1965

CHEVROLET
CHEVELLE
CHEVY II
CORVAIR

BODY SERVICE MANUAL

ST-50

1965 BODY SERVICE MANUAL

FOR

15-16000 SERIES
25-26000 SERIES
35-36-38000 SERIES
45-46-48000 SERIES
68000 SERIES
75-76000 SERIES

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1965 CHEVROLET IDENTIFICATION CHART

MANUAL SECTION 1 - CHEVROLET - 15-16000 SERIES				
Series	Body Style	Model Number		Description
		6 Cyl.	V8	
Biscayne	15411	15311	15411	2-Door Sedan, 6-Passenger
	15469	15369	15469	4-Door Sedan, 6-Passenger
	15435	15335	15435	4-Door Station Wagon, 2-Seats
Bel Air	15611	15511	15611	2-Door Sedan, 6-Passenger
	15669	15569	15669	4-Door Sedan, 6-Passenger
	15635	15535	15635	4-Door Station Wagon, 2-Seats
	15645	15545	15645	4-Door Station Wagon, 3-Seats
Impala	16469	16369	16469	4-Door Sedan, 6- Passenger
	16439	16339	16439	4-Door Sport Sedan, 6-Passenger
	16437	16337	16437	2-Door Sport Coupe, 5-Passenger
	16467	16367	16467	2-Door Convertible, 5-Passenger
	16435	16335	16435	4-Door Station Wagon, 2-Seats
	16445	16345	16445	4-Door Station Wagon, 3-Seats
Impala SS	16637	16537	16637	2-Door Sport Coupe, 4-Passenger
	16667	16567	16667	2-Door Convertible, 4-Passenger

MANUAL SECTION 2 - CHEVELLE - 13000 SERIES				
Series	Body Style	Model Number		Description
		6 Cyl.	V8	
Chevelle 300	13211	13111	13211	2-Door Sedan, 6-Passenger
	13269	13169	13269	4-Door Sedan, 6-Passenger
	13215	13115	13215	2-Door Station Wagon, 2-Seat
Chevelle 300 (Deluxe)	13411	13311	13411	2-Door Sedan, 6-Passenger
	13469	13369	13469	4-Door Sedan, 6-Passenger
	13435	13335	13435	4-Door Station Wagon, 2-Seat
Malibu	13669	13569	13669	4-Door Sedan, 6-Passenger
	13637	13537	13637	2-Door Sport Coupe, 5-Passenger
	13667	13567	13667	2-Door Convertible, 5-Passenger
	13635	13535	13635	4-Door Station Wagon, 2-Seat
Malibu SS	13837	13737	13837	2-Door Sport Coupe, 4-Passenger
	13867	13767	13867	2-Door Convertible, 4-Passenger
El Camino	13480	13380	13480	2-Door Sedan Pickup, 3-Passenger
	13680	13580	13680	2-Door Sedan Pickup, 3-Passenger Deluxe

MANUAL SECTION 4 - CHEVY II - 11000 SERIES					
Series	Body Style	Model Number			Description
		L4	6 Cyl.	V8	
Standard	11411	11111	11311	11411	2-Door Sedan, 6-Passenger
	11469	11169	11369	11469	4-Door Sedan, 6-Passenger
	11435	-	11335	11435	4-Door Station Wagon, 2-Seat
Nova	11669	-	11569	11669	4-Door Sedan, 6-Passenger
	11637	-	11537	11637	2-Door Sport Coupe, 5-Passenger
	11635	-	11535	11635	4-Door Station Wagon, 2-Seat
Nova SS	11837	-	11737	11837	2-Door Sport Coupe, 4-Passenger

MANUAL SECTION 5 - CORVAIR - 10000 SERIES			
Series	Body Style	Model No.	Description
Standard	10137	10137	2-Door Sport Coupe, 5-Passenger
	10139	10139	4-Door Sport Sedan, 6-Passenger
Monza	10537	10537	2-Door Sport Coupe, 4-Passenger
	10567	10567	2-Door Convertible, 4-Passenger
	10539	10539	4-Door Sport Sedan, 5-Passenger
Corsa	10737	10737	2-Door Sport Coupe, 4-Passenger
	10767	10767	2-Door Convertible, 4-Passenger

GENERAL INFORMATION

15-16000 Series
25-26000 Series
35-36-38000 Series
45-46-48000 Series
68000 Series

DESCRIPTION

This publication contains the essential removal, installation, adjustment and maintenance procedures for servicing all 1965 Fisher Body Styles in the 15-16-25-26-35-36-38-45-46-48 and 68000 Series. This information is current as of time of publication.

All page numbers and figure numbers, covering body styles of these series will be preceded by the figure "1". Specific body areas are identified by letters "A", "B", "C", etc. in alphabetic order. The first page of each body area section is marked with a black tab corresponding with the table of contents page.

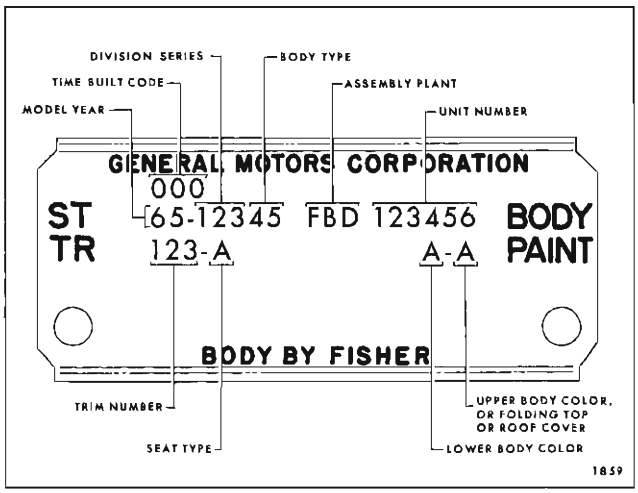


Fig. 1A1—Sample Body Number Plate

BODY NUMBER PLATE

The body number plate identifies the body style, body number, trim combination number, paint code and time built code (Fig. 1A1). The location of the plate is as follows:

Series	Location
15-16000	Right upper horizontal area of cowl
25-26000	Left upper vertical surface of firewall
35-36-38000	Left upper vertical surface of firewall
45-46-48000	Left upper vertical surface of firewall
68000	Left upper horizontal area of cowl

TRIM CLEANING PROCEDURE

INTRODUCTION

This procedure has been prepared to assist service personnel in cleaning automotive upholstery, floor carpets, headlining and folding tops using the latest approved methods for removing soil and stain.

GENERAL INSTRUCTIONS

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

1. Fabrics that may be either plain fabrics (broadcloth), or pattern fabrics which are manufactured with natural or synthetic (nylon, rayon, etc.,) fibers.

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 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 difficult - frequently, impossible.

There are three basic types of acceptable cleaners available to car owners:

1. Volatile cleaners (colorless liquids). GM No. 1050057 (16 oz. can) and GM No. 1050058 (1 gal. can), or equivalent.

2. Detergents. GM No. 1050144, or equivalent.

3. Neutral soap (nonalkaline).

The volatile cleaners have great solvent powers for grease, oils and general road grime. 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 a 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. Using a clean white blotter, blot stained area to remove any excess cleaner. Change to a new portion of the blotter each time stained area is blotted. The blotting action should be repeated until no stain is transferred to the blotter surface.

5. Before proceeding, wait several minutes to allow most of the volatile cleaner to evaporate. DO NOT saturate stained area. 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 in padding.

6. It may be necessary to repeat steps 2, 3, 4 and 5 several times before the stain has been satisfactorily removed. Each time a clean cloth should be used.

7. 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.

8. 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 in 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.

6. Always follow directions specified by the manufacturer of the product used. (Label directions).

PROCEDURE FOR CLEANING FABRICS WITH DETERGENTS

1. Make a solution of the detergent in lukewarm water, working up 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. Repeat 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 or 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 hydrosulphite, 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 or leave a solvent ring.

PROCEDURE FOR CLEANING GENUINE LEATHER AND COATED FABRICS

Care of genuine leather and coated fabrics 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 to the surface, worked up on a piece of gauze or cheesecloth.

NOTE: When cleaning coated fabrics, a non-flammable detergent may be substituted for neutral soap.

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 HEADLINING MATERIAL

Normal soilage such as dirt and finger prints can be removed with a cleaning solution of approximately two 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 (naphtha cleaner is recommended). Then clean soiled area again with detergent suds and rinse as described above.

PROCEDURE FOR CLEANING FOLDING TOP MATERIAL AND FABRIC ROOF COVER 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.

IMPORTANT: Care must be exercised to keep the soaps and cleansers from running onto body finish, as it may cause streaks if allowed to run down and dry.

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 to the entire top. Scrub 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. 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 a convertible top, 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 cleansers, household bleaching agents, or cleansers containing 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 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; however, the cleaner must be used very sparingly since it may have a tendency to remove some of the dye coloring.

INSTRUCTIONS FOR THE REMOVAL OF SPECIFIC STAINS FROM AUTOMOTIVE UPHOLSTERY (CLOTH) 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 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 soapsuds (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. Using a clean white blotter, blot area to

remove excess cleaner and chocolate stain. Repeat blotting action until stain is no longer transferred to surface of blotter.

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 may result.

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. Using a clean white blotter, blot area to remove excess cleaner and loosened grease or oil. Repeat blotting action until grease or oil stain is no longer transferred to blotter.

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 soapsuds (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 oil 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, 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. Blot stained area to remove as much of the cleaner as possible.

TAR

Remove as much of the tar as possible with a dull knife. Moisten the spot lightly with a volatile cleaner, and again 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 soapsuds (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.

LUBRICATION

The movable mechanical parts of the body are lubricated at the factory to insure proper and quiet operation. If additional lubrication is required, the following specified materials or their equivalents should be used at the locations listed.

INSTRUMENT PANEL COMPARTMENT DOOR HINGE

Wipe off dirt and apply a sparing amount of dripless oil to the hinge frictional points. Operate door and wipe off excess lubricant.

FRONT DOOR HINGE HOLD-OPEN ASSEMBLY

Wipe off dirt and apply a light coat of Lubriplate No. 630AAW (or equivalent) at points indicated (Fig. 1B1). The hinge pins should be lubricated with engine oil.

DOOR LOCK FORK BOLT

Wipe off dirt and apply a thin coat of stick-type lubricant and oil (Fig. 1B2).

REAR DOOR HINGE AND HOLD-OPEN ASSEMBLY ALL 4-DOOR STYLES

Wipe off dirt and apply a light coat of Lubriplate to frictional point (Fig. 1B3). Wipe off excess lubricant.

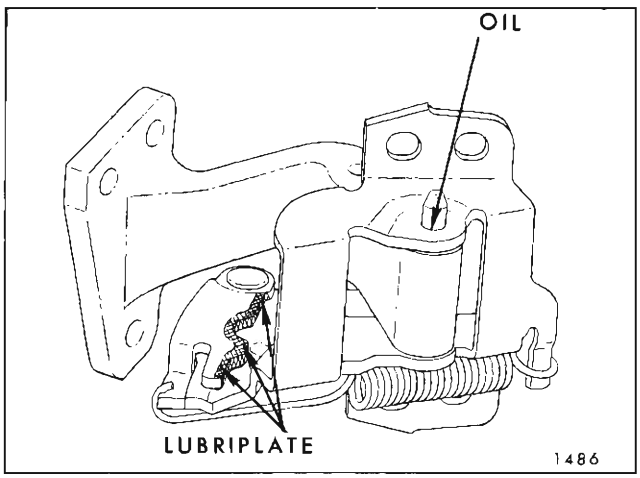


Fig. 1B1—Front Door Hinge Hold Open

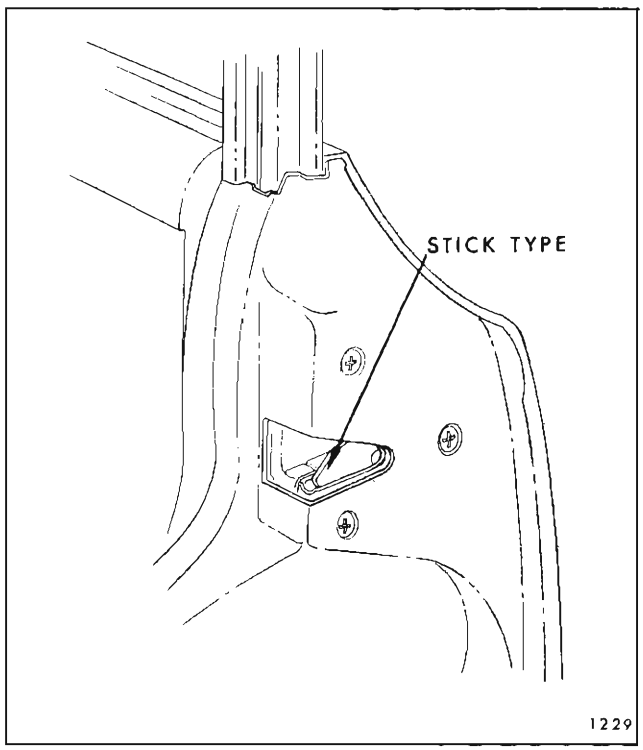


Fig. 1B2—Door Lock Fork Bolt Lubrication

DOOR JAMB SWITCH

Wipe off dirt and apply a thin coat of Lubriplate to the end surface of switch plunger. Wipe off excess lubricant.

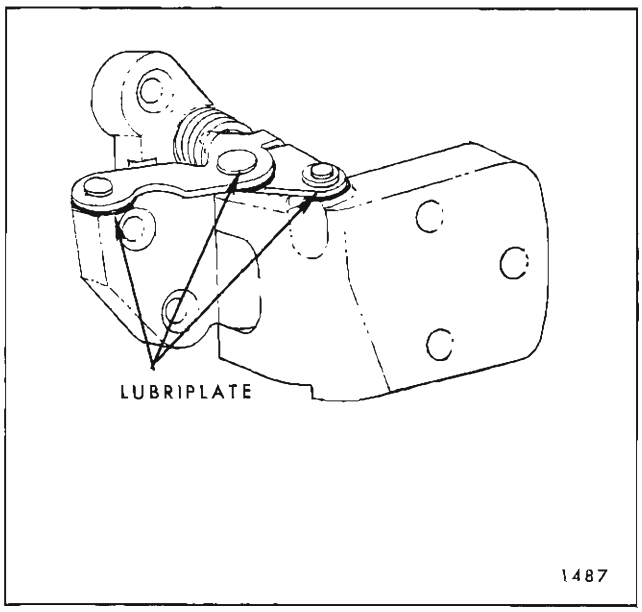


Fig. 1B3—Rear Door Hinge

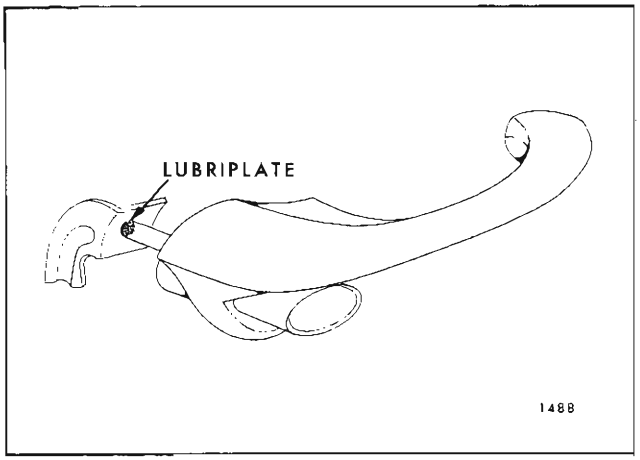


Fig. 1B4—Door Outside Handle

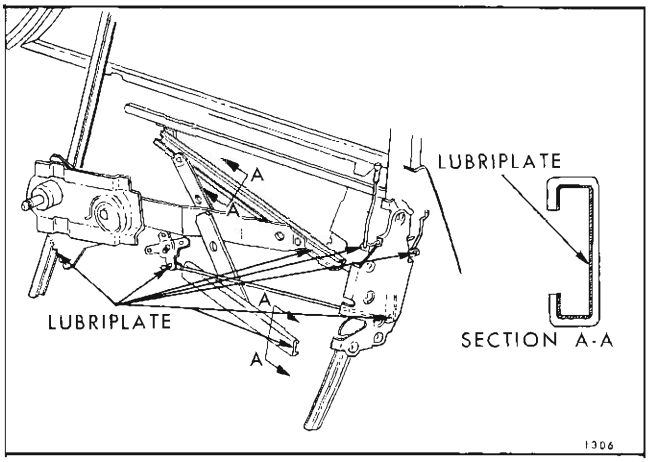


Fig. 1B5—Door Regulator and Cams

DOOR LOCK OUTSIDE HANDLE

Apply a light coat of Lubriplate to surface of lock cylinder shaft contacting bell crank (Fig. 1B4).

DOOR WINDOW REGULATOR AND CAMS STYLES WITH DOOR UPPER FRAMES

Apply a coat of Lubriplate to areas indicated

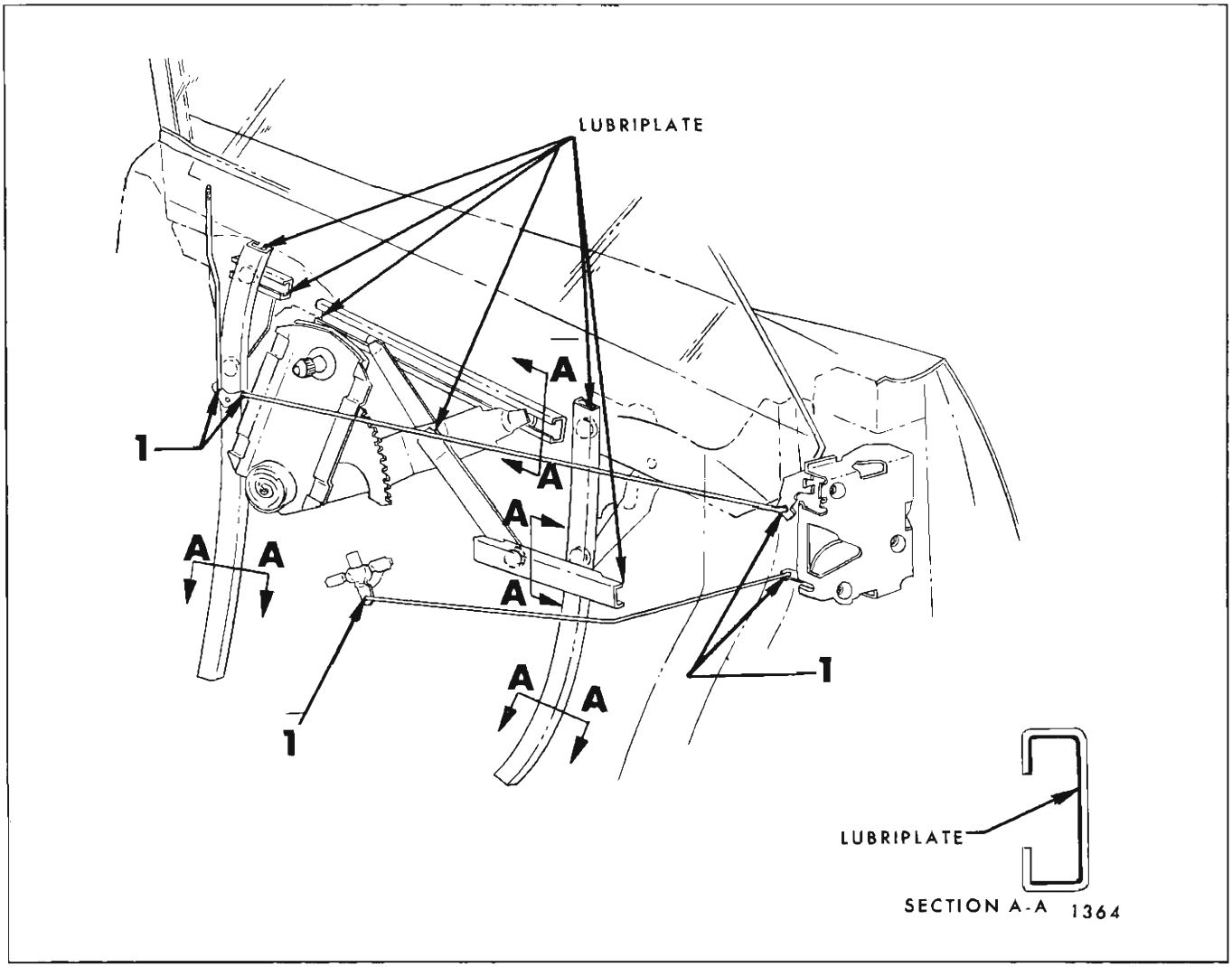


Fig. 1B6—Door Window Regulator Cams and Guides - Styles Without Door Upper Frames

(Fig. 1B5). Lubrication of front and rear doors is typical.

DOOR WINDOW REGULATORS AND CAMS STYLES WITHOUT DOOR UPPER FRAMES

Apply a coat of Lubriplate to areas indicated (Fig. 1B6). Lubrication of front and rear doors typical.

REAR QUARTER WINDOW REGULATOR, CAMS AND GUIDES TWO DOOR SEDANS AND COUPES

Apply a coat of Lubriplate to regulator teeth, cams and guide channels as required.

FRONT SEAT ADJUSTER MECHANISM-MANUALLY AND ELECTRICALLY OPERATED—ALL STYLES

Thoroughly wipe off old lubricant. Apply a thin coat of Lubriplate to jack screws and seat tracks. Operate seat to limits of all positions. Apply a small amount of dripless oil to linkage and wipe off excess lubricant.

FOLDING SEAT LINKAGE STATION WAGON STYLES

Wipe off dirt and apply a sparing amount of dripless oil to all frictional areas. Work linkage several times and wipe off excess lubricant.

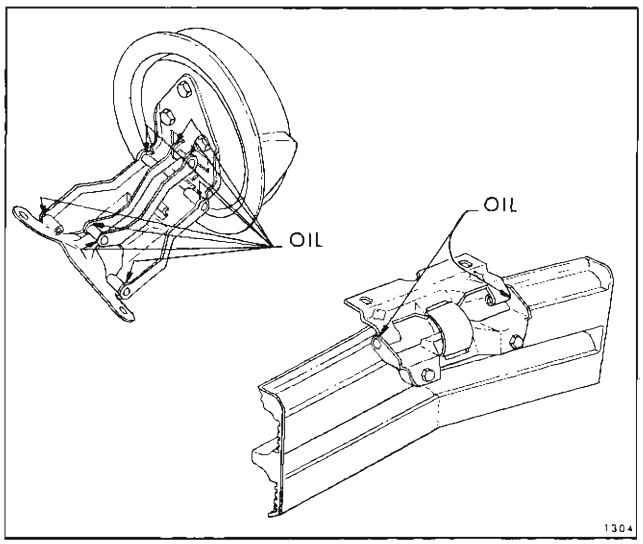


Fig. 1B7—Gas Tank Filler Doors

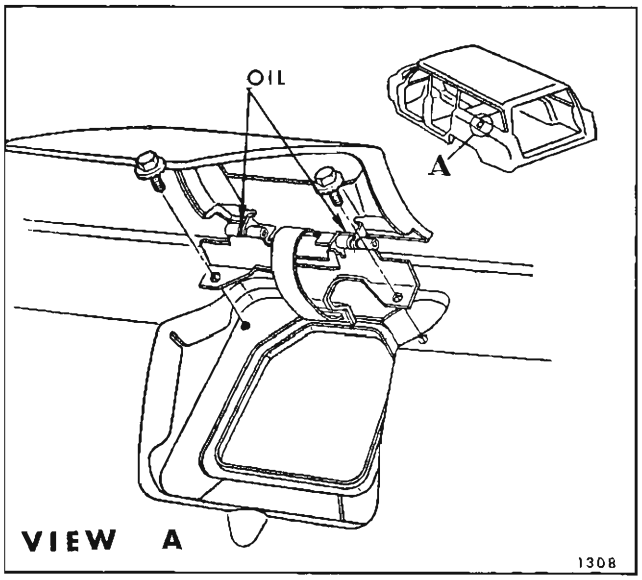


Fig. 1B8—Gas Tank Filler Door - Station Wagons

GAS TANK FILLER DOOR HINGE 15000 & 16000 SERIES— "35" & "45" STYLES 23000 SERIES—"35" & "45" STYLES 45000, 46000 & 48000 SERIES—ALL STYLES

Apply a few drops of dripless oil to frictional points of door hinges as indicated. Work door several times and wipe off excess lubricant (Fig. 1B7 and Fig. 1B8).

