- 4. Remove connecting rod from lock assembly by removing special clip.

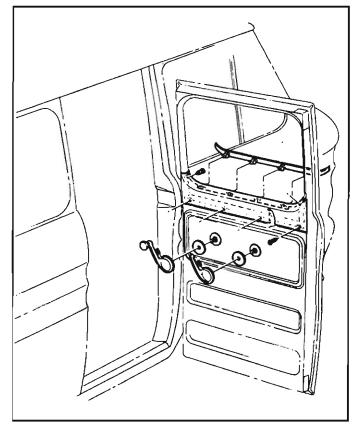


Fig. 80—Trim Panel and Door Handle Assembly

Installation

Install remote control assembly by following removal procedure in reverse order.

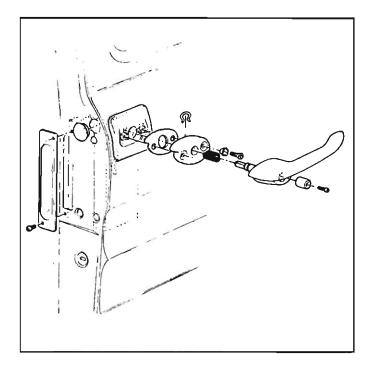


Fig. 81—Side Intermediate Door Outer Handle

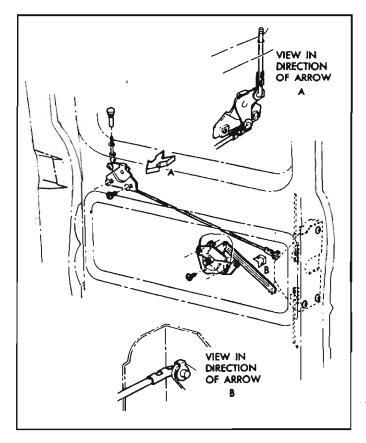


Fig. 82—Door Lock Remote Control

Side Rear Door Lock (fig. 83)

Removal

- 1. To gain access to lock assembly: 1205 Models-remove access cover, 1206 Models-remove trim panel. On both models remove handle retaining screw and remove inside handle.
- 2. Remove spring clips from pull rod trunnions and remove trunnions from lock levers.
- 3. Remove lock retaining screws and remove lock assembly from vehicle.

Installation

- 1. Position lock assembly on door inner panel. Align and install retaining screws.
- 2. Adjust pull rod trunnions as outlined in this section under Side Doors-Adjustments.
- 3. Replace access panel, trim panel and/or soft trim.
- 4. Install side door handle as shown in Figure 84.

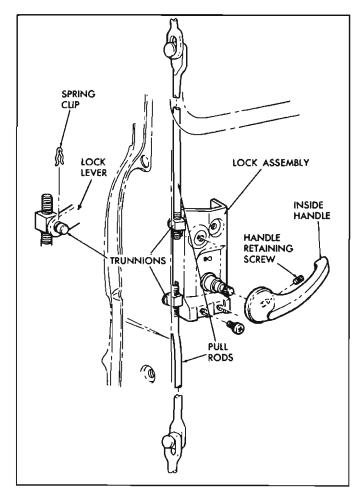


Fig. 83—Side Rear Door Lock

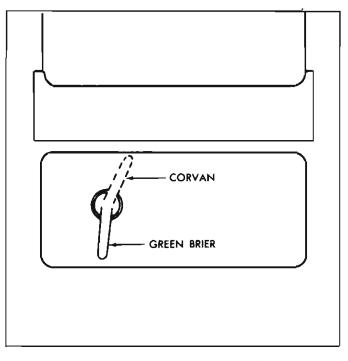


Fig. 84—Side Rear Door Inside Handle Installation

SEATS

AUXILIARY RIGHT HAND FRONT FOLDING SEAT-1205 MODELS

An optional folding seat is offered for use in the 1205 Corvair Models. This seat folds compactly for easy access to the cargo area of the van. Figure 85 shows installation details. Service of the seat proper, exclusive of the mounting brackets, may be performed as outlined in the 1961 Corvair Shop Manual, Page 10-120.

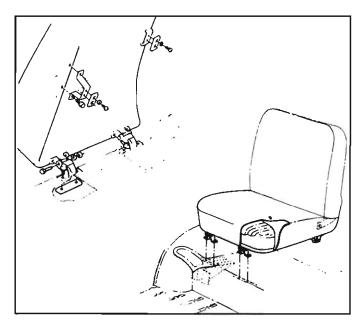


Fig. 85—Auxiliary Seat Mounting

SPECIAL TOOLS