REAR COMPARTMENT LID LOCK

On rear compartment lid locks, apply a thin film of Lubriplate (Fig. 1B9). On tail gate locks,

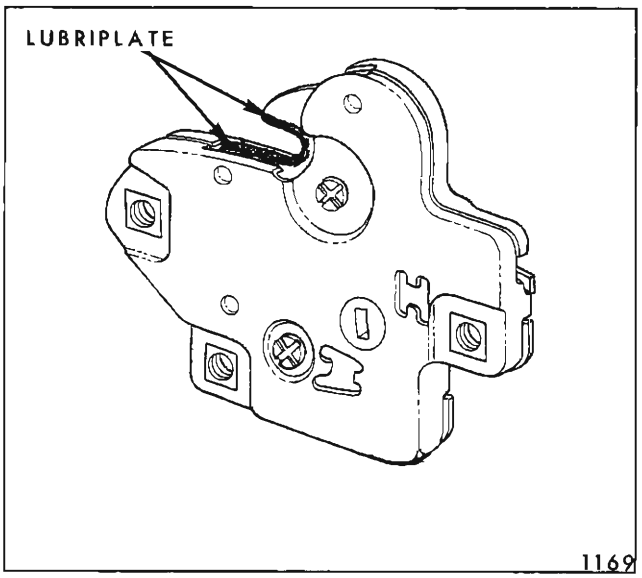


Fig. 1B9—Rear Compartment Lid Lock Bolt

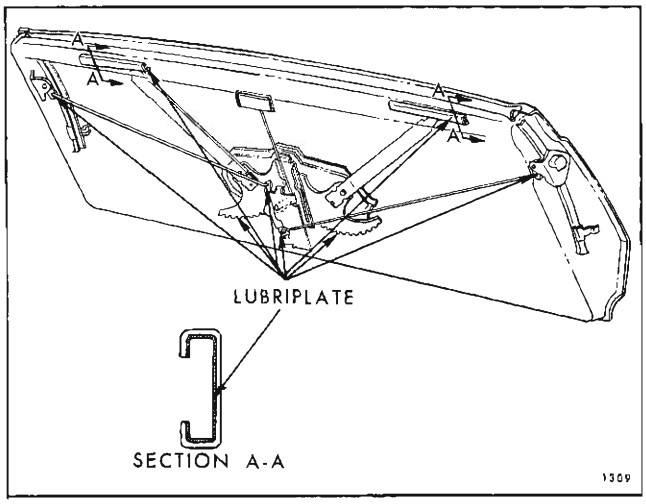


Fig. 1B10—Tail Gate Lubrication

apply a thin film of Lubriplate to the bolt at the striker contact areas.

REAR COMPARTMENT LID HINGES AND TORQUE RODS—ALL STYLES

Apply Lubriplate to hinge and torque rods at friction points.

TAIL GATE HINGE STATION WAGON STYLES

Wipe off dirt and apply a small amount of dripless oil to frictional areas.

TAIL GATE REGULATOR AND CAMS STATION WAGON STYLES

Apply a light coat of Lubriplate to points indicated (Fig. 1B10).

FOLDING TOP LINKAGE ALL "67" STYLES

Apply a sparing amount of light oil to all bearing points (Fig. 1B11). Wipe off excess lubricant to prevent soiling trim.

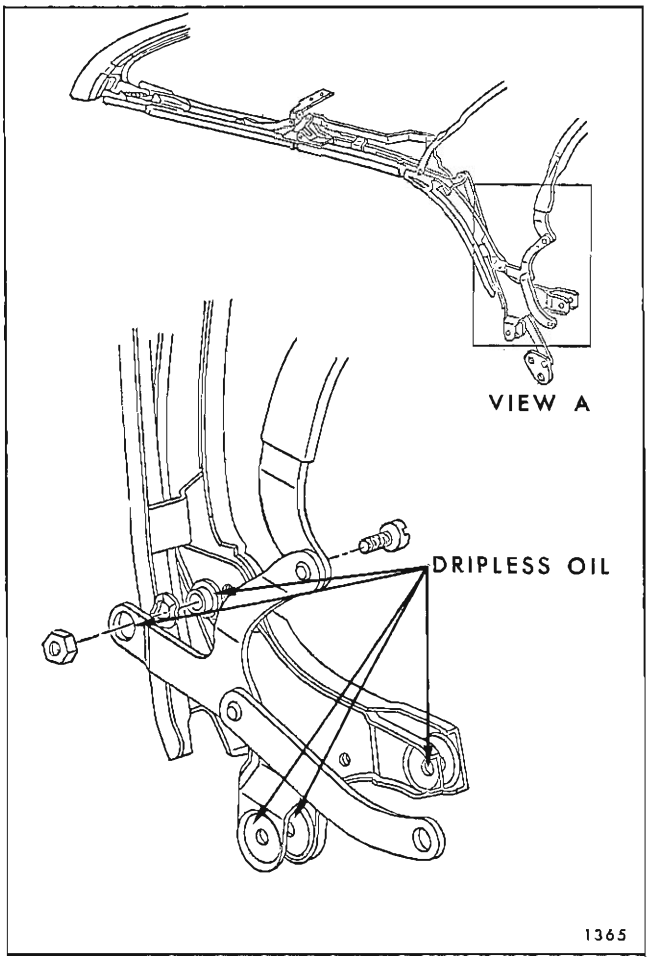


Fig. 1B11—Lubrication - Convertible Top Linkage

FOLDING TOP LIFT CYLINDER PISTON RODS ALL "67" STYLES

With folding top in raised position, wipe exposed portion of each top lift cylinder piston rod with a cloth dampened with brake fluid to remove any oxidation or accumulated grime. With another clean cloth, apply a light film of brake fluid to the piston rods to act as a lubricant.

NOTE: Use caution so that brake fluid does not come in contact with any painted or trimmed parts of the body.

FRONT END

WINDSHIELD ASSEMBLY

WINDSHIELD ASSEMBLY
WINDSHIELD GARNISH MOLDINGS
ALL STYLES

The windshield garnish moldings on closed styles consist of upper right and left and right and left side moldings. On "67" styles, the windshield garnish moldings consist of an upper center, upper right and left sides and lower right and left side moldings. All moldings are secured by screws (Fig. 1C1 and Fig. 1C2).

Removal and Installation

1. Place protective covering over instrument panel.

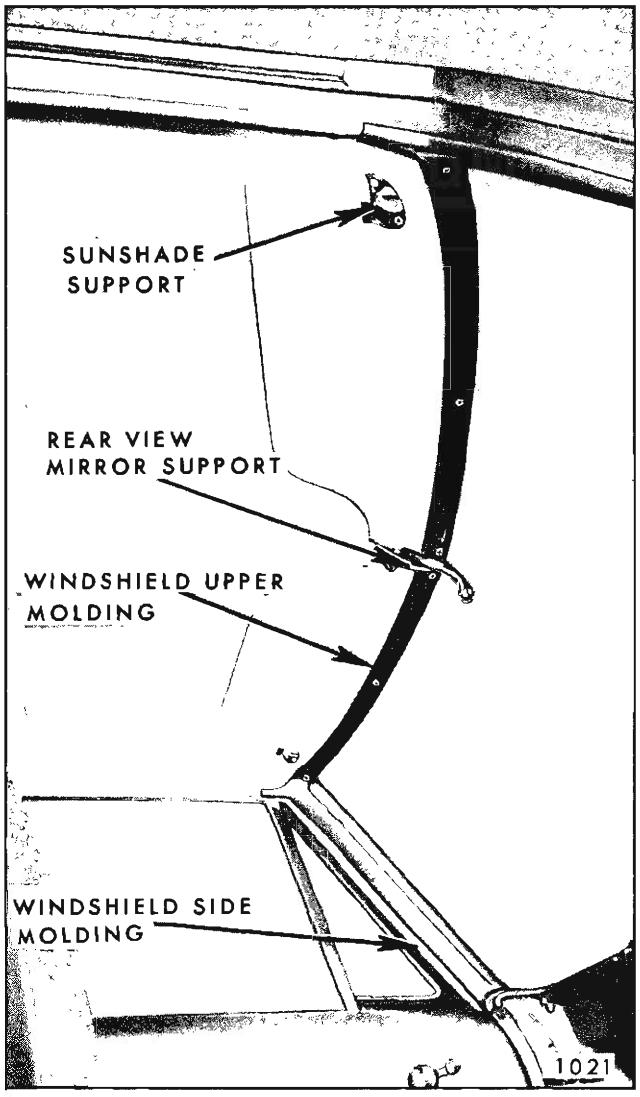


Fig. 1C1—Windshield Garnish Molding

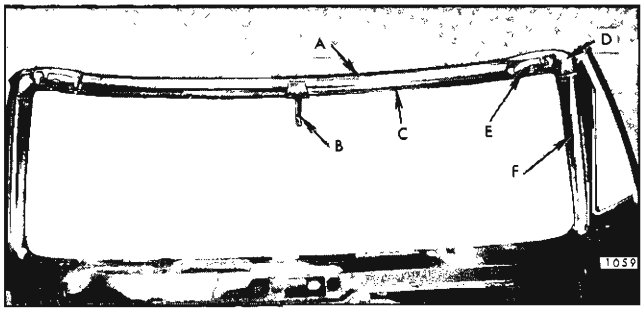


Fig. 1C2—Front End Moldings

A. Header Molding
B. Rear View Mirror Support
C. Upper Center Garnish Molding
D. Upper Side Molding
E. Sunshade Support
F. Lower Side Garnish Molding

2. On closed styles, remove side moldings, then upper moldings.

3. On "67" styles, remove lower sides, sunshade supports, upper sides and upper center moldings.

4. To install, reverse removal procedure.

REAR VIEW MIRROR SUPPORT

Removal and Installation

1. On closed styles, remove one side of upper garnish molding, remove support attaching screws, slide support to one side and remove support.

2. On "67" styles, remove support attaching screws and remove support.

3. To install, reverse removal procedure.

SUNSHADE SUPPORT

Removal and Installation

1. Remove attaching screws and support. On "67" styles raise top prior to removal of support.

2. To install, reverse removal procedure.

WINDSHIELD REVEAL MOLDINGS

The windshield reveal moldings consist of a one piece upper, right and left sides and right and left lower moldings. The upper and side moldings are

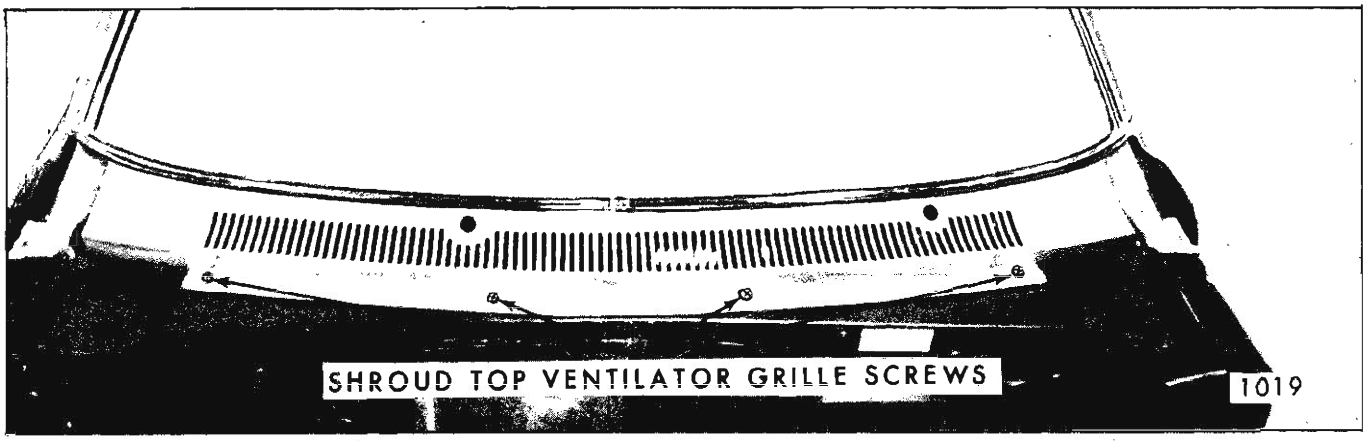


Fig. 1C3—Shroud Top Ventilator Grille

secured to the windshield opening by clips. The lower moldings are secured to the upper shroud assembly by screws through molding clip tabs.

NOTE: On "67" styles the outer ends of the lower moldings are secured to the windshield pillars by screws which are hidden by the windshield pillar weatherstrip retainers.

Removal and Installation

1. Place protective covering over hood and front fenders.

2. Remove windshield wiper arms and escutcheons.

3. Remove shroud top air intake grille attaching screws (Fig. 1C3).

4. Lift grille, slide forward and remove.

CAUTION: Care should be exercised to make certain grille does not contact hood to prevent paint damage.

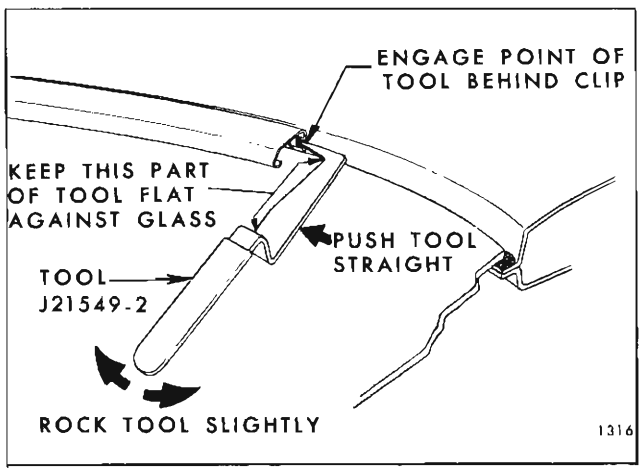


Fig. 1C4—Reveal Molding Clip Disengaging Tool

5. Remove lower molding attaching screws. On "67" styles loosen windshield pillar weatherstrip retainer sufficiently to gain access to molding end attaching screws. Remove screws and lower moldings.

6. Using reveal molding clip disengaging tool, J-21549-2 (Fig. 1C4), remove side and upper moldings.

7. To install, reverse removal procedure.

WINDSHIELD PILLAR FINISHING MOLDING "67" STYLES

The windshield pillar finishing moldings on "67" styles are secured to the windshield opening rabbet and the rear of the windshield pillar by screws (Fig. 1C5).

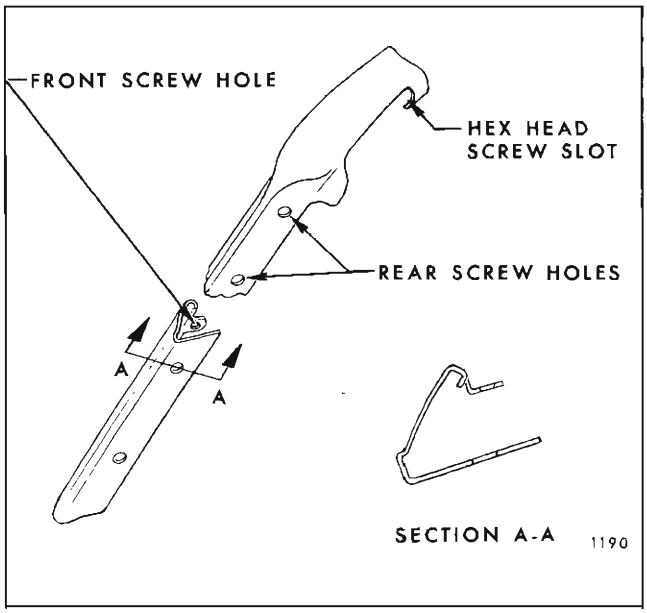


Fig. 1C5—Windshield Pillar Finishing Molding

The molding attaching screws at the windshield opening are hidden by the windshield side reveal moldings. The attaching screws at the rear of the pillar are hidden by the windshield pillar weatherstrip retainers.

Removal and Installation

1. Remove windshield pillar weatherstrip retainers. Remove finishing molding attaching screws at rear (Fig. 1C5).

2. Remove sunshade support.

3. Remove windshield side and upper reveal moldings.

4. Remove molding attaching screws along windshield pillar (Fig. 1C5). At top, loosen hex head screw sufficiently to lift molding from screw and remove finishing molding.

5. To install, apply sufficient amount of medium-bodied sealer to underside of finishing molding where it overlaps the center or header molding to insure a watertight seal and reverse removal procedure.

WINDSHIELD HEADER MOLDING "67" STYLES

The windshield header molding is secured to the windshield upper opening by hex head screws. The molding is slotted at each attaching screw to allow removal without removing the windshield glass. The molding is also retained by the windshield pillar finishing moldings (Fig. 1C6).

Removal and Installation

1. Remove windshield garnish moldings.

2. Remove windshield reveal moldings.

3. Remove windshield pillar finishing moldings.

4. Loosen windshield header molding hex head attaching screws (Fig. 1C6).

CAUTION: Care should be exercised when loosening screws to keep from contacting edge of glass. Remove molding from header.

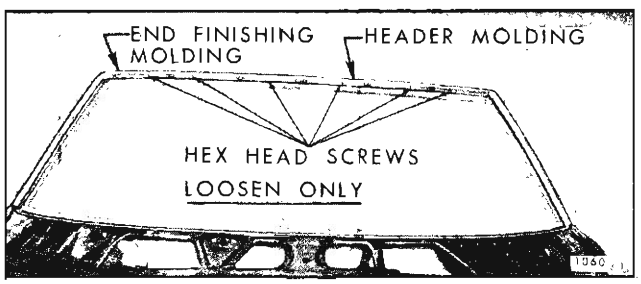


Fig. 1C6—Header Molding

5. To install, apply medium-bodied sealer along the entire length of the underside of the molding to insure a watertight seal and reverse removal procedure.

WINDSHIELD GLASS ADHESIVE CAULKED WINDSHIELD INSTALLATION

This concept of windshield installation incorporates a synthetic rubber compound (Windshield Adhesive Caulking Material) in place of the rubber channel, which requires an entirely different removal and installation service procedure. Two methods of windshield removal and installation are described in the following procedure. The extended method of removal and installation requires removal of all adhesive caulking material from the windshield opening and glass.

The short method requires the removal of the adhesive caulking material from the glass only. The caulking material, caulking tube nozzle, cutting wire and the adhesive caulking primer are furnished in Kit #4226000 or equivalent. This kit will service the installation of the windshield glass on the short method only.

Kit Components:

A. One tube of Adhesive Caulking Material.

B. One nozzle.

C. Steel music wire.

D. Adhesive Caulking Primer (For priming old caulking material on pinchweld flanges).

Additional Material Required:

A. Caulking gun (standard household type reworked as described in step #10 of extended method installation procedure).

B. Two pieces of wood for wire handles.

C. Paint Finish Primer - service part, used only on extended method.

NOTE: On the extended method installation, two kits of material will be necessary to properly install the glass due to the additional material required to compensate for removal of all old material around the windshield opening. The necessary service parts and adhesive caulking materials may be obtained through regular service parts channels. The service procedures must be performed as specified to insure a watertight and proper windshield installation.

Windshield Removal

IMPORTANT: When the windshield glass is originally installed a sponge type filler sealing

strip is applied to the inside surface of the glass prior to application of adhesive caulking material. For service windshield replacements the sealing strips are not required and will not be available as a service part. When replacing a windshield glass, using the short method, the sealing strip must be trimmed from the adhesive material in the body opening for a good appearance.

The windshield removal procedure will be the same for extended or short method.

1. Place protective coverings over front seat, instrument panel, hood and front fenders.

2. Remove inside garnish moldings, rear view mirror support and necessary instrument panel items; instrument panel cover, etc.

3. Remove windshield wiper arms, escutcheon nuts and escutcheon.

4. Remove shroud top air intake grille assembly.

5. Remove lower, side and upper windshield reveal moldings.

6. Secure one end of steel music wire to a piece of wood (for handle) (Fig. 1C7). Insert end of wire through caulking material at lower inside corner of windshield along side of glass surface; then, secure other end of wire to another piece of wood (handle).

7. With aid of helper, carefully cut (pull steel wire) through caulking material, up one side of windshield across top, down opposite side and across bottom of windshield (Fig. 1C7). Make sure inside wire is held close to plane of glass to prevent cutting an excessive amount of adhesive caulking material from the windshield opening. This can be accomplished by holding the inside wire close to the plane of the glass with one hand while pulling the wire with the other hand. After cutting the adhesive material around entire perimeter of windshield, remove glass and place on a protected bench or holding fixture.

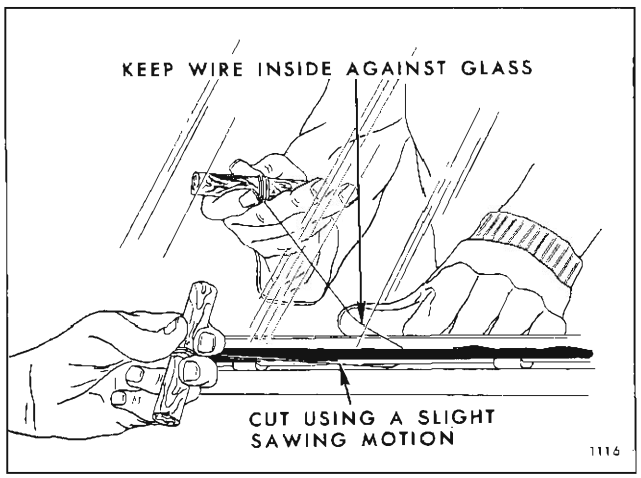


Fig. 1C7—Cutting Out Windshield Glass

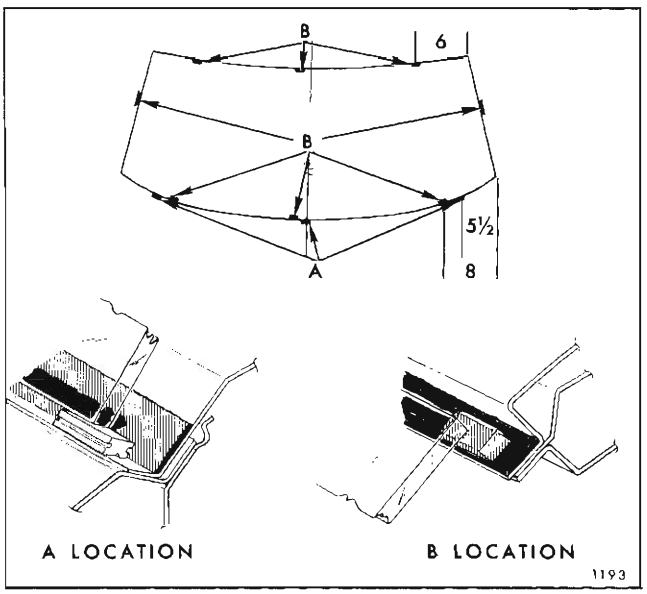


Fig. 1C8—Windshield Glass Spacers

WINDSHIELD INSTALLATION—SHORT METHOD

1. The short method of windshield glass installation involves the removal of a minimum of adhesive caulking material when cutting the glass from the body opening; however, no loose pieces of adhesive material or sealing strip material should be left around the windshield opening.

2. Inspect reveal molding retaining clips for damage, replace if necessary, and seal. Cement three rubber spacers (#4871330 or equivalent) to lower windshield opening at location "A" Figure 1C8.

3. Place glass in opening. Check relationship of glass contour to windshield opening. Glass should

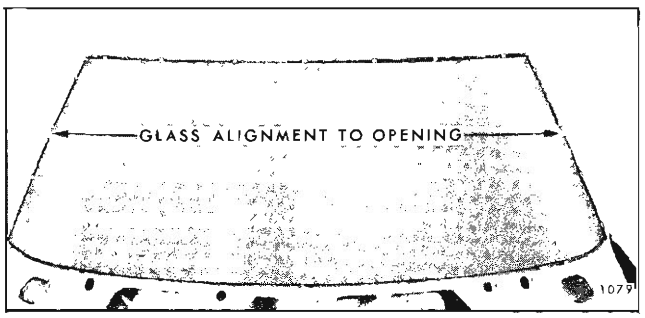


Fig. 1C9—Glass Alignment

rest on adhesive caulking material. Gap spaces may be filled by applying additional caulking material to glass at gap locations. Mark position of replacement windshield glass to body windshield pillars with masking tape or equivalent, for proper alignment of glass to opening at time of installation (Fig. 1C9).

Remove glass and place on protected bench or holding fixture. If original glass is to be reinstalled, remove old caulking material from glass with sharp scraper or razor blade. Remove remaining traces with toluene or thinner dampened cloth.

NOTE: Do not use oil base solvent. Any oil will prevent adhesion of new caulking material to glass.

4. Apply 2" wide masking tape along front of instrument panel. Apply 2" wide masking tape to inside windshield pillars and across front edge of headlining to assist in clean-up after installation.

5. Carefully apply 1" wide masking tape around entire perimeter of inside surface of glass 1/4" inboard from outer edge of glass to facilitate clean-up after installation (Fig. 1C10).

6. Using a clean lint-free cloth, briskly rub a generous amount of adhesive caulking primer on the freshly cut material in the windshield opening.

CAUTION: Do not allow primer to drop on painted surfaces or trim.

7. Wipe surface of glass to which bead of adhesive caulking material will be applied (between masking tape and edge of glass) with a clean, water-dampened cloth. Dry glass with a clean dry cloth.

8. Remove cap and protective end cover from tube of adhesive caulking material and install nozzle. Insert tube into reworked household type caulking gun, as indicated in step #10 for extended installation.

NOTE: Nozzle is cut properly for short method bead.

9. Apply a smooth continuous bead of adhesive caulking material to inside surface of glass next to edge completely around glass (Fig. 1C10). Material should be 1/8" to 3/16" in diameter.

IMPORTANT: The operation of installing windshield glass into the opening should be completed within 15 minutes from start of application of material to glass.

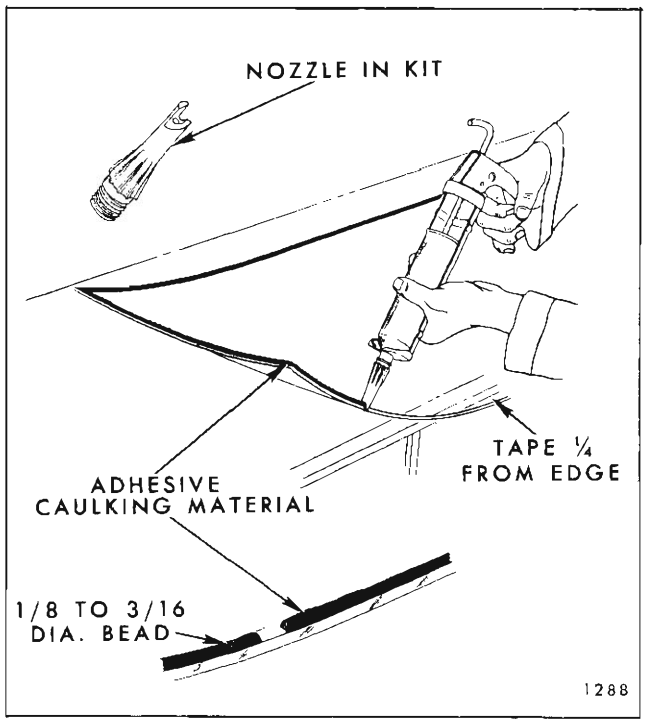


Fig. 1C10—Adhesive Caulking Material Application—Short Method

10. With aid of helper, lift glass with one hand on outside of glass and one hand on inside of glass. Carefully move glass up to windshield opening maintaining glass in a horizontal position. While one man holds glass in this position, the second man can reach around the windshield pillar and hold glass; then, first man can reach around windshield pillar (Fig. 1C11). Carefully position glass into opening, making certain that glass is properly centered in opening and positioned on lower spacers. Use tape previously applied on windshield pillars to properly align glass (Fig. 1C9).

11. Press glass firmly to set caulking material. Use caution to avoid excessive squeeze-out of material.

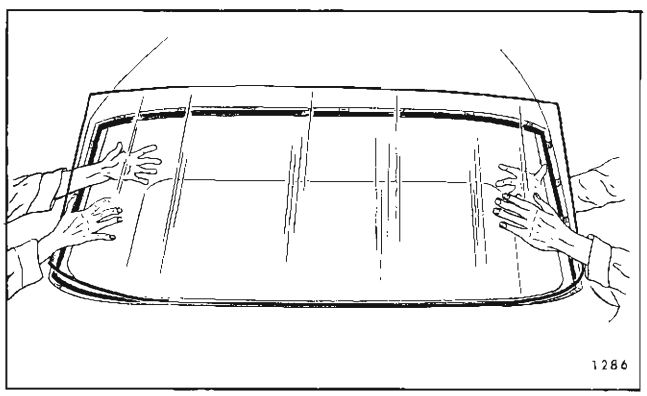


Fig. 1C11—Windshield Installation

NOTE: Glass handling suction cups may be used when removing or installing the windshield glass.

12. Inspect installation for proper seal between new caulking material and original material. If a gap is encountered, apply sufficient caulking material to fill the void. On inside of body run a flat stick around pinchweld flanges to push excess caulking material back into opening between glass and flanges. Remove any excess squeeze-out of material.

13. Watertest windshield immediately using cold water spray. If any waterleaks are encountered, use flat-bladed screwdriver or stick and work caulking material into leak point to correct leak. This operation may be performed from outside the body.

CAUTION: Do not run a heavy stream of water directly on caulking material while the material is still soft.

14. Remove masking tape from inside of glass and windshield opening.

15. Install upper and lower reveal moldings, inside garnish moldings and previously removed parts. Clean up car and remove protective coverings.

WINDSHIELD INSTALLATION— EXTENDED METHOD

The extended adhesive caulked windshield installation method should be used only in conjunction with an installation requiring complete replacement of adhesive caulking material.

NOTE: Two kits of material are required for the extended method.

Using a sharp scraper or wood chisel, remove major portion of adhesive caulking material from body pinchweld flange.

NOTE: It is not necessary to clean off all old caulking material completely from body opening; however, there should not be any loose pieces of caulking material left in the opening.

1. Inspect all reveal molding retaining clips for damage, replace if necessary.

2. Cement three rubber spacers (#4421823 or equivalent) to upper windshield flange and two rubber spacers (#4421823 or equivalent) to windshield pillars at rabbet (View "B" Fig. 1C8). Cement three rubber spacers (#4459429 or equivalent) to lower windshield flange (View "B" Fig. 1C8). Cement three rubber spacers (#4871330 or equivalent) to lower windshield opening (View "A" Fig. 1C8).

3. Postion replacement windshield glass in body opening. Carefully check relationship of glass to body opening. The distance between the inside surface of the glass and body should not be less than 3/16". The galss should have 3/8" overlap around the entire opening. Where necessary to obtain proper spacing, shim spacers as required. Mark position of glass on glass and windshield pillars with masking tape or equivalent, for proper alignment of glass to opening at time of installation. Remove glass and place on protected bench or holding fixture.

4. Clean entire inner surface of glass, carefully apply 1" wide masking tape around entire perimeter of inside surface of glass 1/4" inboard from outer edge of glass to eliminate excessive clean-up time after installation (Fig. 1C12).

5. If original glass is to be reinstalled, remove old caulking material from glass with sharp scraper or razor blade. Remove remaining traces with toluene or thinner dampened cloth.

NOTE: Do not use oil base solvent. Any oil will prevent adhesion of new caulking material to glass.

6. Using a clean, lint-free cloth, briskly rub a generous amount of adhesive caulking primer over

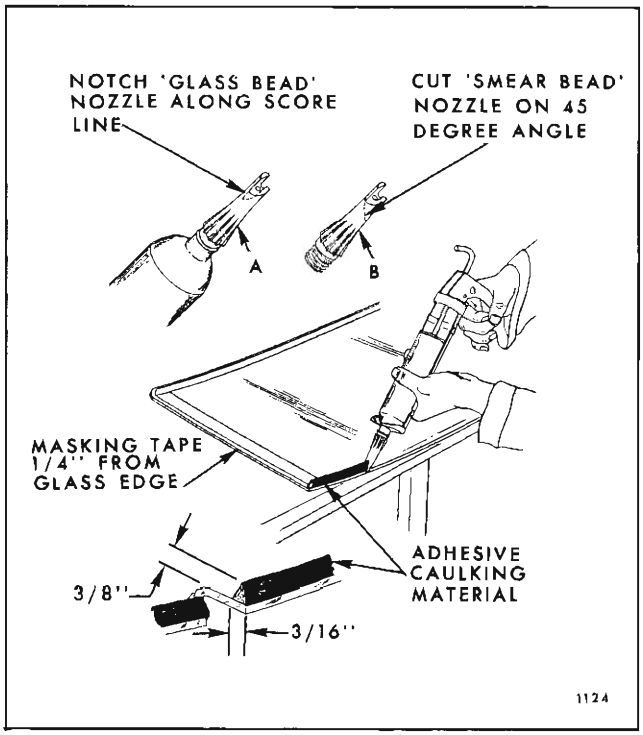


Fig. 1C12—Adhesive Caulking Installation—Extended Method

original adhesive caulking material that remains on pinchweld flange. Additional brisk application of primer on flat rubber spacers is necessary to insure a good bond of material to spacers.

CAUTION: Do not allow primer to drop on painted surfaces or trim parts.

NOTE: If the windshield opening is freshly painted due to collision work, etc., apply paint finish primer to painted pinchweld flange. Paint finish primer is available as a service part.

7. Cut off tip of one nozzle along score line (Fig. 1C12). This nozzle will be used to apply bead of adhesive caulking material to glass. Cut tip off other nozzle at 45° angle 1" below end of nozzle. This nozzle will be used to apply "smear bead" of adhesive caulking material to pinchweld flange.

8. Wipe surface of glass to which bead of adhesive caulking material will be applied (between masking tape and edge of glass) with a clean, water-dampened cloth. Dry glass with a clean dry cloth.

9. Remove cap and protective end cover from one tube of adhesive caulking material and insert "glass bead" nozzle (cut on score line in step 7).

10. Insert tube in a standard household type caulking gun reworked as follows:

a. Widen end-slot of caulking gun with a file to accept dispensing end of tube.

b. Grind down plunger disc on rod so that disc will fit into large end of tube.

11. Positioning the gun and nozzle as shown in Figure 1C12, carefully apply a smooth continuous bead of caulking material 3/8" high by 3/16" wide at base completely around inside edge of glass. When material in first tube is dispensed, quickly insert second tube and continue application of bead. After application, check bead and fill all voids and air bubbles.

NOTE: Material begins to cure after 15 minutes exposure to air, therefore, perform following steps immediately and install glass in opening as soon as possible.

12. Remove "glass bead" nozzle and insert "smear bead" nozzle (nozzle cut on 45° angle in step #7). Holding caulking gun at an angle so that angle-cut of nozzle rests flat on pinchweld flange, apply a thin (1/4" wide x 1/16" high) "smear bead" of adhesive caulking material completely around pinchweld flange.

13. With aid of helper, lift glass with one hand on outside of glass and one hand on inside of glass. Carefully move glass up to windshield opening, maintaining glass in a horizontal position. While one man holds glass in this position, the second man can reach around the windshield pillar and hold glass; then, first man can reach around windshield pillar (Fig. 1C11). Carefully position glass to plane of opening, making certain that glass is properly centered and positioned to opening and resting on lower spacers. Use tape on glass and windshield pillars as a guide (Fig. 1C9).

14. Press glass firmly to set caulking material.

15. Inspect installation for proper seal between caulking material, glass and opening. If a gap is encountered, use caulking gun to apply sufficient material from outside the glass to fill the void.

16. Watertest windshield immediately using cold water spray. If any waterleaks are encountered, use flat-bladed screwdriver or stick and work caulking material into leak point to correct leak. This operation is usually performed most effectively from outside the body.

CAUTION: Do not run a heavy stream of water directly on caulking material while the material is still soft.

17. Remove masking tape from inside of glass and windshield opening.

18. Install upper and lower reveal moldings, garnish moldings and previously removed parts. Clean up car and remove protective coverings.

NOTE: Unused adhesive caulking material remaining in tube can be stored for later use. To store, remove nozzle and insert end cap previously removed. Do not remove material from nozzle until it has cured. Once material has cured, it can be removed from ends of nozzle with a pair of pliers.

WATERLEAK CORRECTION OF ADHESIVE CAULKED GLASS INSTALLATION

Adhesive caulked glass installation waterleaks can be corrected in the following manner without removing and reinstalling the glass.

NOTE: The following procedure is applicable only with the use of adhesive caulking material and primer furnished in Kit Part No. 4226000 or equivalent.

1. Remove reveal moldings in area of leak.

2. Mark location of leak(s).

IMPORTANT: If leak is between adhesive caulking material and body or between material and glass carefully push outward on glass in area of leak to determine extent of leak. This operation should be performed while water is being applied to leak area. Mark extent of leak area.

3. From outside body clean any dirt or foreign material from leak area with water; then dry area with air hose.

4. Using a sharp knife, trim off uneven edge of adhesive caulking material (See Operation "A" Fig. 1C13) at leak point and 3 to 4 inches on both sides of leak point or beyond limits of leak area.

5. Using a small brush, apply adhesive caulking material primer over trimmed edge of adhesive caulking material and over adjacent painted surface. (See operation "B" Fig. 1C13).

6. Apply adhesive caulking material, as shown in Operation "C" (Fig. 1C13), at leak point 3 to 4 inches on both sides of leak point or beyond limits of leak area.

7. Immediately after performing Step 6, use flat stick or other suitable flat-bladed tool to work adhesive caulking material well into leak point and into joint of original material and body to effect a watertight seal along entire length of material application (See Operation "D" Fig. 1C13).

8. Spray watertest to assure that leak has been corrected. DO NOT run a heavy stream of water directly on freshly applied adhesive caulking material.

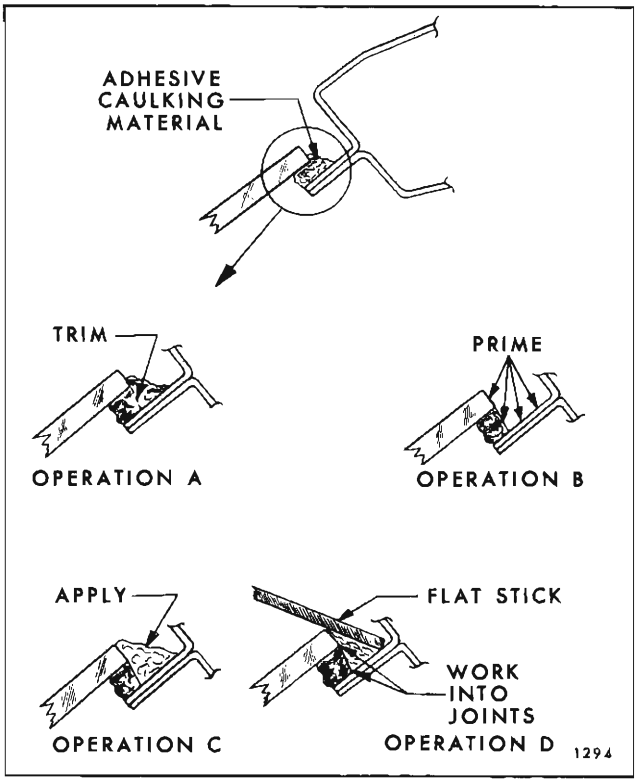


Fig. 1C13—Correction of Adhesive Caulked Glass Installation Waterleaks

A. Trim Off Adhesive Caulking Material Along Edge of Glass.
B. Prime Areas Indicated Using a Small Brush.
C. Apply Adhesive Caulking Material (Use Kit #4226000 or Equivalent)
D. Using a Flat Stick, Work Adhesive Caulking Material Well into Joints of Original Material, Painted Body and Glass.

BODY VENTILATING SYSTEM

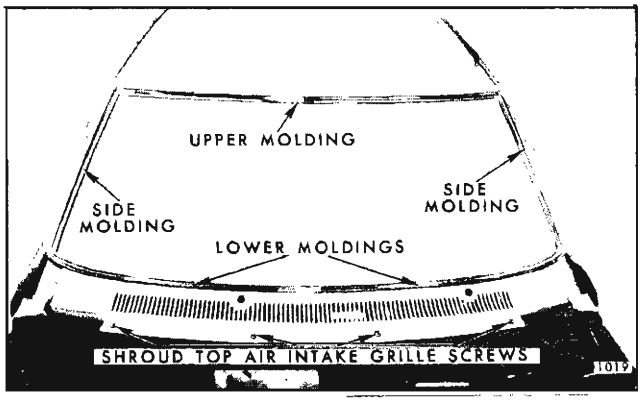


Fig. 1C14—Shroud Top Air Intake Grille and Windshield Reveal Moldings

The body ventilating system incorporates the use of an air intake grille located on top of the shroud panel. The air entering the shroud top ventilator grille flows through a duct which guides the air into the body through a shroud side duct panel air outlet assembly. The door in the outlet assembly regulates the flow of air and is adjusted by the use of a cable and knob control. Water entering the air inlet grille flows down the shroud side duct panel and is discharged through an opening in the rocker panel.

SHROUD TOP VENTILATOR GRILLE

Removal and Installation

1. Place protective coverings over hood and fenders.

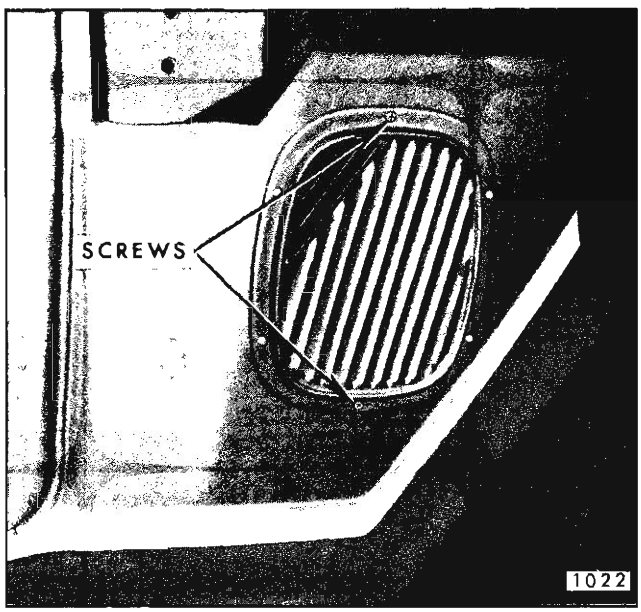


Fig. 1C15—Shroud Side Trim Pad

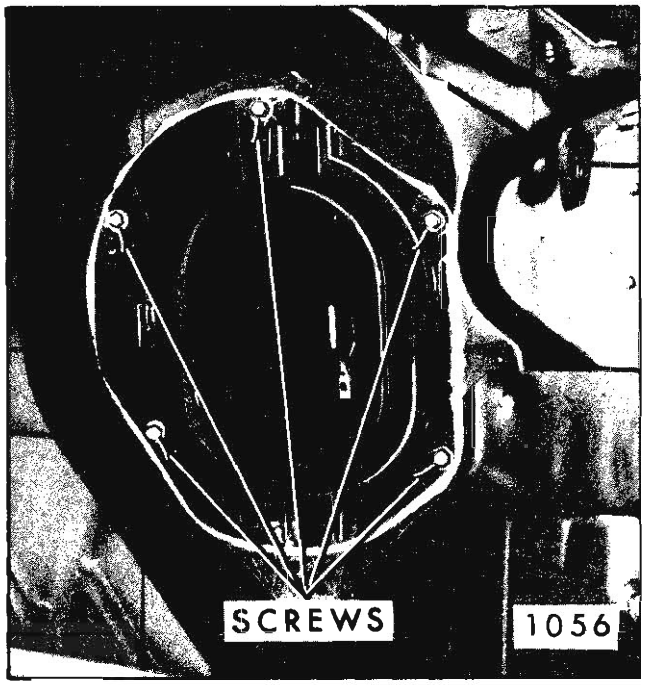


Fig. 1C16—Shroud Side Air Outlet Duct

2. Remove windshield wiper arms and escutcheons.

3. Raise hood, remove screws securing grille to shroud (Fig. 1C14).

4. Carefully raise front edge of grille, slide grille forward and remove grille.

5. To install, reverse removal procedure.

NOTE: Exercise care so that grille does not contact hood.

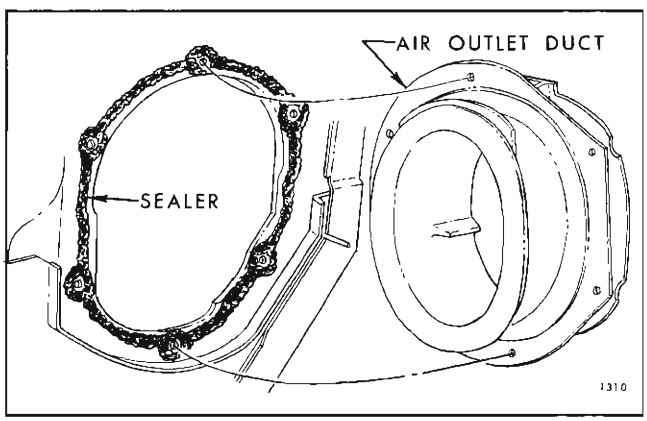


Fig. 1C17—Shroud Side Air Outlet Duct Sealing

SHROUD SIDE TRIM PANEL

Removal and Installation

1. Remove sill plate and screws securing trim panel and grille to outlet (Fig. 1C15).

2. Slide trim panel rearward disengaging trim from front body hinge pillar pinchweld flange and remove trim panel assembly.

3. To install, reverse removal procedure.

SHROUD SIDE AIR OUTLET

Removal and Installation

1. Remove shroud side trim panel.

2. Remove screws securing outlet to shroud panel, disengage control cable from outlet and remove outlet (Fig. 1C16).

3. To install, apply a bead of medium-bodied sealer to shroud panel completely around inside perimeter of opening and reverse removal procedure (Fig. 1C17).

INSTRUMENT PANEL ASSEMBLY

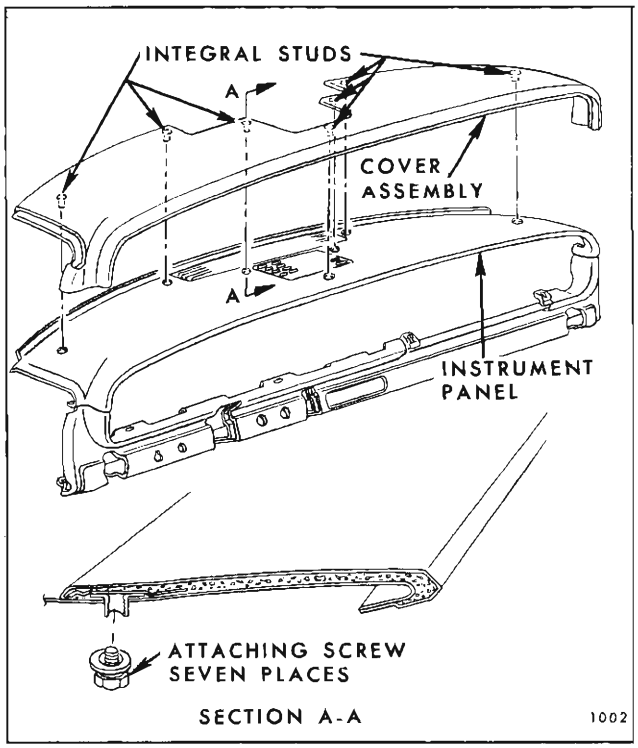


Fig. 1C18—Instrument Panel Cover - Chevrolet

INSTRUMENT PANEL COVER 15-16000 SERIES STYLES

The instrument panel cover is secured to the upper instrument panel by studs and screws (Fig. 1C18).

The studs are an integral part of the cover assembly.

Removal and Installation

1. Remove windshield side garnish moldings.

2. Loosen or remove any necessary instrument items, glove box, etc.

3. From underside of instrument panel, remove the seven (7) attaching stud screws and carefully remove the cover assembly (Fig. 1C18).

4. To install, reverse removal procedure making certain cover is properly aligned before securing in place.

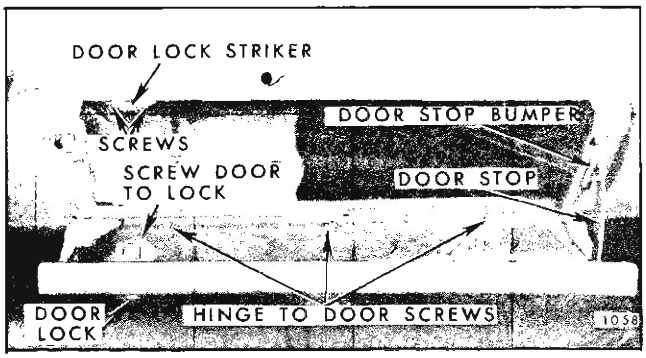


Fig. 1C19—Instrument Panel Compartment Door

INSTRUMENT PANEL COMPARTMENT DOOR 25-26000 SERIES STYLES

Removal and Installation

1. Mark location of compartment hinge on door inner panel.

2. Remove hinge to inner panel screws (Fig. 1C19).

3. Remove door stop rubber bumper and remove door assembly.

4. To install, reverse removal procedure.

ADJUSTMENTS

The door may be adjusted up and down or right to left, by loosening the hinge to door attaching screws. Position door as required and tighten screws. The door may be adjusted in or out, by loosening the hinge to instrument panel screws. Position door as required and tighten screws. The striker may be adjusted as required by loosening the attaching screws.

INSTRUMENT PANEL COMPARTMENT DOOR LOCK 25-26000 SERIES STYLES

Removal and Installation

1. Open compartment door, remove screw attaching lock to door inner panel and remove lock assembly (Fig. 1C19).

2. To install, reverse removal procedure.

DOORS

FRONT AND REAR DOORS

The door section consists of a series of specific service operations that must be performed in order to remove or install individual door hardware components. In addition, because hardware alignment affects door sealing and the operation of door mechanisms, adjustment procedures are included for those parts that have adjustment provisions.

To facilitate locating specific service operations, the door section is divided into three areas. These areas are titled and arranged in the following sequence:

a. "Front and Rear Doors" which consists of operations similar to both front and rear doors.

b. "Front Doors" which consists of operations applicable to front doors only.

c. "Rear Doors" which consists of operations applicable to rear doors only.

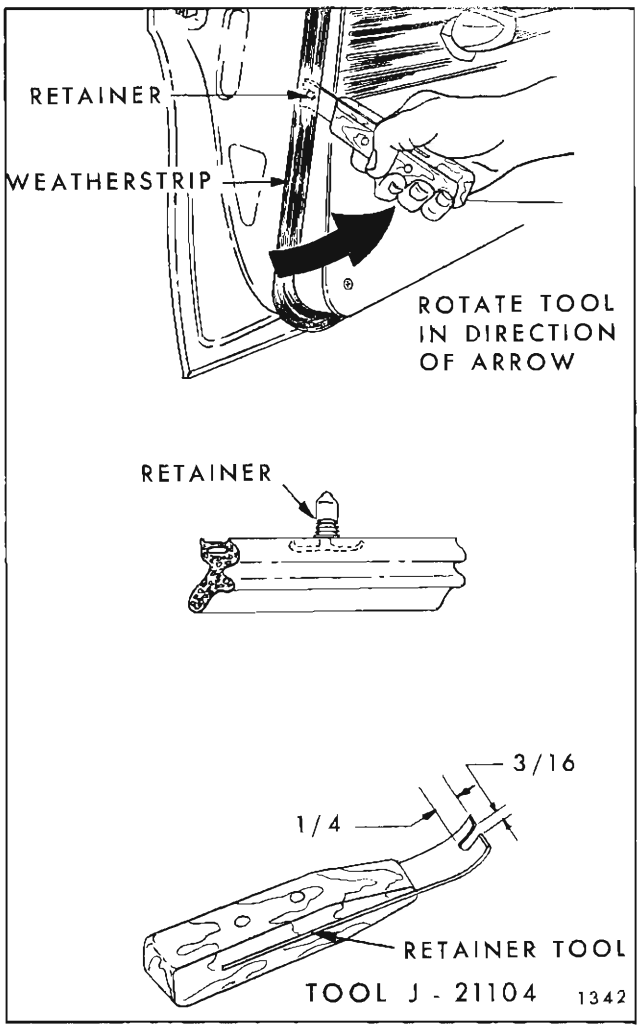


Fig. 1D1—Door Weatherstrip Removal

FRONT AND REAR DOOR WEATHERSTRIPS ALL STYLES

Both the front and rear doors use nylon fasteners to retain the door weatherstrips. The fasteners are a component part of the weatherstrip and secure the weatherstrip to the door by engaging piercings in the door panels. Serrations on the fastener help retain the fastener in the piercings and also seal the openings against water entry (Fig. 1D1).

In addition to the nylon fastener, sedan styles use a limited amount of weatherstrip adhesive at the beltline. Hardtop styles use exposed plastic fasteners at this location.

To remove a weatherstrip retained with nylon fasteners requires the use of tool J-21104. If this tool is not available, one comparable can be made according to the dimensions shown in Figure 1D1.

Although a replacement door weatherstrip will include the nylon fasteners, individual fasteners are available as a service part.

Removal

1. On hardtop and convertible styles, remove exposed plastic fasteners at beltline. On "39" styles, and "69" style rear doors without door upper frames, remove door trim pad to gain access to fastener under trim pad (Fig. 1D2).

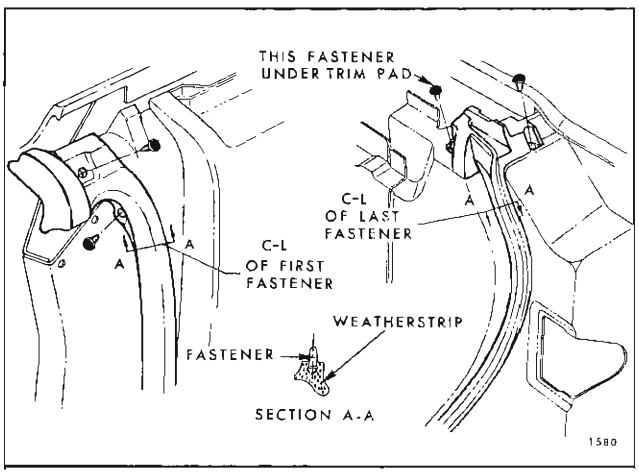


Fig. 1D2—Rear Door Weatherstrip Retention

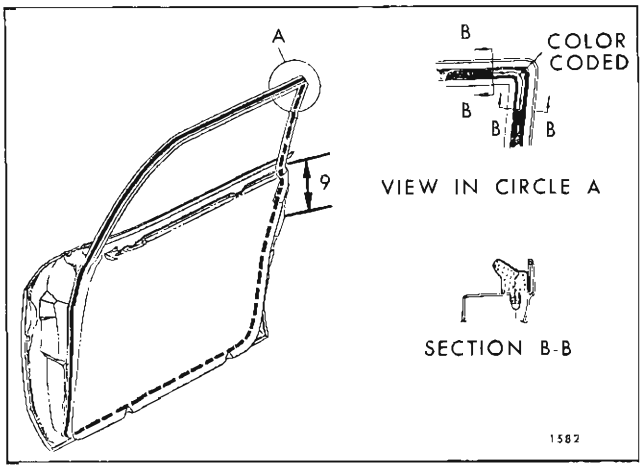


Fig. 1D3—Front Door Weatherstrip Installation

2. On all styles, use a flat blade tool to break cement bond between weatherstrip and door lock pillar at beltline. On sedan style rear doors, also break cement bond at beltline on door hinge pillar.

3. Slide weatherstrip removal tool J-21104 under weatherstrip at a fastener location and, gripping fastener in tool slot, carefully pry fastener out of door panel piercing. Repeat this operation at all fastener locations, and when all fasteners have been disengaged, remove weatherstrip from door.

Installation

1. Inspect weatherstrip nylon fasteners and replace those that are damaged.

2. Clean off all old weatherstrip adhesive from door.

3. On hardtop styles and sedan styles without door upper frames, position weatherstrip to door and install plastic fastener at both front and rear ends of weatherstrip.

4. On sedan styles with door upper frames, position color coded area of weatherstrip to door as follows:

a. On front doors, color code should be located at rear upper corner of door upper frame (Fig. 1D3).

b. On rear doors, color coded area should begin at beltline of door lock pillar and extend upward (Fig. 1D4).

5. Working around door, tap nylon fasteners into door piercings using a hammer and a blunt caulking tool.

6. After all fasteners have been installed, apply weatherstrip adhesive between door and weatherstrip outer surface at the following locations:

a. For 5" around rear upper corner of front door upper frame (Circle "A", Fig. 1D3) and 9" down door lock pillar starting at beltline.

b. On sedan rear doors, 9" down both door lock and hinge pillars starting at beltline (Fig. 1D4).

c. On door lock pillar starting at beltline and extending down 2" on hardtop styles.

NOTE: If weatherstrip becomes damaged and will not retain fastener, remove fastener and secure weatherstrip to door with weatherstrip adhesive. If more than two consecutive fastener locations become damaged, replace weatherstrip.

Although weatherstrip adhesive is specified only at several locations, it can be used at any point where additional retention is required.

DOOR BOTTOM DRAIN HOLE SEALING STRIPS ALL STYLES

Door bottom drain hole sealing strips (dust flaps) are attached to door inner panels over door bottom drain holes to prevent entry of dust and cold air at these locations (Fig. 1D5).

To remove sealing strip, use a flat-bladed tool to pry retaining plugs from door panel piercings.

To install, insert a blunt pointed tool such as a dull ice-pick into retaining plug and push plug into door panel piercings.

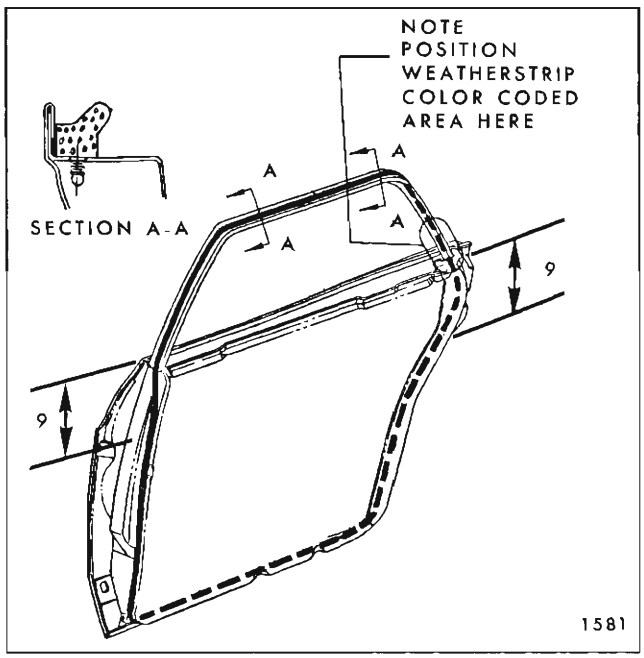


Fig. 1D4—Rear Door Weatherstrip Installation

FRONT AND REAR DOOR PULL HANDLE 48400 SERIES

The door pull handle is secured to the door inner panel by an exposed screw inserted through the base of the handle, and a clip that engages the trim finishing panel at the top (Fig. 1D6).

To remove the handle, merely remove the screw at the handle base and disengage the upper clip from the slot provided in the trim finishing panel. To install, reverse the removal procedure.

FRONT AND REAR DOOR PULL HANDLE 26239 STYLES

The door pull handle is secured to the door inner panel by screws which are covered by the door front and rear upper moldings. Therefore, to remove the pull handle it is necessary to first remove the upper trim finishing moldings.

Removal and Installation

1. Insert end of a flat-bladed tool under edge of door trim moldings and pry front and rear moldings off retainers (Fig. 1D7).

2. Remove screws inserted through front and rear handle hinges and remove pull handle from door (Fig. 1D7).

3. To install, reverse removal procedure. To remove handle from hinges, remove spring clips shown in View "B".

FRONT AND REAR DOOR PULL HANDLE 68000 SERIES

The door pull handle is secured to the door inner panel by exposed screws that are inserted through the pull handle escutcheons (Fig. 1D8).

To remove the pull handle, merely remove the screws at the front and rear escutcheons.

The handle is retained to the escutcheons by screws which are accessible once the handle assembly is removed from the door (View "C").

FRONT AND REAR DOOR PULL HANDLE 38000 SERIES

The door pull handle is assembled to the door trim assembly and can only be removed after the trim assembly has been removed from the door.

Removal and Installation

1. Remove door trim assembly as described in a following procedure and lay trim assembly reverse-side-up on a clean protected surface.

2. Straighten bend-over tabs retaining upper rear trim finishing molding (Fig. 1D9, Section C-C), and remove molding from trim assembly.

3. Remove pull handle stud nuts (Fig. 1D9, Section B-B). Disengage front of handle from front trim finishing molding and remove handle assembly.

4. To install, reverse removal procedure. To disassemble handle from handle hinges, refer to Figure 1D10.

FRONT AND REAR DOOR INSIDE HANDLES ALL STYLES

Removal and Installation

A. On styles equipped with door inside remote control "paddle" handles, proceed as follows:

1. Remove door arm rest as described under "Front and Rear Door Arm Rests".

2. If present, remove remote control cover plate (Fig. 1D11).

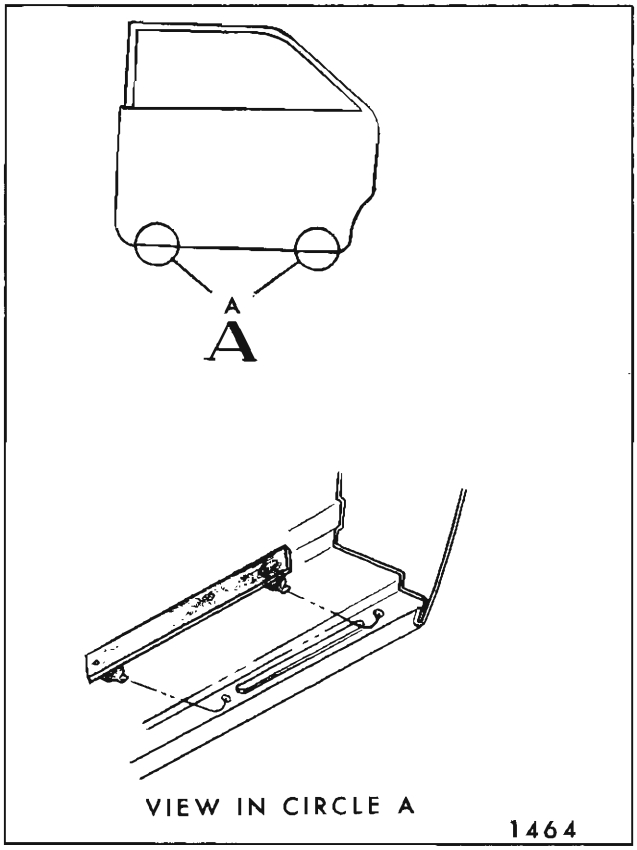


Fig. 1D5—Door Bottom Drain Hole Sealing Strip

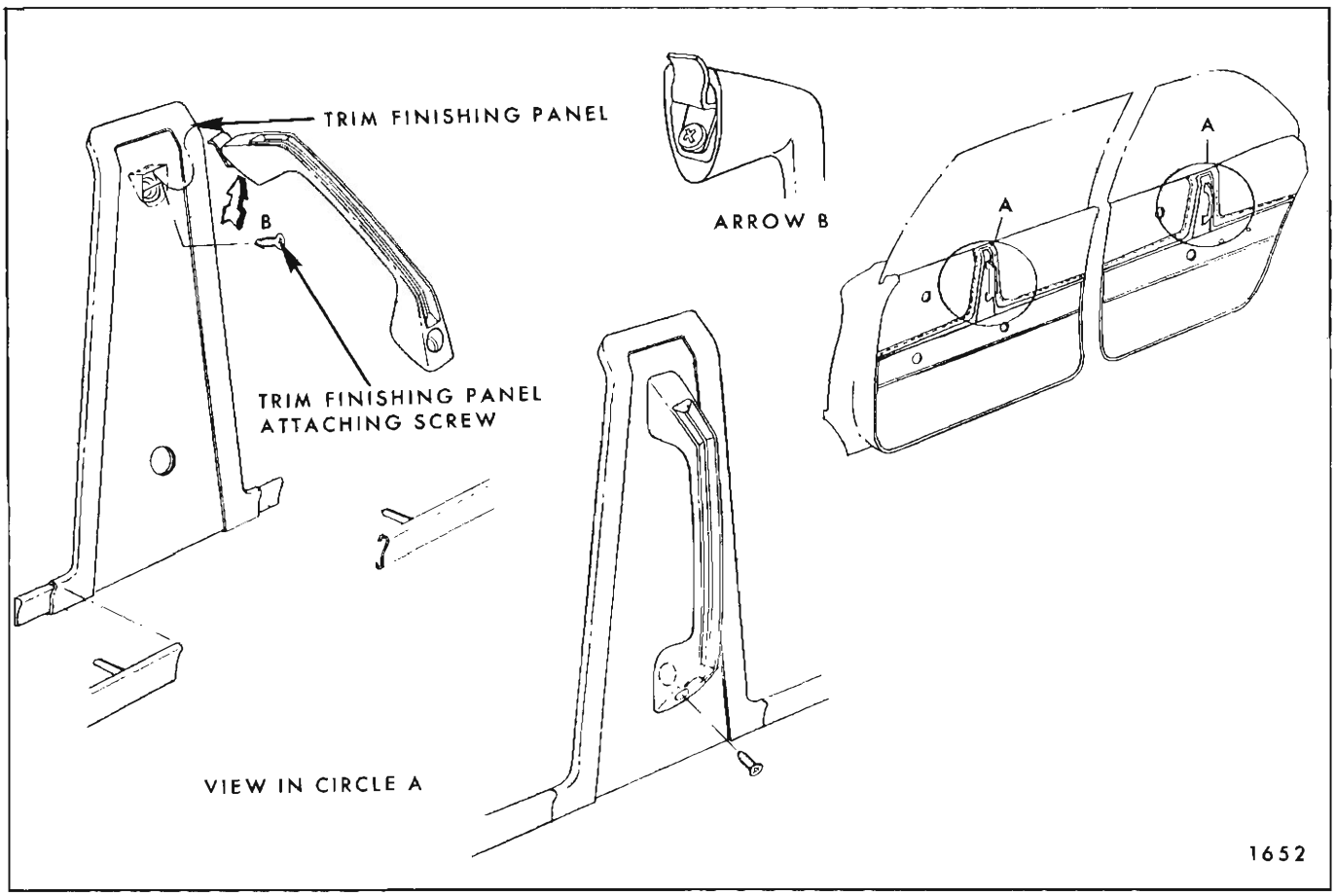


Fig. 1D6—Door Pull Handle Installation - 48000 Series

3. Remove remote control to handle attaching screw and remove handle.

4. To install, reverse removal procedure.

B. On styles not equipped with "paddle" handles, and for removal of manually operated ventilators and door window inside handles, proceed as follows:

1. Depress door trim assembly sufficiently to permit insertion of tool J-7797 between handle and bearing plate (Fig. 1D12).

2. Push tool to disengage handle retaining spring from spindle and remove bearing plate and handle from door.

3. To install, engage retaining spring on handle and position handle to door at same angle as opposite door handle; then, press handle until spring engages spindle.

FRONT AND REAR DOOR ARM RESTS ALL STYLES EXCEPT 38000-68000 SERIES

Removal and Installation

1. Remove screws securing arm rest to door inner panel (Fig. 1D13) and remove assembly from door.

2. To install, reverse removal procedure. Make certain screw piercings in inner panel are sealed prior to installation.

FRONT OR REAR DOOR ARM REST SWITCH COVER ASSEMBLY 38439-38467-38669-48467-STYLES-68000 SERIES

Removal and Installation

1. Remove exposed screws at front and rear of switch cover assembly (Fig. 1D14).

2. Disconnect switch terminal blocks from switch assemblies and remove switch cover from arm rest.

3. To install, reverse removal procedure.

FRONT OR REAR DOOR SWITCH MOUNTING BASE COVER 38437-39 AND 48437-39-69 STYLES

Removal and Installation

1. Remove screws inserted through switch

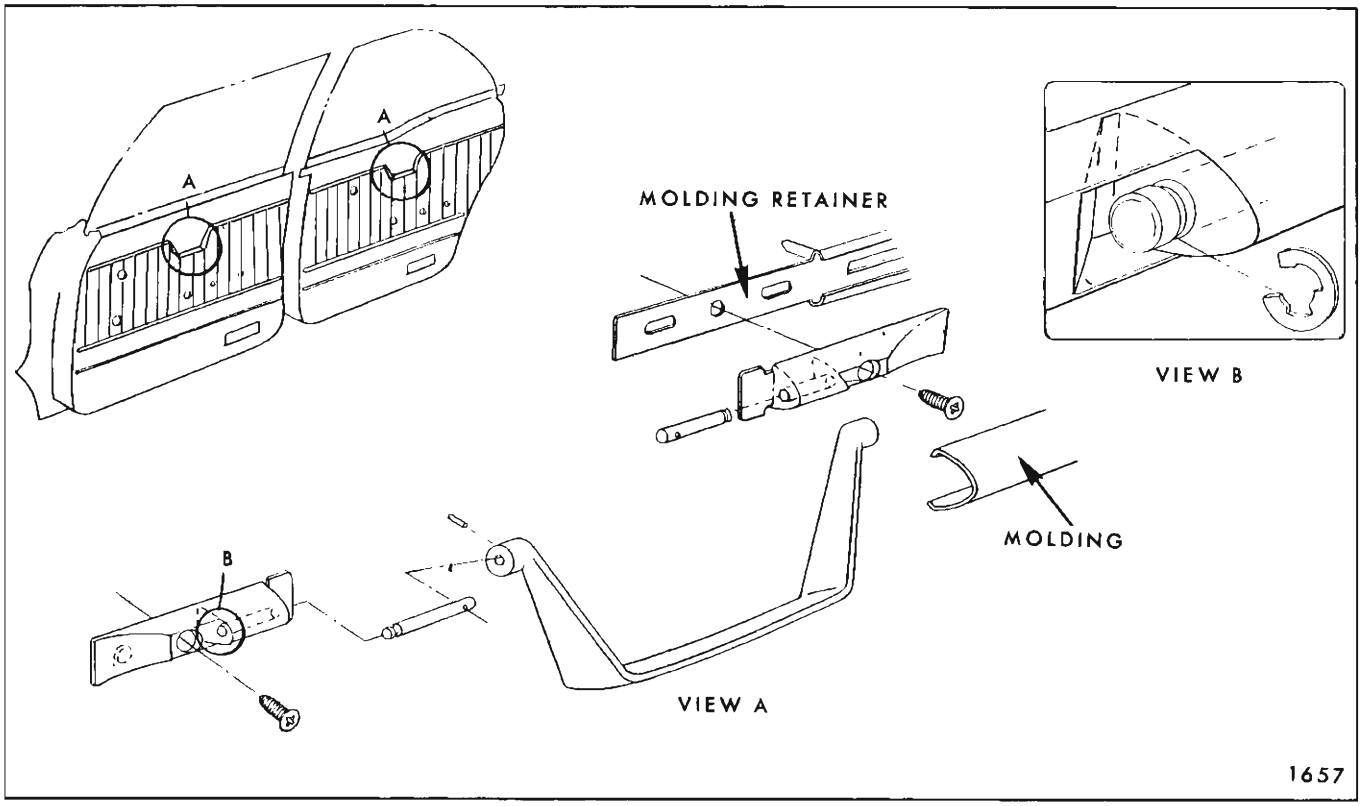


Fig. 1D7—Door Pull Handle Installation - 26239 Style

mounting base cover into switch mounting base (Section "C-C", Fig. 1D15).

2. To install, reverse removal procedure.

FRONT AND REAR DOOR TRIM ASSEMBLIES ALL STYLES EXCEPT 38439-38467-38669-48467 AND THE 68000 SERIES

All door trim assemblies are the "hang-on" type and are further secured by screws along the bottom and retaining nails inserted into plastic retaining cups along the sides (Fig. 1D16).

Removal and Installation

1. Remove door inside handles, locking rod knob, and arm rest assembly.

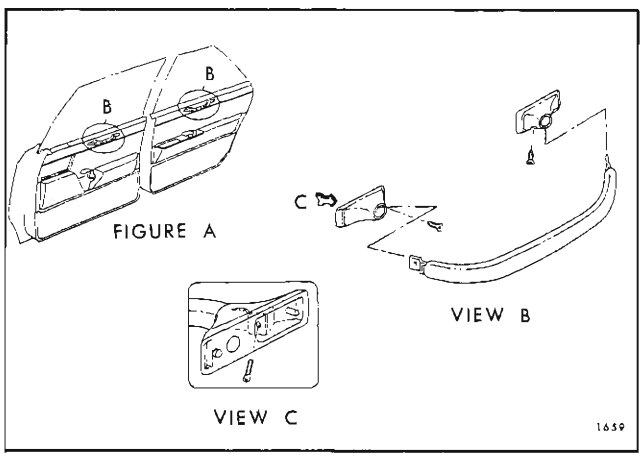


Fig. 1D8—Door Pull Handle Installation - 68000 Series

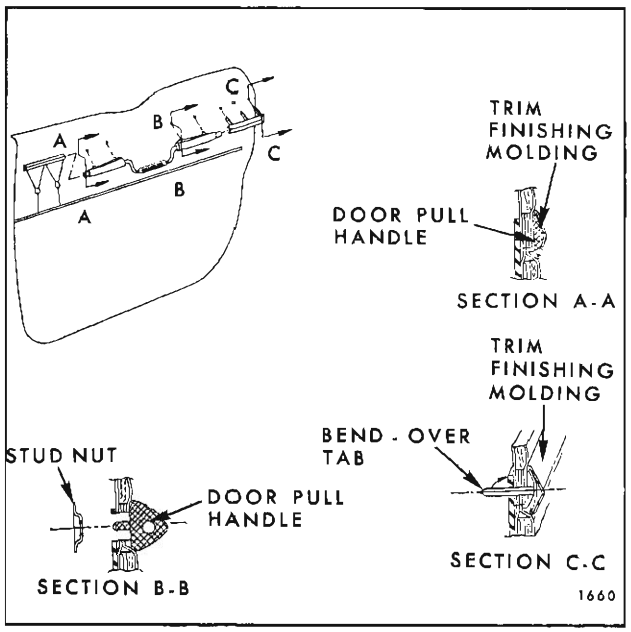


Fig. 1D9—Door Pull Handle Installation - 38000 Series

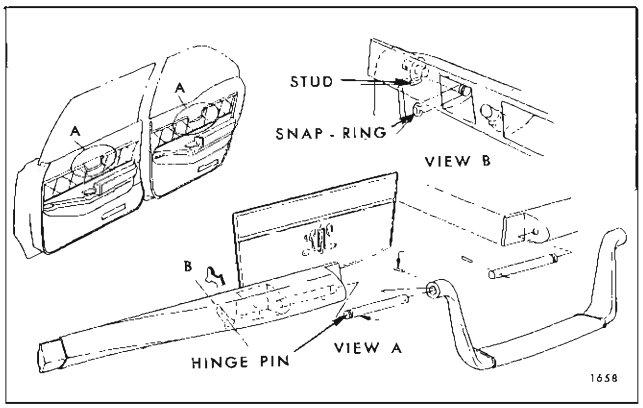


Fig. 1D10—Door Pull Handle Assembly - 38669 Style

2. Remove exposed screws securing trim assembly to door inner panel along door bottom.

3. With a clean rubber mallet, tap trim assembly along front and rear edges to free trim assembly retaining nails in slots.

4. Starting at a lower corner, insert tool J-6335 between door inner panel and trim assembly. Working upward, carefully disengage retaining nails from plastic cups inserted in door inner panel (View "E", Fig. 1D16).

NOTE: Use care not to damage water deflector.

5. After all retaining nails have been disengaged, lift trim assembly upward and remove it from door.

NOTE: On styles equipped with electric window regulators or vacuum door locks, disconnect harness or vacuum hoses at switch or selector valve.

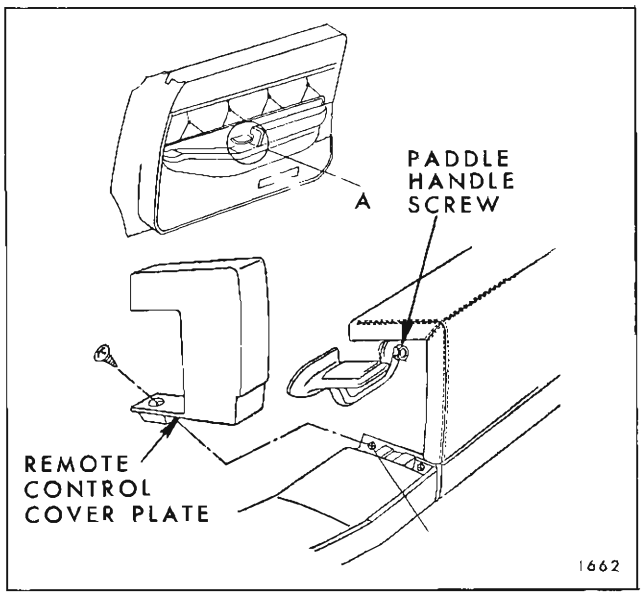


Fig. 1D11—Remote Control Handle and Cover Plate
Front Door Shown - Rear Door Typical

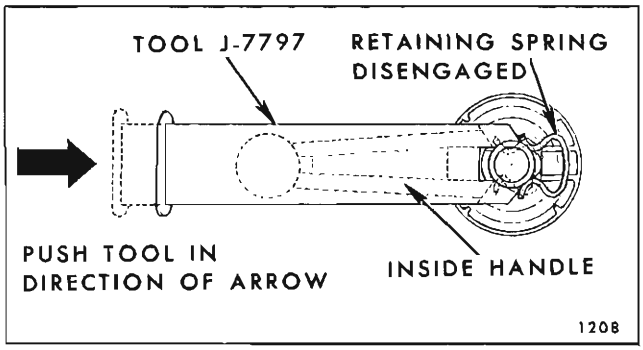


Fig. 1D12—Disengaging Door Inside Handle Retaining Spring

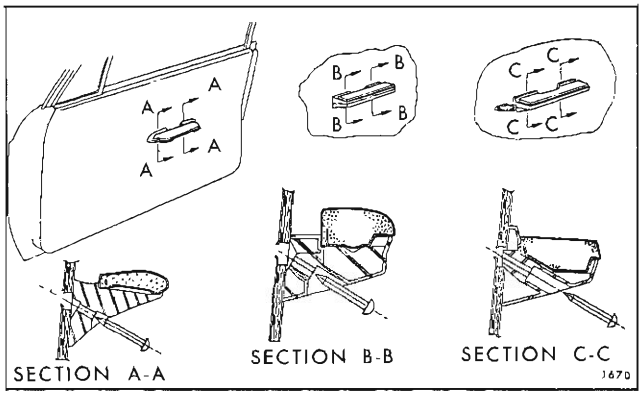


Fig. 1D13—Typical Applied-Type Door Arm Rests

6. To install, reverse removal procedure. Broken retaining nails can be replaced with replacement nailing tabs which are available as a service part.

FRONT AND REAR DOOR TRIM ASSEMBLIES 38000-48000-68000 SERIES

Removal and Installation

1. Remove door inside handles and inside locking

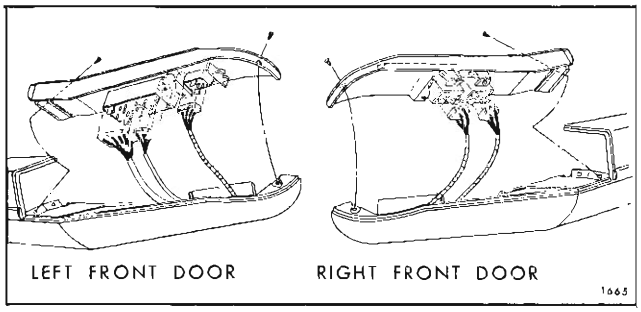


Fig. 1D14—Front Door Arm Rest Switch Cover Assembly

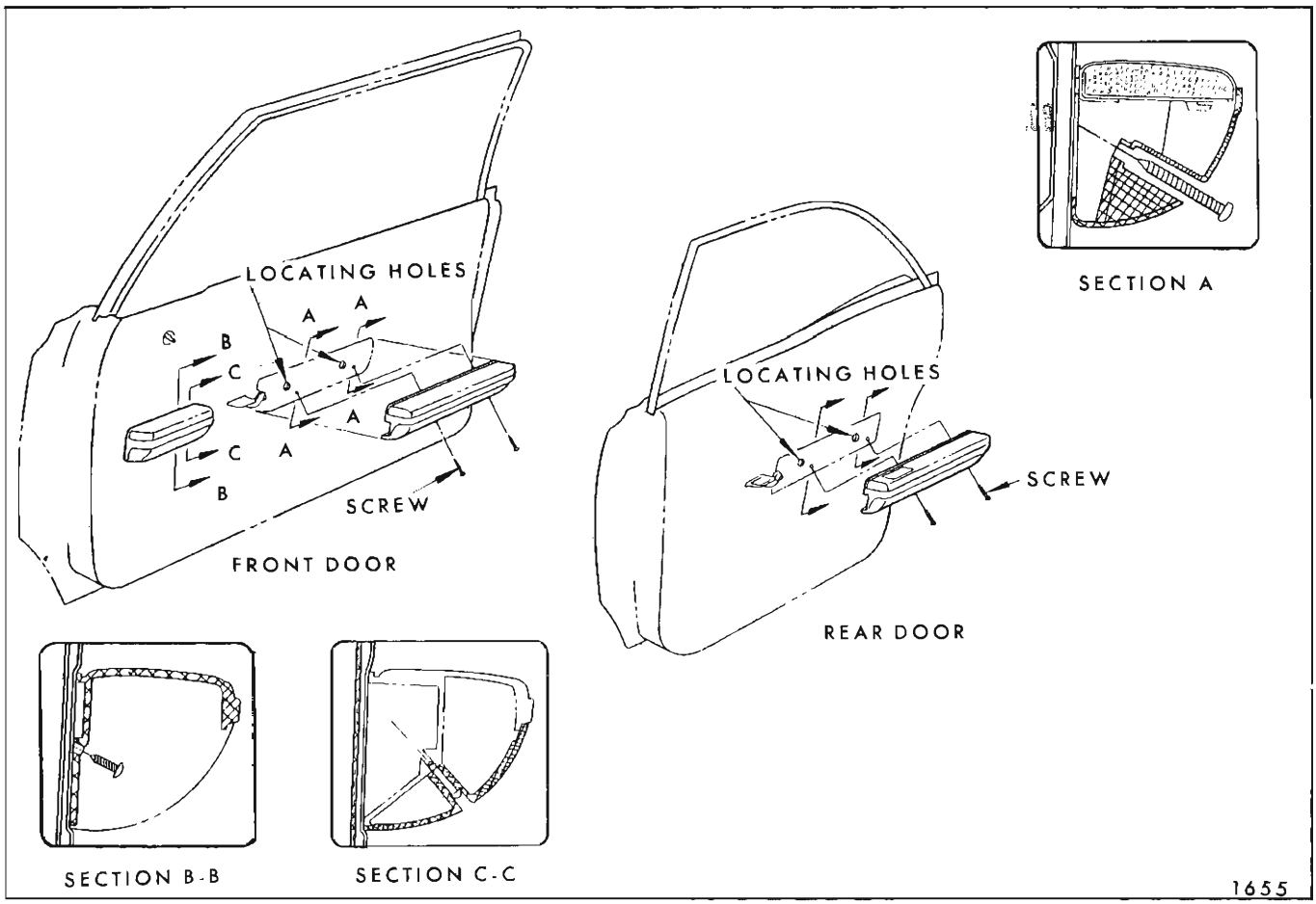


Fig. 1D15—Door Arm Rest and Switch Base

rod knob. On styles with applied type arm rests (Fig. 1D15) remove arm rest.

2. On 38000 - 68000 series equipped with door pull handle, remove two exposed screws inserted through handle into door inner panel.

3. On 48000 series equipped with door pull handle, remove handle to gain access to trim assembly retaining screw behind handle and remove screw (Fig. 1D6).

4. On styles with one piece arm rest and switch base, remove switch cover plate (Fig. 1D14) and screw immediately below paddle handle into arm rest hanger plate (Fig. 1D21, View "C").

5. On styles with separate switch base or cigar lighter and ash tray assembly, remove switch cover plate or base cover (Fig. 1D17 for 38-48000 series, Fig. 1D14 for 68000 series). On 68200 styles only, also remove arm rest base cap (Fig. 1D18).

On 38-48000 series remove screws inserted through switch base into door inner panel (Section B-B, Fig. 1D15).

On 68200 series remove screws securing switch base and arm rest to hanger plates (Fig. 1D19 and 1D18).

6. On 38439-67 styles, remove arm rest cup to hanger plate attaching screws (Fig. 1D20).

7. Remove exposed screws securing door trim assembly to inner panel along door bottom (Fig. 1D21, Section B-B). On 68000 series, also remove exposed screw at front corner of trim upper finishing molding (Section D-D, Fig. 1D21).

8. Starting at a lower corner, insert tool J-6335 between door inner panel and trim assembly. Working upward, carefully disengage retaining nails from plastic cups inserted in door inner panel (Fig. 1D21, View "A").

NOTE: Use care not to damage inner panel water deflector.

9. Lift trim assembly upward to disengage it from door inner panel and remove trim assembly.

10. To install, reverse removal procedure.

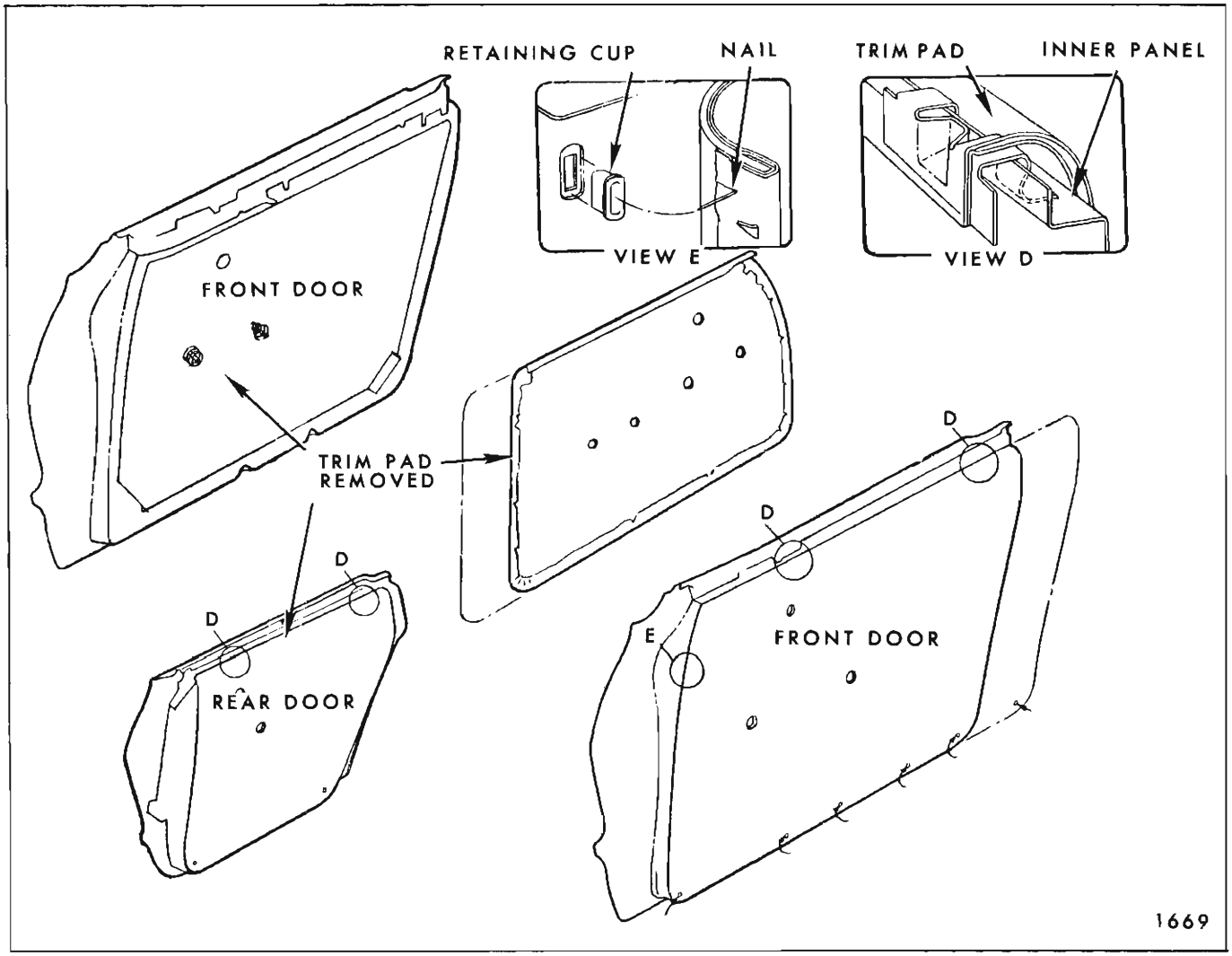


Fig. 1D16—Front and Rear Door Trim Assemblies

FRONT AND REAR DOOR ARM RESTS 38439-38467-38669-48467 AND 68000 SERIES

The door arm rest is secured to the door trim assembly by screws inserted from the reverse side of the door trim. To remove arm rest, it is necessary to remove the trim assembly as previously described. The arm rest can then be removed in a bench operation (Fig. 1D22).

FRONT DOOR SWITCH MOUNTING BASE OR REAR DOOR CIGAR LIGHTER AND ASH TRAY BASE 38000 SERIES EXCEPT 38439-38467-38669 STYLES, 48000 SERIES EXCEPT 48467 STYLES

The base is secured to the door trim assembly by screws inserted from the reverse side of the assembly. Therefore, to remove the base it is necessary to remove the door trim assembly as previously described. The base can then be removed in a bench operation.

FRONT AND REAR DOOR WATER DEFLECTOR ALL STYLES

A waterproof paper deflector is used to seal the door inner panel and prevent entry of water into body. The polyethylene (Black) side of the deflector is placed against the inner panel. The deflector fits into a retaining slot at the lower section of the door inner panel and deflects water to bottom of door and out door bottom drain holes. The deflector is further secured by a string loaded sealing material along both front and rear edges and by the application of waterproof sealing tape at front and rear lower corners.

Whenever work is performed on front or rear doors where the water deflector has been disturbed,

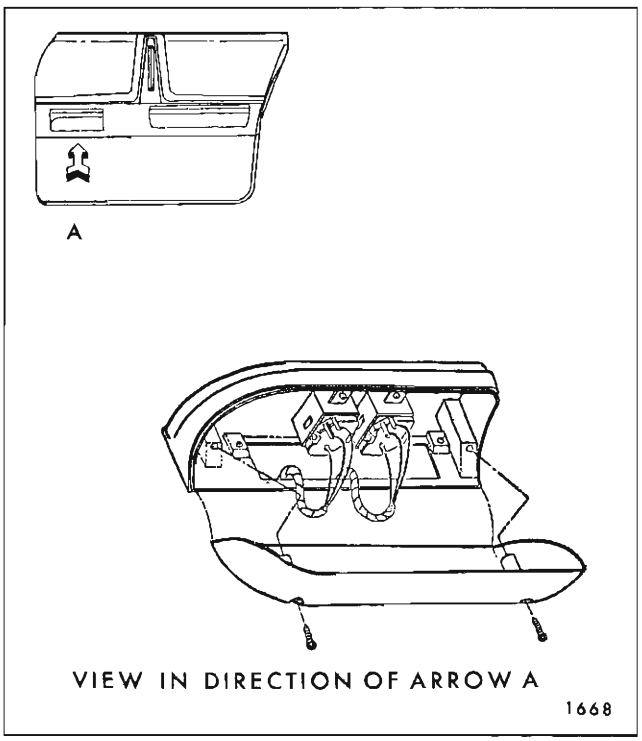


Fig. 1D17—Switch Base Cover

the deflector must be properly resealed and taped to the inner panel to prevent serious waterleaks. It is important that all service personnel performing door hardware adjustments or sealing operations are aware of the importance of using the specified material and the recommended removal and installation or replacement procedures.

For service sealing, body caulking compound is recommended if additional sealing material is required.

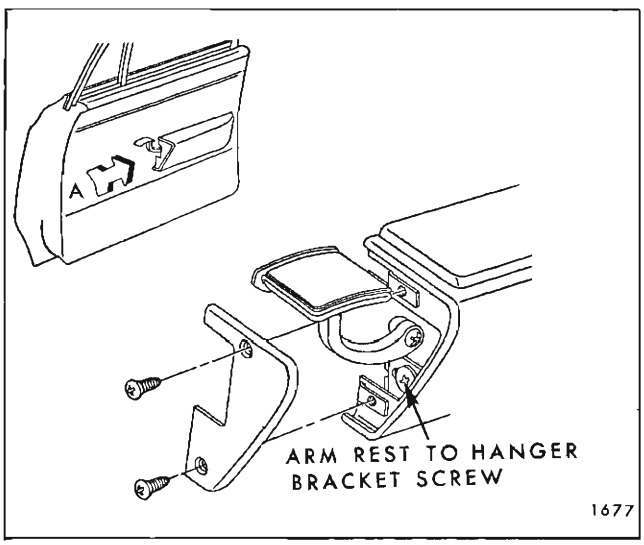


Fig. 1D18—Front Door Arm Rest Base Cap - 68200 Series

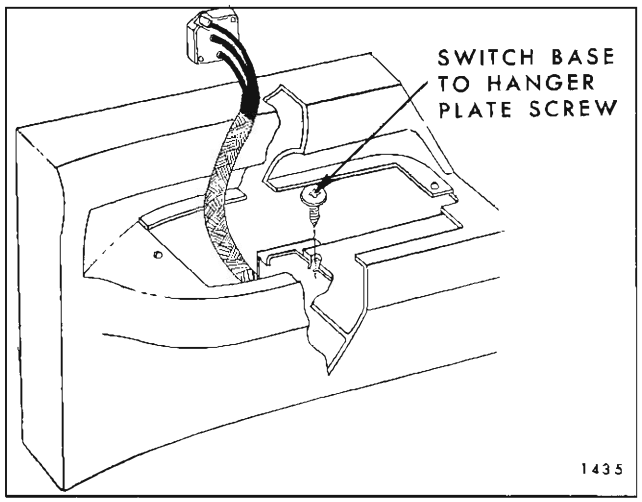


Fig. 1D19—Door Trim Pad Removal - 68200 Series

When access to the door inner panel is required to perform service operations, the deflector may be partially detached or completely removed from the inner panel. If the existing water deflector is damaged so that it will not properly seal the door inner panel, replacement of deflector is absolutely necessary.

The following procedure covers complete removal and installation of the water deflector. If only partial detachment is required, perform only those steps which are necessary to expose the required area of the door inner panel.

Removal

1. Remove door trim assembly.

2. Remove strips of waterproof body tape securing lower corners of water deflector.

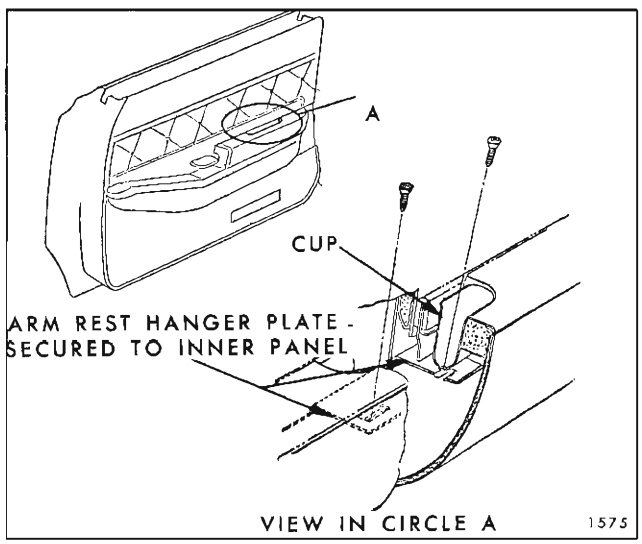


Fig. 1D20—Door Arm Rest Cup Attachment

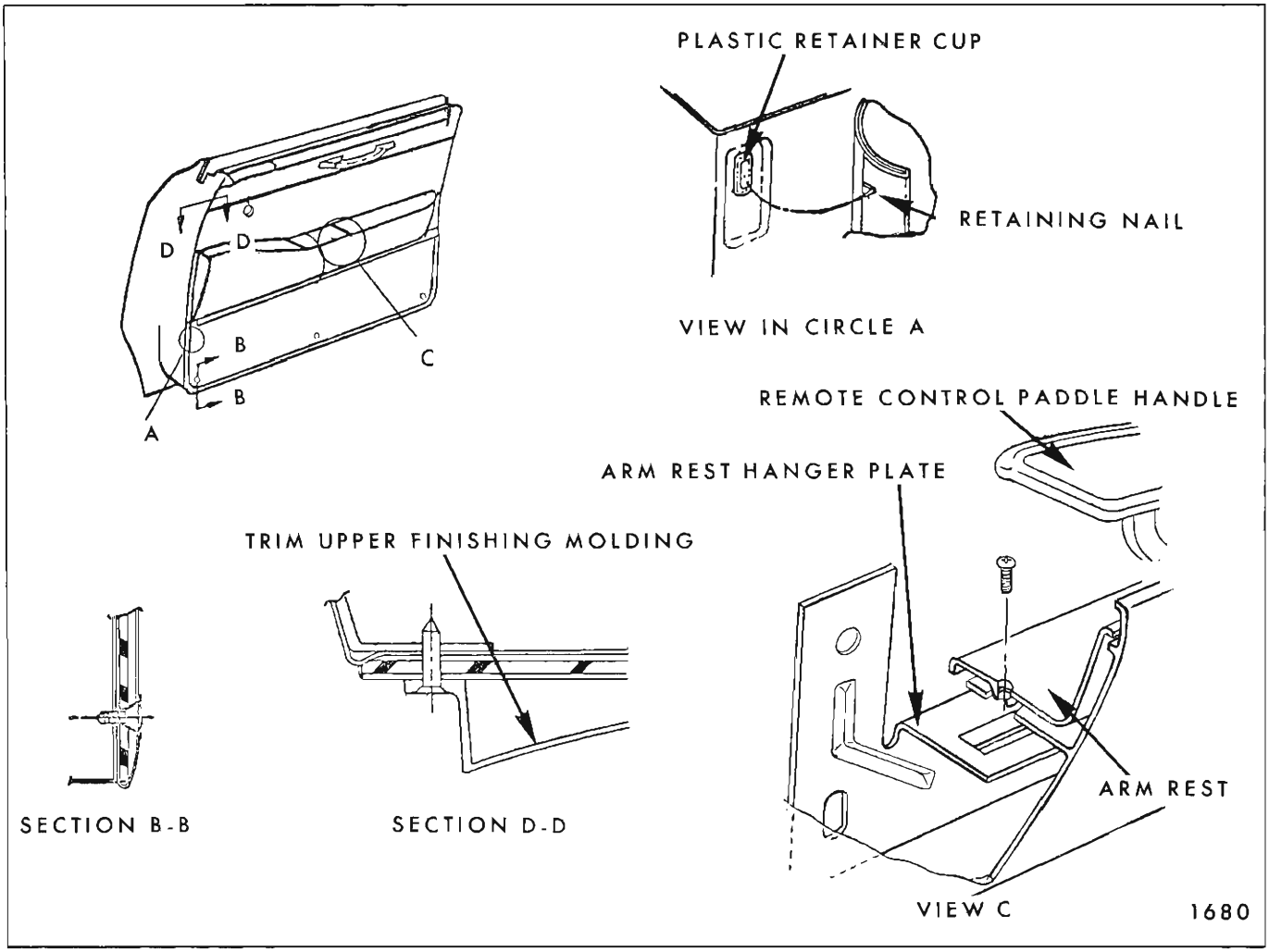


Fig. 1D21—Door Trim Pad Removal

3. With a putty knife, or other suitable flat-bladed tool, carefully break cement bond securing upper corners of water deflector to door inner panel. Make sure string, located within sealer, is against water deflector and carefully slide putty knife between sealer and door inner panel along both sides of door to disengage sides of water deflector from door inner panel.

4. Disengage lower edge of water deflector from retaining slot in door inner panel and remove water deflector.

Installation

1. Inspect water deflector and repair any tears or holes with waterproof body tape applied to both sides of deflector. If bond between polyethylene and deflector paper has been torn, cut or damaged, apply waterproof body tape to both sides of deflector over damaged area to prevent water from wicking on uncoated side of deflector paper.

2. If a new deflector is to be installed, use old water deflector as a template to trim new deflector to proper size and to cut holes for door inside hardware. If old sealer does not effect an adequate seal, remove all old cement from door inner panel and replace with a continuous bead of body caulking compound (approximately 3/16" diameter).

3. If the door arm rest attaching screw holes are

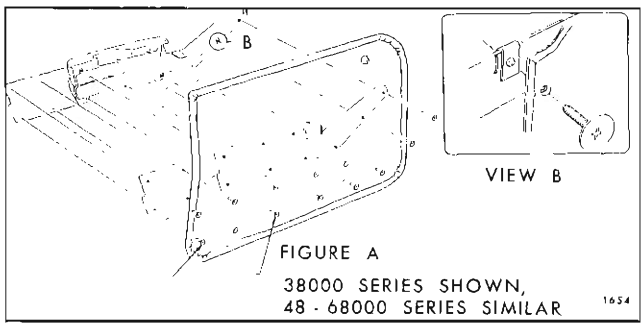


Fig. 1D22—Arm Rest to Door Trim Pad Installation

located in the door inner panel, seal these holes with body caulking compound.

4. Position water deflector to door inner panel with polyethylene coated side (black) of deflector against inner panel. Insert lower edge of deflector in retaining slot and firmly roll or press sealed areas to obtain a good bond between deflector and door inner panel.

5. Seal lower corners of water deflector with 2" or 2-1/2" waterproof body sealing tape.

6. Clean off any excessive cement or caulking compound and install previously removed door trim and inside hardware.

SPRING CLIPS

A spring clip is used to secure remote control connecting rods and inside locking rod connecting links to door levers. A slot in the clip provides for disengagement of the clips, thereby, facilitating detachment of linkage.

To disengage a spring clip, use a screwdriver, or other suitable tool, to slide clip out of engagement (See Fig. 1D23).

FRONT AND REAR DOOR OUTSIDE HANDLE ASSEMBLY ALL STYLES

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 screws.

2. Remove screws and door lock handle and gaskets from outside of body.

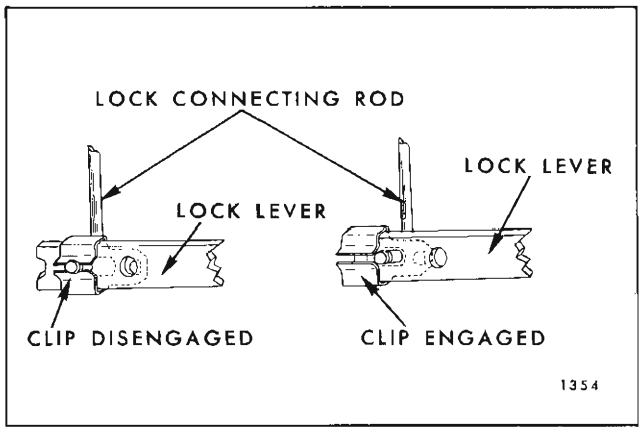


Fig. 1D23—Door Lock Spring Clip

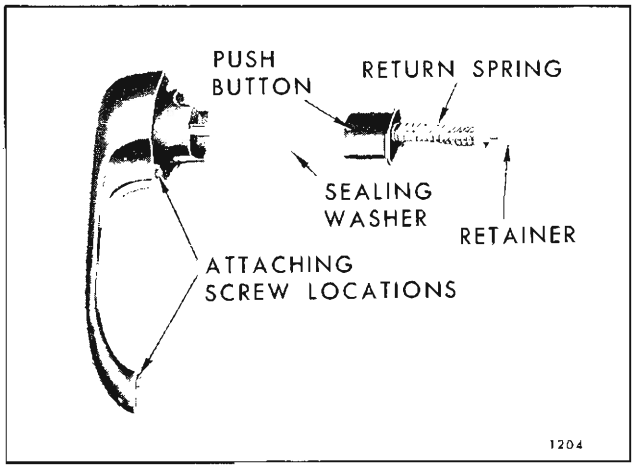


Fig. 1D24—Rear Door Outside Handle Assembly

NOTE: On 68069 Styles it is necessary to remove rear door ventilator regulator as described in the rear door section in order to remove rear door outside handle.

3. To install, reverse removal procedure.

DOOR OUTSIDE HANDLE DISASSEMBLY ALL STYLES

1. Remove door outside handle as previously described.

2. Depress retainer slightly and turn 1/4 turn either direction. Remove retainer, spring, push button and shaft, and sealing washer from handle (Fig. 1D25 for front door handles, Fig. 1D24 for rear door handles).

NOTE: Parts are serviced as shown in the illustrations; separate components for the front door handle, and a push button, spring, and retainer assembly for the rear door handle.

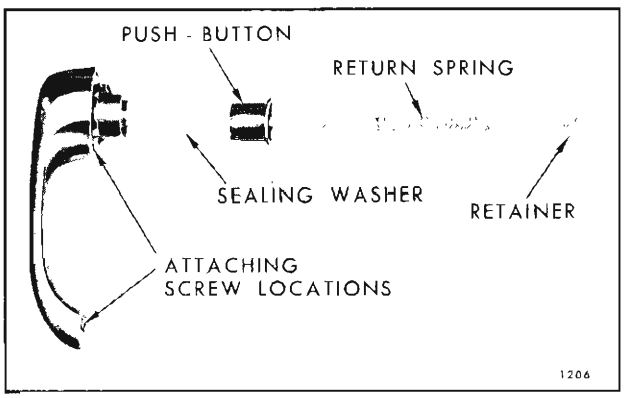


Fig. 1D25—Front Door Outside Handle Assembly

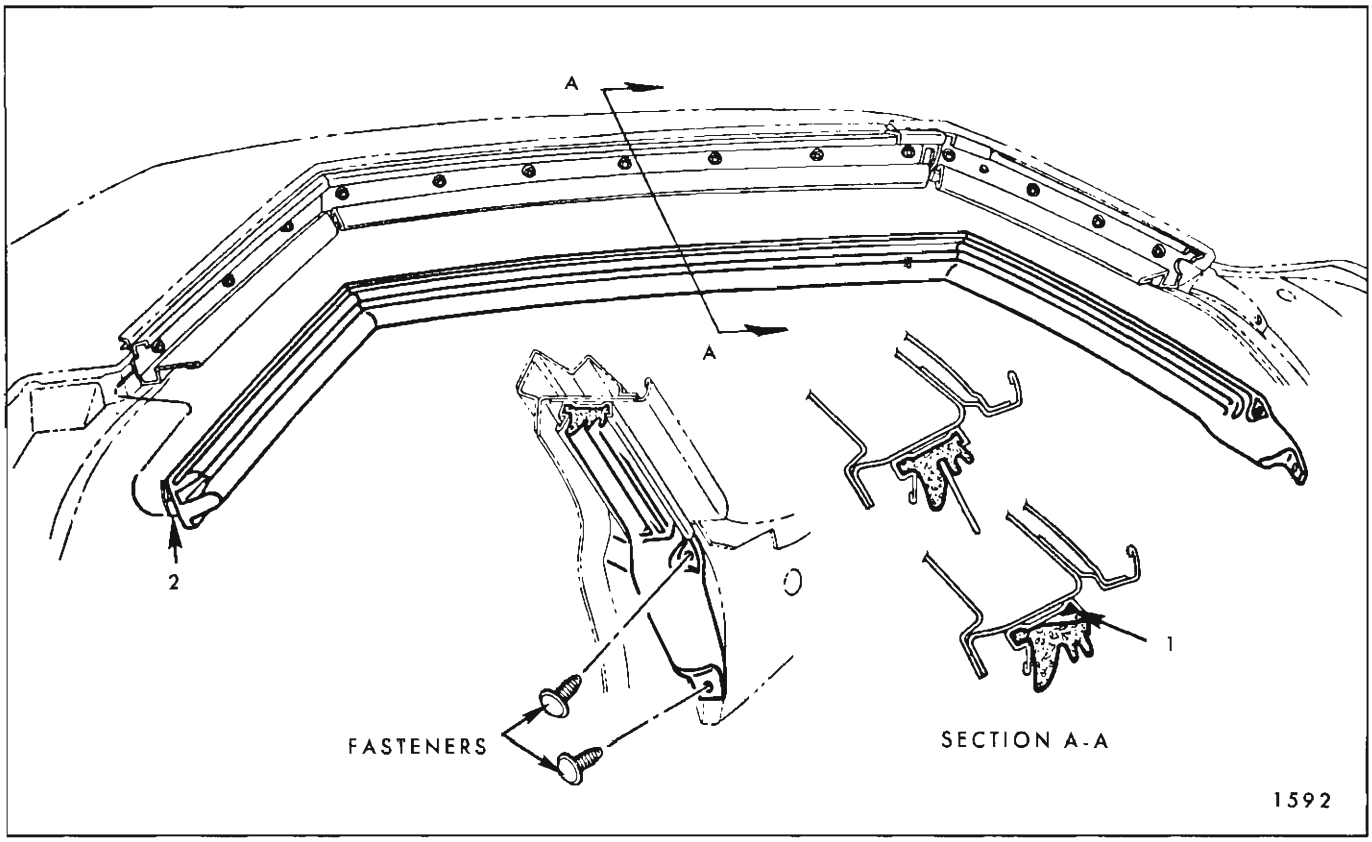


Fig. 1D26—Side Roof Rail Weatherstrip - "39" Styles

SIDE ROOF RAIL WEATHERSTRIP AND RETAINER ALL "39" STYLES AND 38000-48000-68000 SERIES "69" STYLES

Removal

1. Remove plastic snap-fasteners at front and/or rear of weatherstrip (Fig. 1D26 for "39" styles, Fig. 1D27 for "69" styles).

2. While pulling weatherstrip into door opening, carefully break adhesive bond between weatherstrip and side roof rail weatherstrip retainer and remove weatherstrip.

3. With weatherstrip removed, screws securing retainer to side roof rail are exposed. Remove screws to remove side roof rail weatherstrip retainer.

Installation

1. Clean off all old caulking material from surface of retainer that mates with side roof rail.

2. Clean retainer of old weatherstrip adhesive.

3. Apply a continuous bead of body caulking compound to surface of retainer that mates with side roof rail ("1", Fig. 1D28).

NOTE: Bead should be outboard of attaching screw slots.

4. Position retainer to body and install attaching screws (Fig. 1D28).

5. Apply a bead of black weatherstrip adhesive to outboard flange of retainer ("1", Figs. 1D26 and 1D27).

6. Engage hook at rear of weatherstrip under weatherstrip retainer at rear lower end ("2", Figs. 1D26 and 1D27).

7. Engage inboard lip of weatherstrip with inboard flange of retainer.

8. Using a flat-bladed tool as shown in Section A-A of Figure 1D26 and 1D27, engage outboard lip of weatherstrip with retainer.

9. Prior to installing plastic fasteners at lower forward end of weatherstrip, apply black weatherstrip adhesive under weatherstrip to effect a watertight seal.

10. Install plastic snap-fasteners and clean up any excess sealer or adhesive.

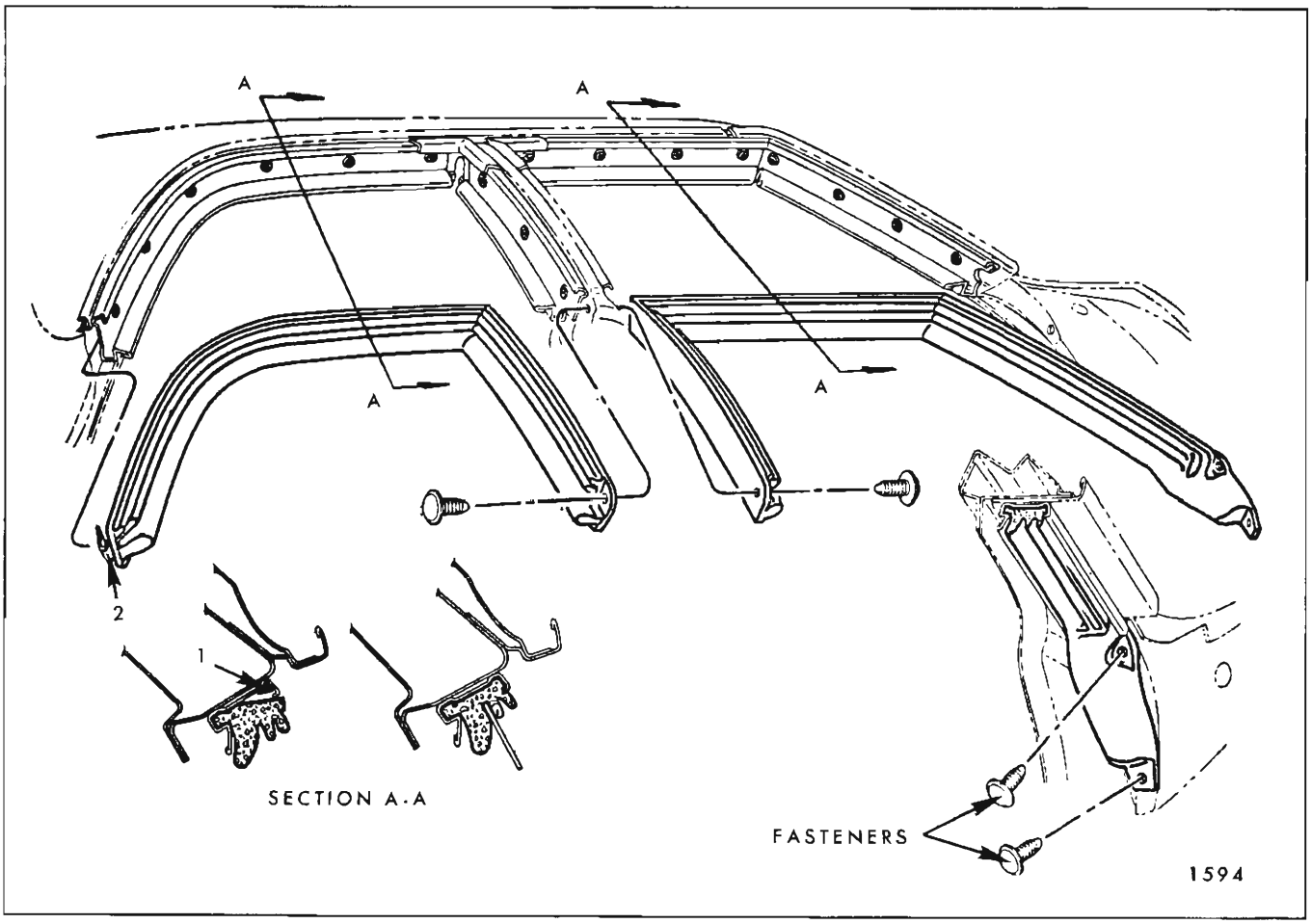


Fig. 1D27—Side Roof Rail Weatherstrip - "69" Styles

FRONT AND REAR DOOR LOCK STRIKERS ALL STYLES

The front and rear door lock striker consists of a single metal bolt and washer assembly that is threaded into a tapped, floating cage plate located in the body lock pillar. With this design, the door is secured in the closed position when the door lock fork bolt snaps-over and engages the striker bolt.

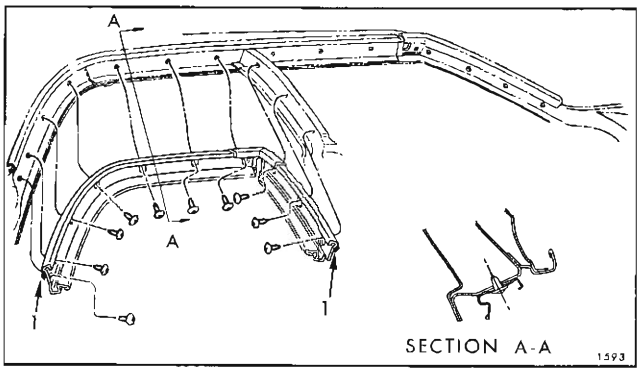


Fig. 1D28—Side Roof Rail Weatherstrip Retainer - "69" Style shown - "39" Similar

Removal and Installation

1. Mark position of striker on body lock pillar using a pencil.

2. Insert a 5/16" wrench into hex-head fitting in head of striker bolt and remove striker (Fig. 1D29).

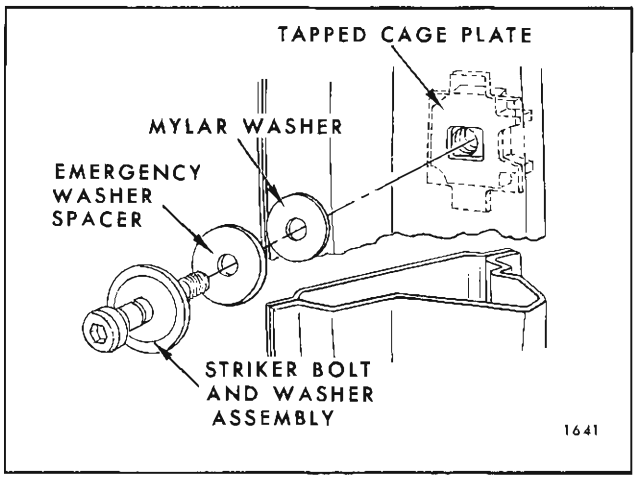


Fig. 1D29—Door Lock Striker Installation

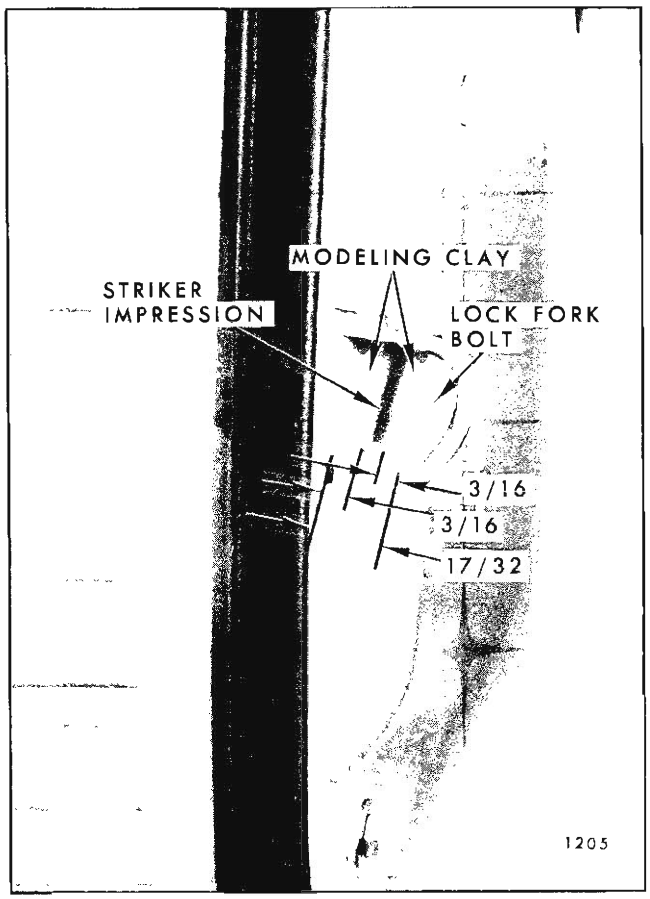


Fig. 1D30—Door Lock Striker Engagement

3. To install, reverse removal procedure. Make certain striker is positioned within pencil mark. Also, that paint protecting plastic washer is installed (Fig. 1D29).

IMPORTANT: Whenever a door has been removed and reinstalled or realigned, the door should not be closed completely until a visual check is made to determine if lock fork-bolt will correctly engage with striker.

Adjustments

1. To adjust striker up or down, or in or out, loosen striker bolt and shift striker as required; then tighten striker.

2. To determine if striker fore or aft adjustment is required, proceed as follows:

a. Make certain door is properly aligned.

b. Apply modeling clay or body caulking compound to lock bolt opening as shown in Figure 1D30.

c. Close door only as far as necessary for striker bolt to form an impression in clay or caulking compound as shown in Figure 1D30.

CAUTION: Do not close door completely. Complete door closing will make clay removal very difficult.

d. Measure the impression in the clay as follows: Striker head should be centered fore and aft as shown. Although 3/16" is shown as desired measurement on both sides of striker head, a tolerance of plus or minus 1/32" is allowed. The following spacers are available as service parts and can be used individually or in combination to achieve the desired alignment.

5/64" spacer - Part #4469196
5/32" spacer - Part #4469197
1/4" spacer - Part #4469194
5/16" spacer - Part #4469195

FRONT DOORS
ALL STYLES

The front door section consists of operations applicable only to the front doors. Procedures for the removal of trim, weatherstrips, lock strikers and other components that are similar for both front and rear doors can be found in the preceding "Front and Rear Door" section.

Figures 1D31 and 1D32 are typical of door hardware mechanisms on the "closed" and "hardtop" styles respectively, and illustrate the relationship of the various components.

FRONT DOOR ASSEMBLY AND HINGES

The front door hinges are the swing-out type with a two position hold-open incorporated in the lower hinge. The hinges are attached to the door and body with bolts that are threaded into tapped anchor plates caged within the door and body hinge pillars.

The door can be removed from the body by either removing it from the hinges or by removing the

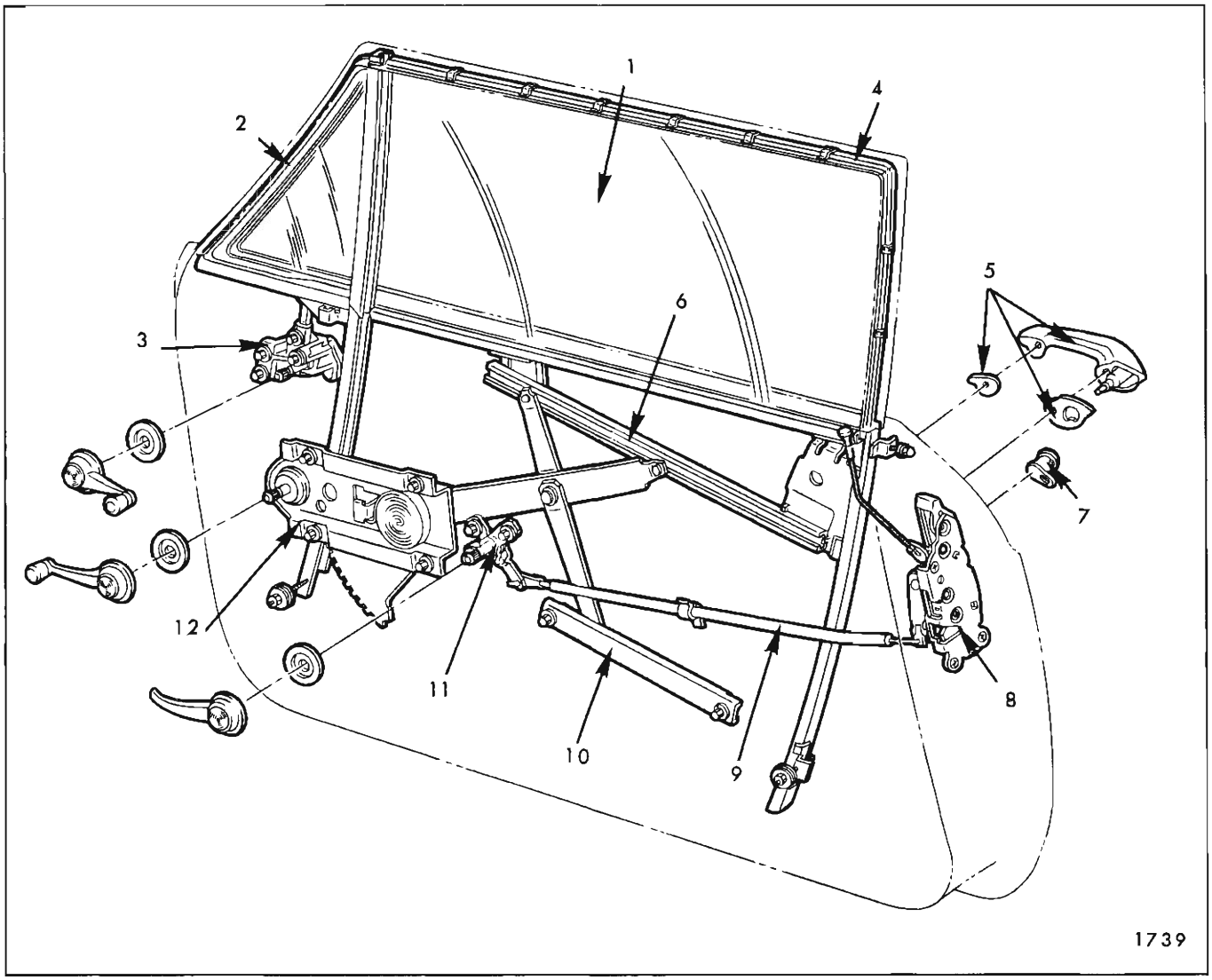


Fig. 1D31—Front Door Hardware - "11" Styles

1. Window Assembly
2. Ventilator Assembly
3. Ventilator Regulator
4. Window Glass Run Channel
5. Door Outside Handle and Sealing Gaskets
6. Lower Sash Channel Cam
7. Lock Cylinder
8. Door Lock
9. Remote Control Connecting Rod
10. Inner Panel Cam
11. Remote Control
12. Window Regulator

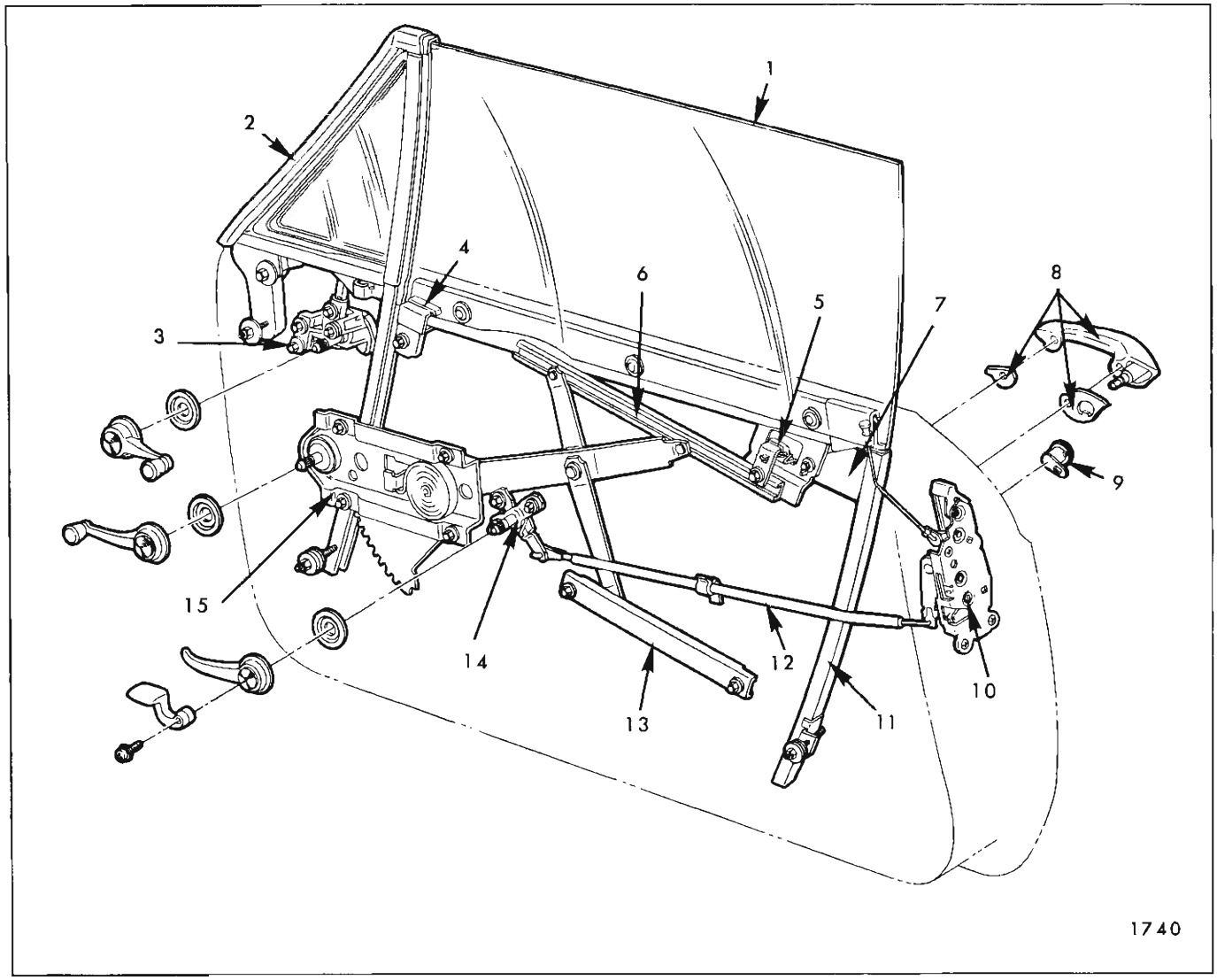


Fig. 1D32—Front Door Hardware - 37-57-67 Styles

1. Window Assembly
2. Ventilator Assembly
3. Ventilator Regulator
4. Window Front Upper Stop (Attached to Inner Panel)
5. Window Rear Upper Stop (Attached to Inner Panel)
6. Lower Sash Channel Cam (Welded to Sash)
7. Window Guide Plate and Upper Stop
8. Door Outside Handle and Sealing Gaskets
9. Lock Cylinder
10. Door Lock
11. Window Glass Run Channel
12. Remote Control Connecting Rod
13. Inner Panel Cam
14. Remote Control
15. Window Regulator

door and hinges as an assembly from the front body hinge pillar.

To service only the hinges, remove the door and hinges as an assembly; then, remove the hinges from the door in a bench operation.

Removal

1. Place protective covering over front fender at door opening to protect paint finish.

2. If door and hinges are to be removed as an assembly, additional access can be gained to lower hinge bolts by loosening front fender lower rear attachments.

3. Mark hinge locations on door or body hinge pillar depending on removal method being used.

4. On styles equipped with electrically operated windows or vacuum door locks, proceed as follows:

a. Remove door trim assembly and detach inner panel water deflector along front edge.

b. Disconnect wire harness at window regulator motor. On power operated ventilators, disconnect door wire harness at jumper wire connector, not at ventilator regulator motor.

c. If present, disconnect vacuum hose from door lock vacuum actuator.

d. Remove wire harness conduit from door, then remove wire harness and/or vacuum hose through conduit opening in door hinge pillar.

5. With door properly supported, remove hinge to body or hinge to door attaching bolts depending on removal method being used and remove door from body (Fig. 1D33).

NOTE: On 68000 Series, it is necessary to remove the cowl air intake grille to gain access to the upper hinge to body attaching bolts.

Installation

1. As an anti-squeak precaution, and to prevent waterleaks at attaching bolt locations, apply a coat of heavy bodied body caulking compound to surfaces of hinges that mate with door and body.

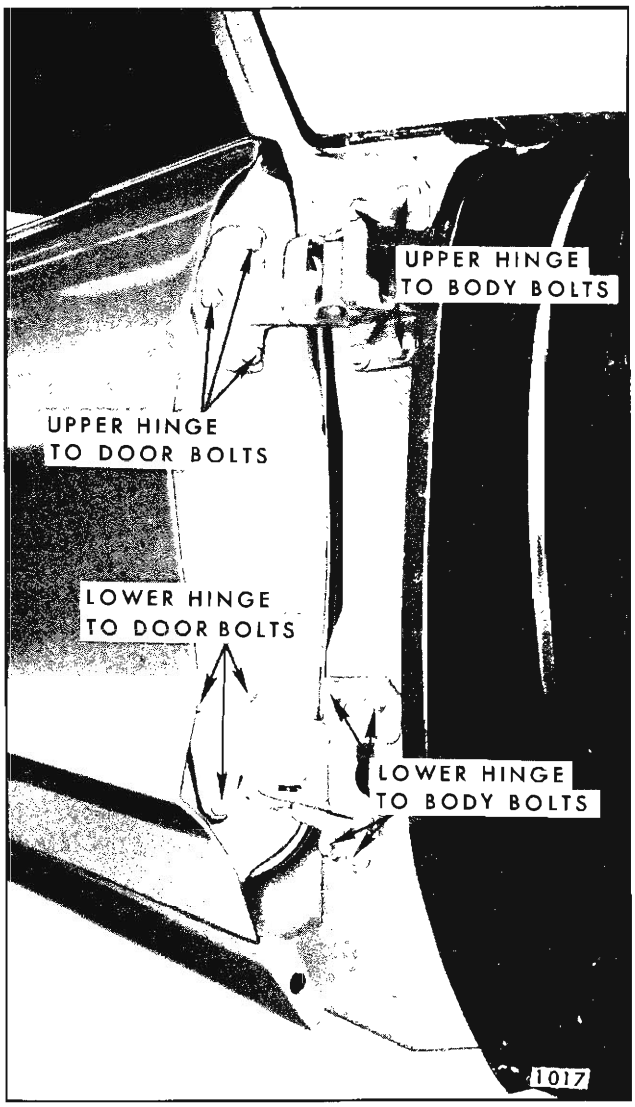


Fig. 1D33—Front Door Hinge Attachment

2. With the aid of a helper, position door to body opening and loosely install hinge bolts, then align hinges within scribe marks previously made and tighten all bolts.

3. Reinstall harnesses and connectors and check components for proper operation. Check door for proper alignment and, if necessary, realign as described under "Front Door Adjustments".

4. Install door water deflector and all other previously removed parts.

FRONT DOOR ADJUSTMENTS
ALL STYLES

Prior to performing any door adjustments, remove door lock striker to permit door to hang free on its hinges.

After performing door adjustments on other than closed styles, check alignment of front door ventilator and window to side roof rail weatherstrip and adjust as required.

1. To adjust door in-or-out and/or up-or-down, loosen hinge to door attaching bolts (Fig. 1D33). Adjust door as required and tighten bolts.

NOTE: When performing in or out adjustments, adjust one hinge at a time so as not to distrub up and down adjustment.

2. To adjust door fore-or-aft, loosen hinge to body attaching bolts (Fig. 1D33). Adjust door as required and tighten bolts.

NOTE: One or more of the hinge to body attaching bolts may not be accessible due to inadequate wrench clearance. In these situations, remove the obstructing bolt and perform adjustments with the remaining three bolts, then replace the previously removed bolt.

FRONT DOOR LOCK CYLINDER ASSEMBLY
ALL STYLES

Removal and Installation

1. Raise door window. Remove door trim assembly and detach inner panel water deflector sufficiently to expose large inner panel access hole.

2. Working through large access hole, use a screwdriver or comparable tool to force lock cylinder slotted retainer forward and out of engagement with lock cylinder.

3. From outside of the body, remove lock cylinder and sealing gasket from door outer panel.

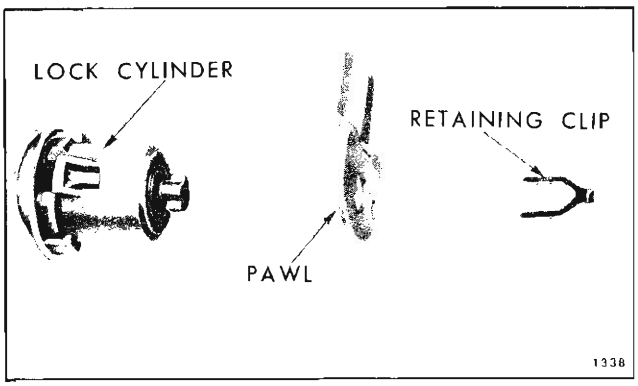


Fig. 1D34—Lock Cylinder Assembly

4. To install, reverse removal procedure. Make certain that slot in lock cylinder pawl engages door lock extension.

Disassembly and Assembly

1. Remove lock cylinder from door as previously described.

2. Remove pawl retaining clip and pawl (Fig. 1D34), then, pry off lock cylinder housing scalp and remove cylinder.

3. To assemble, reverse removal procedure. Replace distorted housing scalp with a new scalp which is available as a service part.

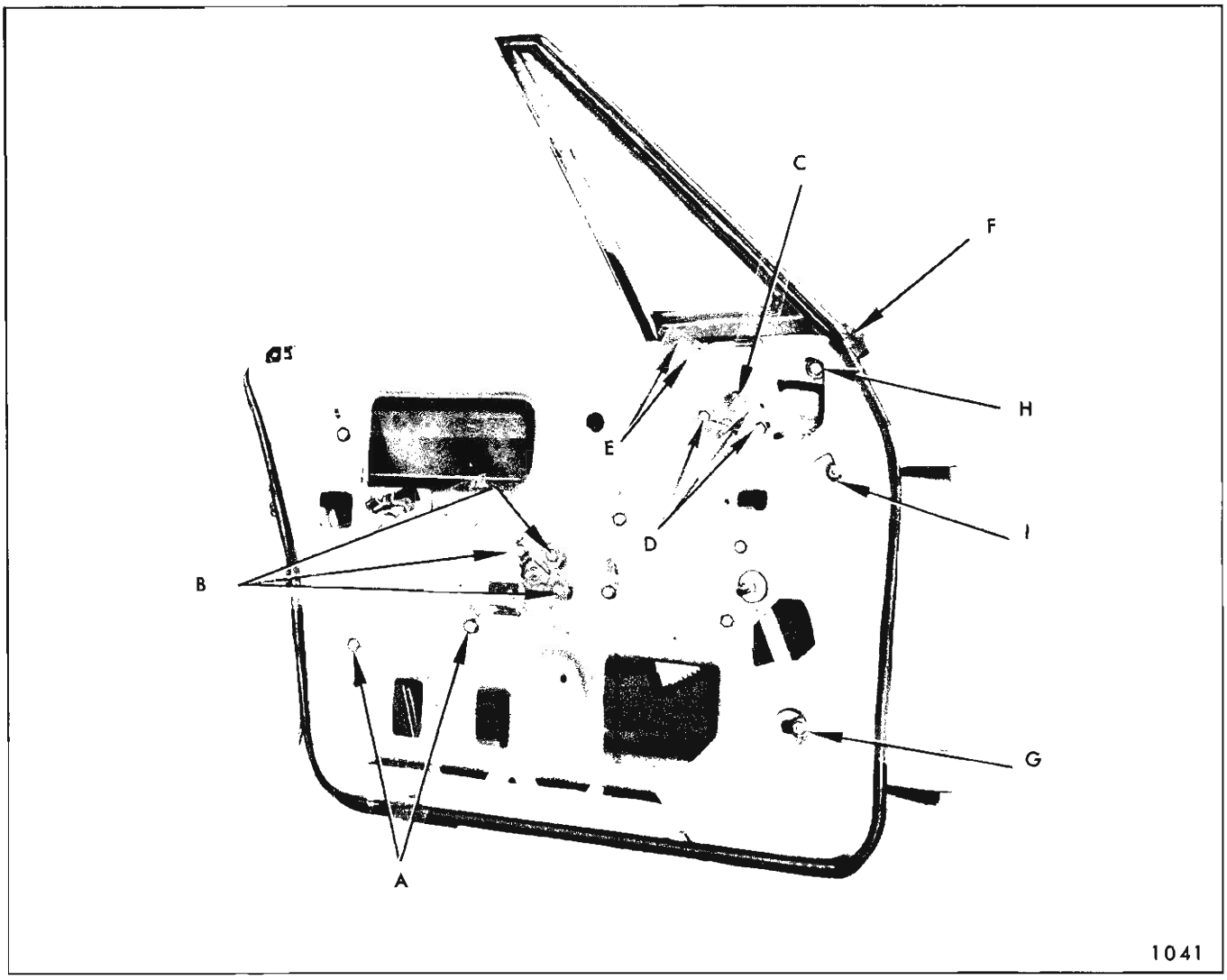


Fig. 1D35—Front Door Hardware Attachment

A. Inner Panel Cam Bolts
B. Remote Control Bolts
C. Ventilator T-Shaft Bolt
D. Ventilator Regulator Bolts
E. Vent Lower Frame to Door Inner and Outer Panel Screws
F. Cement Bond between Vent and Door Weatherstrip
G. Ventilator Division Channel Lower Adjusting Stud Nut
H. Ventilator Lower Frame Bolt
I. Ventilator Lower Frame Adjusting Stud Nut

FRONT DOOR INNER PANEL CAM ALL STYLES

Removal and Installation

1. Raise door window. Remove door trim assembly and detach inner panel water deflector.

2. Remove bolts securing door inner panel cam ("A", Fig. 1D35). Disengage cam from regulator balance arms and remove cam from door.

3. To install, reverse removal procedure. Prior to installation, lubricate channel of cam with 630AAW Lubriplate or equivalent.

NOTE: The inner panel cam is adjustable up or down at the forward attaching bolt. This adjustment can be used to correct a rotated (cocked) door window.

FRONT DOOR LOCK REMOTE CONTROL ALL STYLES

Removal and Installation

1. Remove door trim assembly and detach inner panel water deflector sufficiently to expose remote control.

2. Remove remote control attaching screws ("B", Fig. 1D35). Disengage remote control from remote to lock connecting rod and remove remote control.

3. To install, reverse removal procedure. Make certain anti-rattle clip is installed on connecting rod prior to engaging it with remote control.

FRONT DOOR VENTILATOR REGULATOR-MANUAL AND ELECTRIC ALL STYLES

Removal and Installation

1. Raise door window. Remove door trim assembly and detach inner panel water deflector sufficiently to gain access to regulator attachments.

2. On styles equipped with electric ventilator regulators, disconnect door wire harness at ventilator jumper harness connector, not at ventilator motor.

3. Remove ventilator T-shaft attaching bolt "C" and ventilator regulator to inner panel attaching bolts "D" (Fig. 1D35).

4. Pull regulator down to disengage from ventilator T-shaft and remove regulator through access hole.

5. To install, reverse removal procedure. Check operation of ventilator prior to installing water deflector.

FRONT DOOR VENTILATOR— MANUAL AND ELECTRIC ALL "37"-"39"-"57"-"67" STYLES AND 38-48-68000 SERIES "69" STYLES

Removal and Installation

1. Raise door window. Remove door trim assembly and inner panel water deflector.

2. Remove screws (2) securing ventilator lower frame to door outer panel return flange and to door inner panel ("E", Fig. 1D35).

3. At front of ventilator assembly, break cement bond between door weatherstrip and ventilator assembly ("F", Fig. 1D35).

4. Remove ventilator division channel lower adjusting stud nut ("G", Fig. 1D35).

5. Remove ventilator regulator as previously described.

6. Remove ventilator lower frame attaching bolt "H" and ventilator lower frame adjusting stud nut "I" (Fig. 1D35).

7. Lift ventilator assembly upward approximately 6" and remove ventilator lower frame adjusting stud from ventilator at upper front access hole.

8. Lift ventilator upward and remove from door.

9. To install, reverse removal procedure. Adjust ventilator for proper operation and alignment with side roof rail weatherstrip as described below.

FRONT DOOR VENTILATOR ADJUSTMENTS ALL "37"-"39"-"57"-"67" STYLES AND 38-48-68000 SERIES "69" STYLES

The front door ventilator assembly can be adjusted up-or-down, in-or-out at the top, and slightly fore-or-aft. To perform any ventilator adjustments it is first necessary to remove the door trim assembly and inner panel water deflector to expose ventilator attachments. Then, remove or loosen the following attachments.

a. Remove ventilator lower frame to inner panel and ventilator lower frame to outer panel screws (2) ("E", Fig. 1D35).

b. Loosen ventilator lower frame attaching bolt "H".

c. Loosen ventilator lower frame adjusting stud nut "I" and ventilator division channel lower adjusting stud nut "G".

d. Loosen ventilator regulator attaching bolts "D".

1. To adjust the top of the ventilator assembly in-or-out, adjust the ventilator lower frame and ventilator division channel adjusting studs as required, then tighten the stud nuts.

2. To position ventilator fore-or-aft or up-or-down to obtain proper alignment with side roof rail weatherstrip, shift loosened ventilator to desired position and tighten attaching nuts and bolts.

3. To eliminate flutter (play) of ventilator window, tighten ventilator T-shaft attaching bolt.

4. To obtain a better seal between division pillar weatherstrip and rear edge of ventilator glass, shim front edge of ventilator regulator outboard. Install shims between regulator and door inner panel.

5. To adjust ventilator window up-or-down within ventilator frame, loosen ventilator T-shaft attaching bolt. Adjust ventilator window up-or-down as desired, then, tighten T-shaft bolt.

FRONT DOOR VENTILATOR ASSEMBLY WEATHERSTRIP

Removal and Installation

1. Remove front door ventilator assembly.

2. Remove ventilator glass and sash channel from ventilator frame by opening glass approximately 60° and pushing glass downward slightly to disengage glass unit from ventilator frame at upper pivot point; then, upward to disengage lower T-shaft from frame. (See Fig. 1D36).

3. Remove ventilator division channel upper rubber bumper attaching screw.

4. Remove two attaching screws securing ventilator casting to frame and separate ventilator casting from frame so that the ventilator weatherstrip can be removed. (See Fig. 1D36).

5. To install, reverse removal procedure. Prior to installation, however, a ribbon of medium bodied sealer should be applied between ventilator weatherstrip and casting.

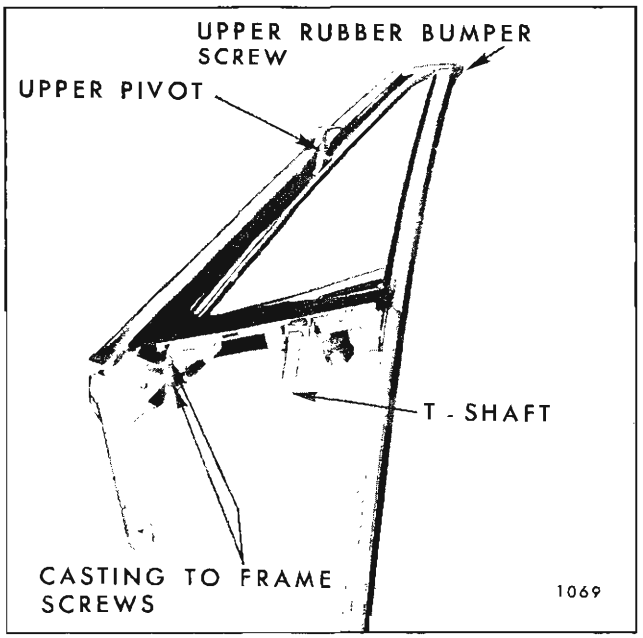


Fig. 1D36—Front Door Ventilator

FRONT DOOR VENTILATOR ASSEMBLY ALL "11"-"35" AND "45" STYLES, AND ALL "69" STYLES EXCEPT 38-48-68000 SERIES

Removal and Installation

1. Remove door trim assembly and inner panel water deflector.

2. Remove ventilator regulator as previously described.

3. Lower door window. Remove screws (2) securing ventilator lower frame to door inner panel and to door outer panel ("1", Fig. 1D37).

4. Remove division channel lower adjusting stud nut (Fig. 1D37).

5. Remove ventilator upper attaching screws along door upper frame (Fig. 1D37).

6. Lower ventilator assembly sufficiently to tilt assembly inward, then lift ventilator assembly upward and remove from door.

7. To install, reverse removal procedure. Prior to installation, inspect saturated polyurathane foam sealing material along length of door upper frame contacted by ventilator (Fig. 1D45). If material is damaged, replace with new sealing strip or its equivalent. This is furnished in 5 foot sections under part #4480378 (Saturated Polyurathane Foam).

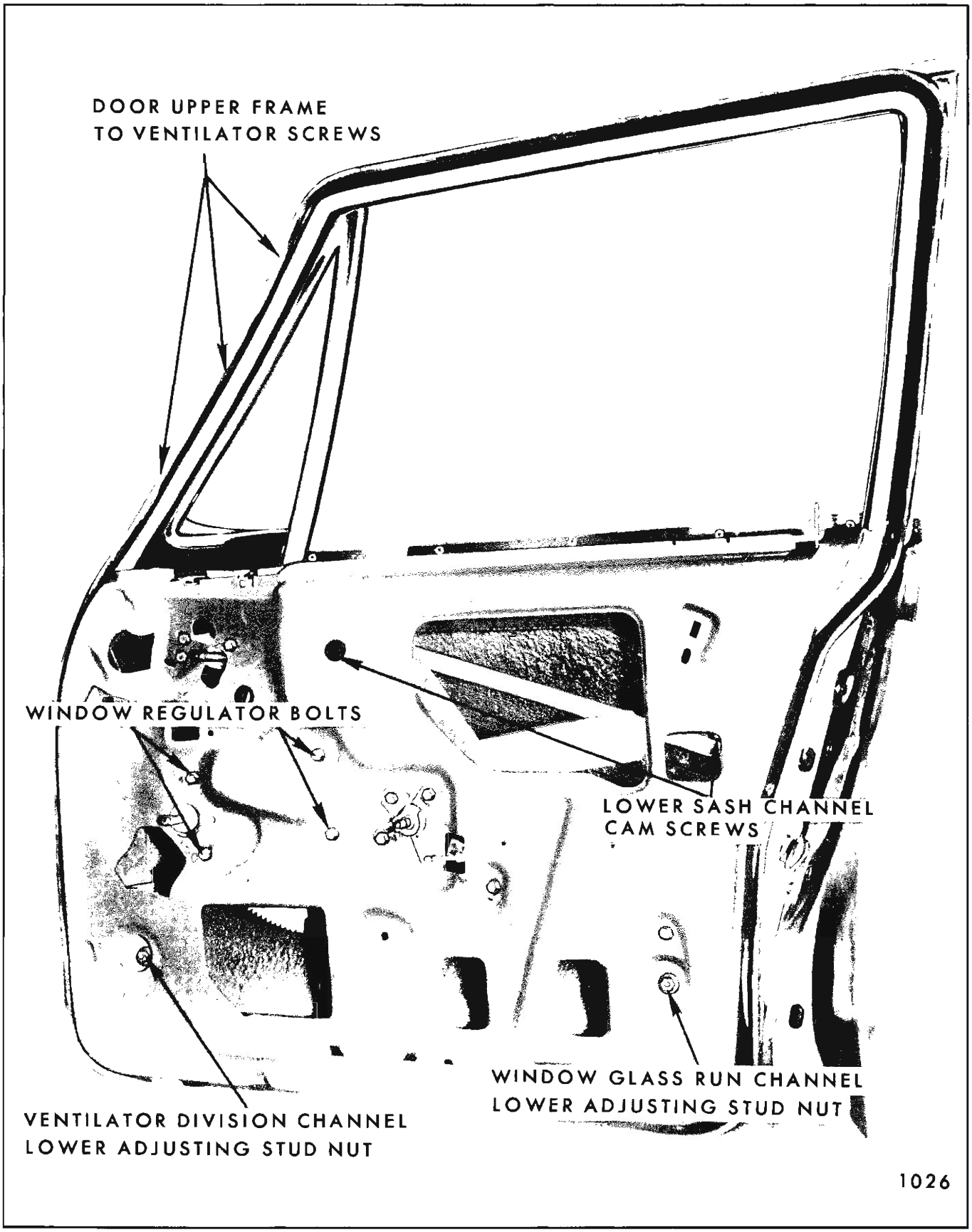


Fig. 1D37—Front Door Ventilator and Regulator Attachment

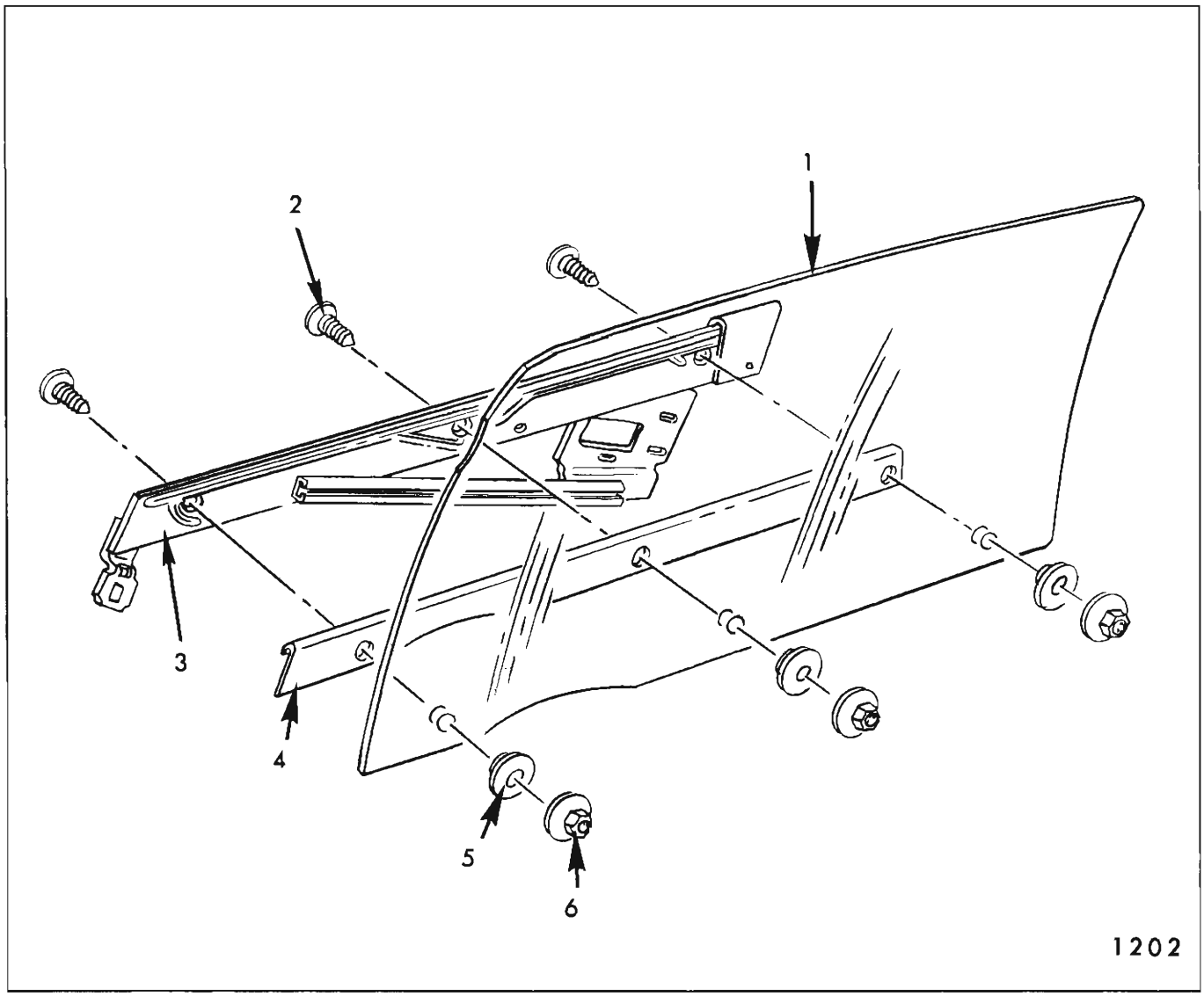


Fig. 1D38—Front Door Window Assembly

1. Door Window Glass
2. Glass to Lower Sash Channel Attaching Bolts
3. Lower Sash Channel Assembly
4. Glass to Sash Channel Filler
5. Glass to Sash Channel Spacers
6. Glass to Sash Channel Attaching Bolt Nuts

FRONT DOOR WINDOW ASSEMBLY ALL "37"-"39"-"57"-"67" STYLES AND 38-48-68000 SERIES "69" STYLES

The front door window assembly consists of a solid tempered safety plate glass window and a bolted-on lower sash channel assembly which includes a welded-on sash channel cam. With this design, the door glass and sash channel are removed from the door as a unit and replacement glasses installed in bench operations.

Figure 1D38 is an exploded view of the front door window assembly and identifies the various components and their assembly sequence.

CAUTION: When installing glass to sash channel bolts, do not exceed torque of 50 inch pounds (4 foot pounds). Also, when replacing door glass, replace glass spacers.

Removal and Installation

1. Remove door trim assembly and inner panel water deflector.

2. Operate glass to "full-down" position and remove front up-travel stop from lower sash channel (Fig. 1D39).

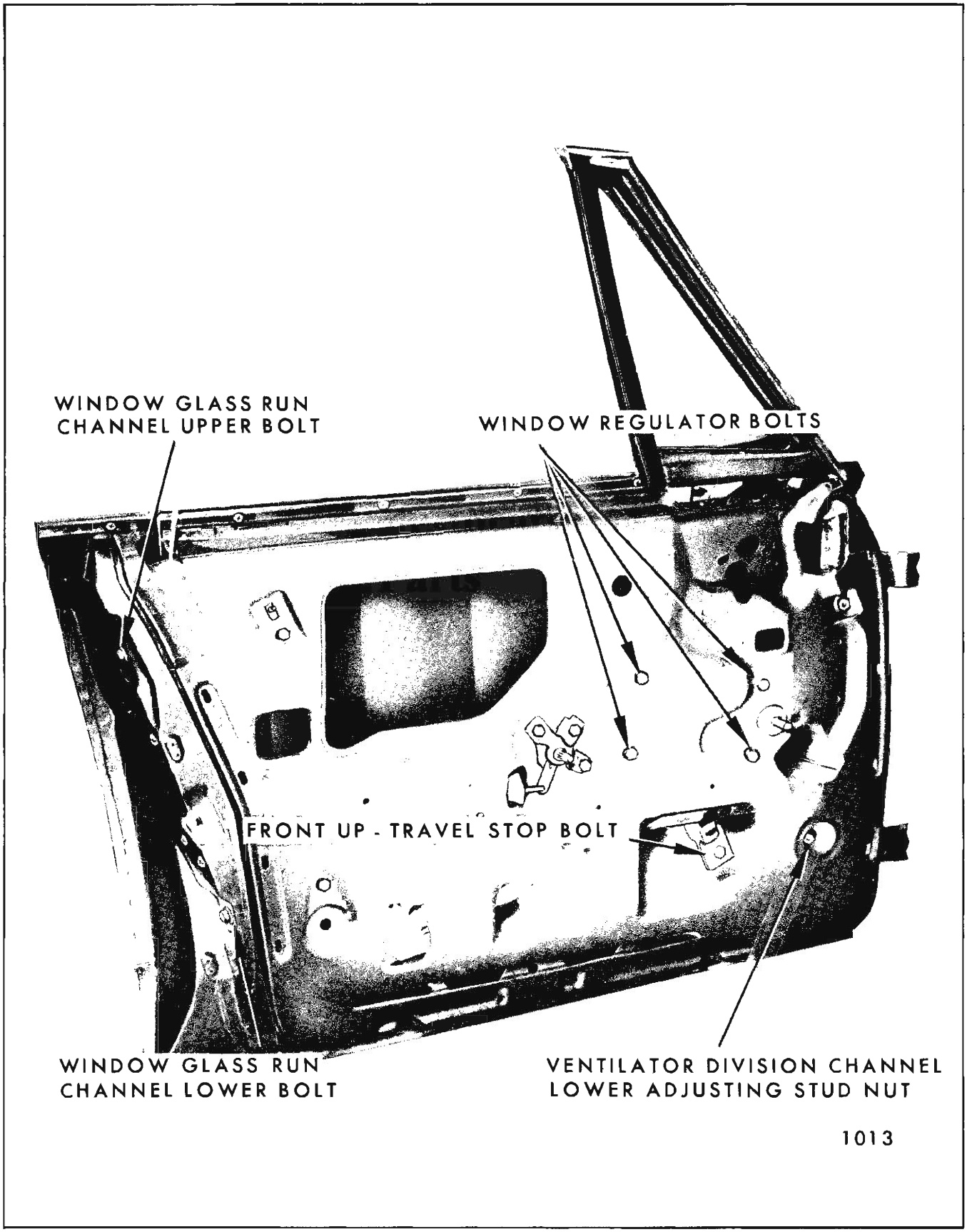


Fig. 1D39—Front Door Window Regulator and Glass Run Channel

3. Operate window to half-up position and remove rear guide plate attaching screws (Fig. 1D40).

4. Remove inner panel cam attaching screws (Fig. 1D40). Disengage cam from regulator balance arm roller and remove cam.

5. On coupe styles, operate window to full up position and slide window rearward off regulator rollers.

6. On sedan styles, operate window to approximately 3" down from full-up position. Tilt front edge of glass downward to disengage balance arm roller from front of sash channel cam. Slide window rearward to disengage cam from regulator lift arm roller and remove window from door.

7. To install, reverse removal procedure. Adjust up-travel stops and inner panel cam for proper window operation and alignment as follows:

FRONT DOOR WINDOW ADJUSTMENTS ALL "37"-"39"-"57"-"67" STYLES AND 38-48-68000 SERIES "69" STYLES

To perform any door window adjustments it is necessary to remove the door trim assembly and inner panel water deflector to expose the adjustment provisions.

1. To correct a rotated window condition (glass cocked in opening) loosen inner panel cam attaching bolts (Fig. 1D40). Adjust forward end of cam up-or-down as required and tighten bolts.

2. To adjust the top of the window in-or-out in relation to side roof rail weatherstrip on coupe styles, loosen ventilator division channel lower adjusting stud nut and window run channel lower adjusting stud nut (Fig. 1D40). Adjust studs in-or-out as required and tighten stud nuts.

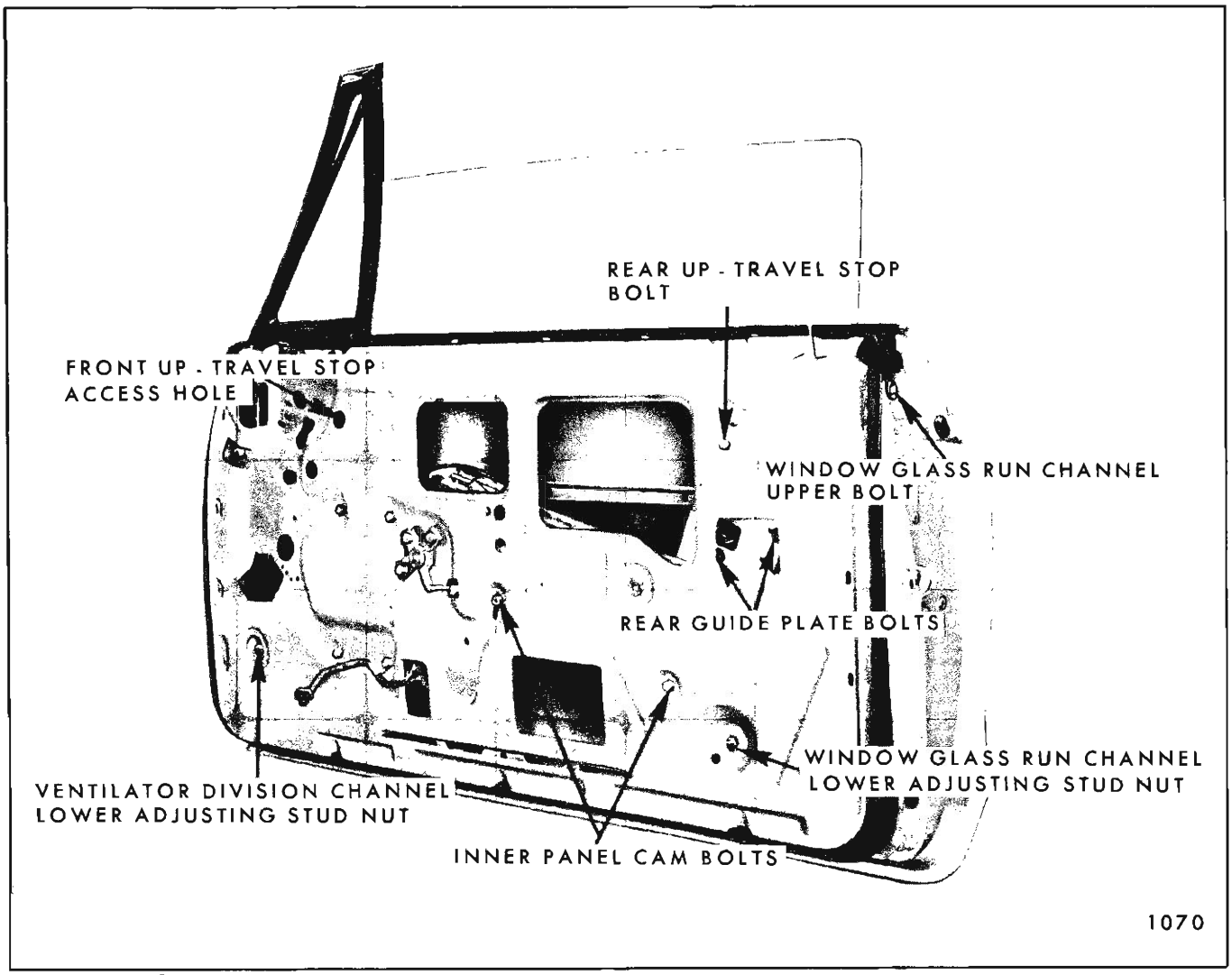


Fig. 1D40—Front Door Hardware Attachment "67" Style

3. To adjust top of window in-or-out in relation to side roof rail weatherstrip on sedan styles, loosen ventilator division channel lower adjusting stud nut and window run channel lower attaching bolt (Fig. 1D39). Adjust division channel stud as required and tighten stud nut. Position lower end of run channel in-or-out as required and tighten attaching bolt.

4. To adjust upper rear edge of glass in-or-out in relation to side roof rail and door beltline, loosen run channel upper attaching bolt and lower attaching bolt or adjusting stud nut depending on body style (Fig. 1D39 or 1D40). Adjust run channel in-or-out as required and tighten run channel attachments.

5. To adjust upper front of window in-or-out in relation to side roof rail weatherstrip, adjust ventilator assembly as described under "Front Door Ventilator Adjustments".

6. To adjust up-travel of window for proper contact with side roof rail weatherstrip, operate window to "full-up" position. Loosen rear up-travel stop attaching bolt and front up-travel stop attaching bolt through access hole indicated (Fig. 1D40). Adjust window as required and tighten attaching bolts.

NOTE: Figure 1D41 depicts typical misalignments and the correct alignment of the front door ventilator assembly to the side roof rail weatherstrip. This alignment can be quickly checked by lowering front door window and inspecting proper fit of ventilator to side roof rail weatherstrip at top of ventilator division channel. If the ventilator assembly is correctly aligned and door glass is smooth in operation, it is usually safe to assume that the door glass is also correctly aligned to the side roof rail weatherstrip. This fit can be further verified by lowering rear door or rear quarter window and checking fit at top section of front door window to side roof rail weatherstrip. The weatherseal in this area should be the same as depicted for the front door ventilator assembly.

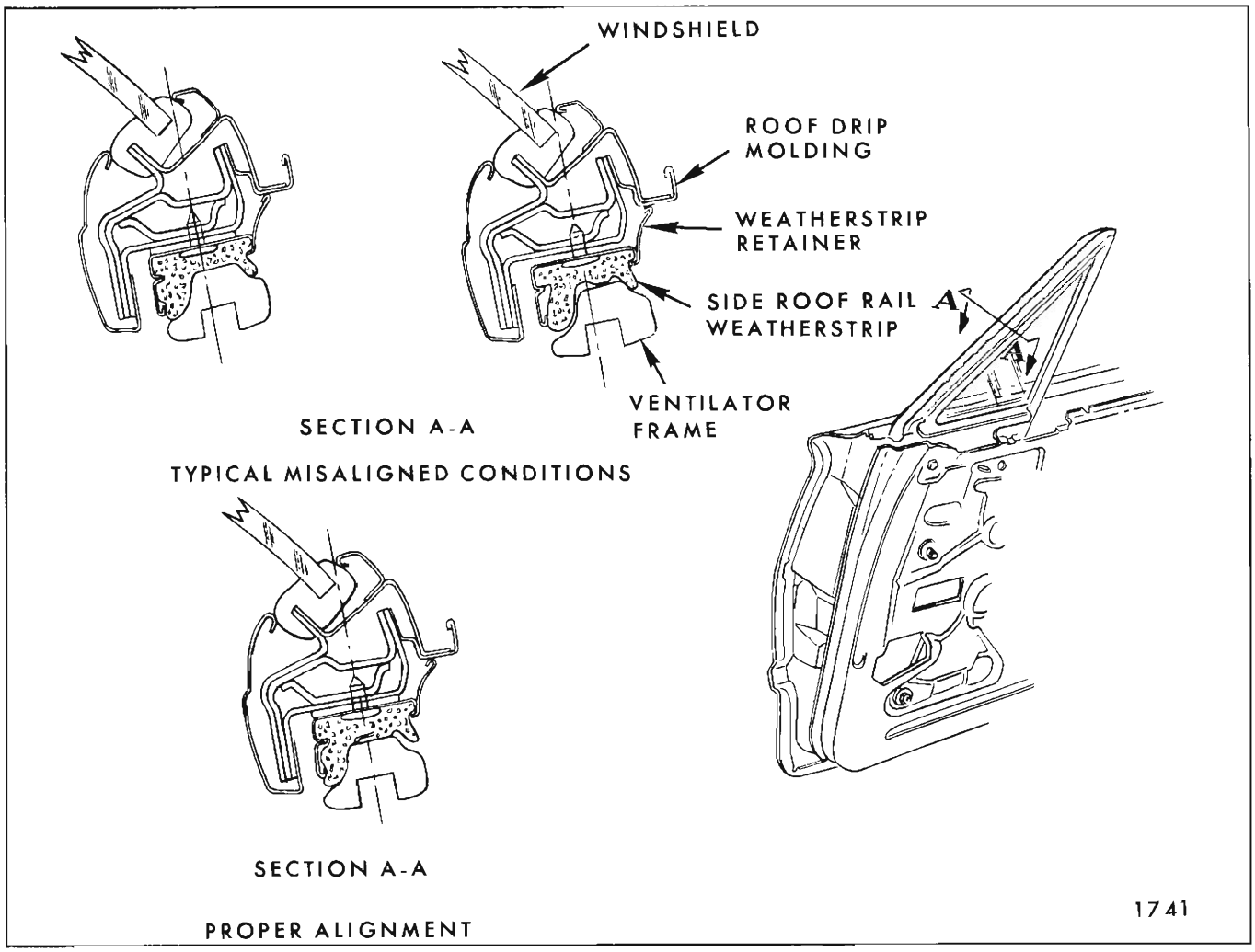


Fig. 1D41—Front Door Ventilator Assembly Alignment

FRONT DOOR WINDOW ASSEMBLY ALL "11"-"35" AND "45" STYLES AND ALL "69" STYLES EXCEPT 38-48-68000 SERIES

The front door window assembly consists of a frameless piece of solid tempered safety plate glass pressed into a thin-section lower sash channel. When cycled, the glass operates within the ventilator division glass run channel and window glass run channel.

Removal and Installation

1. Remove door trim assembly and detach inner panel water deflector.

2. Remove front door ventilator as previously described.

3. On "11" styles, operate window to approximately 3" down from "full-up" position and remove lower sash channel cam attaching screws (Fig. 1D37).

4. On "35", "45", and "69" styles, lower window to "full-down" position and remove lower sash channel cam attaching screws through lower access holes and remove cam.

5. Lift window upward and inboard to remove window from door.

6. To install, reverse removal procedure. Check window for proper operation before installing water deflector.

FRONT DOOR WINDOW ADJUSTMENTS ALL "11"-"35" AND "45" STYLES AND ALL "69" STYLES EXCEPT 38-48-68000 SERIES

Adjustments have been provided to relieve a binding door glass due to misalignment of the glass run channels. The glass can also be adjusted to correct a rotated (cocked) door window assembly. To perform the following adjustments, remove door trim assembly and detach inner panel water deflector, where necessary, to gain access to the hardware attaching points.

Adjustments

1. To adjust lower portion of ventilator division channel for proper alignment with door window assembly, lower door window and loosen ventilator adjusting stud nut. Turn adjusting stud in or out or position lower end of channel fore or aft as required; then tighten adjusting stud nut (Fig. 1D37).

2. To adjust lower section of door window rear glass run channel in-or-out for proper alignment with door window, raise door window. Loosen rear run channel lower adjusting stud nut, adjust channel as required and tighten nut (Fig. 1D37).

NOTE: Adjustments 1 and 2 must be coordinated to provide a properly operating front door window assembly.

3. The door window inner panel cam is adjustable at the forward section and can correct a rotated (cocked) front door window (Fig. 1D37).

FRONT DOOR WINDOW REGULATOR— MANUAL OR ELECTRIC "37"-"57"-"67" STYLES

Removal and Installation

1. Remove front door window as previously described.

2. On styles equipped with manual regulators, loosen front door ventilator attachments (Refer to "Front Door Ventilator" section).

3. On styles equipped with electric window regulators, disconnect wire harness connector at window regulator motor.

4. Remove window regulator attaching bolts (Fig. 1D39) and remove regulator through large access hole.

5. To install, reverse removal procedure.

FRONT DOOR WINDOW REGULATOR— MANUAL OR ELECTRIC ALL "39" STYLES AND 38-48-68000 SERIES "69" STYLES

Removal and Installation

1. Remove front door window and front door ventilator assemblies as previously described.

2. On styles equipped with electric window regulators, disconnect wire harness connector at window regulator motor.

3. Remove window regulator attaching bolts (Fig. 1D39) and remove regulator through access hole.

4. To install, reverse removal procedure.

FRONT DOOR WINDOW REGULATOR— MANUAL AND ELECTRIC ALL "11"-"35" AND "45" STYLES AND ALL "69" STYLES EXCEPT 38-48-68000 SERIES

Removal and Installation

1. Remove front door trim assembly and inner panel water deflector.

2. Operate window to full-up position and secure it with pieces of clothbacked body tape applied over door upper frame.

3. Remove inner panel cam as previously described.

4. Remove window regulator attaching bolts (Fig. 1D37). Run regulator balance arm roller and lift arm roller out of lower sash channel cam at front. Remove regulator through large access hole.

5. To install, reverse removal procedure.

FRONT DOOR WINDOW REGULATOR ELECTRIC MOTOR ASSEMBLY

The electric motor assembly which powers the electrically operated window regulators is a twelve volt, reversible direction motor with an internal circuit breaker and a self-locking gear drive. The motor is secured to the regulator assembly with three attaching bolts.

Removal and Installation

1. Remove front door window electric regulator and clamp assembly in a vise. (See Fig. 1D42).

NOTE: The position of regulator assembly in vise will vary with type of regulator and position of lift arm.

2. Drill a 1/4" hole through regulator back plate and sector gear. The exact point of this hole will be dependent on the position of the regulator lift arm.

IMPORTANT: DO NOT drill into the motor housing, part of which is indicated by the dotted line illustrated in Figure 1D42. In addition, locate hole a sufficient distance from edge of sector gear to insure proper retention of sector gear to back plate.

3. Install a 3/16" bolt through hole in regulator back plate and sector gear and install a nut on the bolt. DO NOT tighten nut.

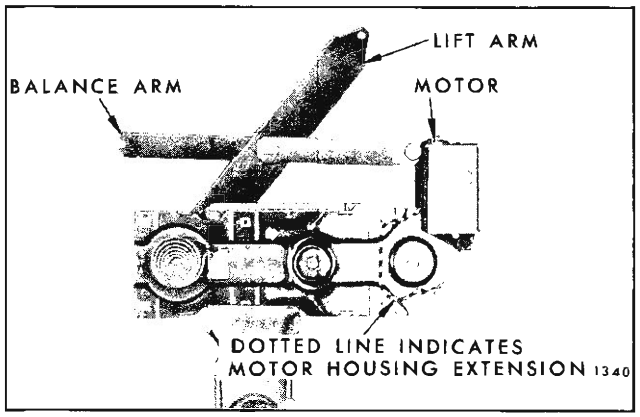


Fig. 1D42—Door Window Regulator and Electric Motor Assembly

CAUTION: Be sure to perform steps 2 and 3 before attempting to remove motor from regulator assembly. The regulator lift arm is under tension from the regulator counterbalance spring and can cause SERIOUS INJURY if motor is removed from regulator without locking the sector gear in position with a nut and bolt.

4. Remove regulator motor attaching bolts and remove motor from regulator assembly. (See Fig. 1D42).

NOTE: Clean off any steel chips from regulator sector gear and motor pinion gear.

5. To install, reverse removal procedure. If difficulty is encountered in lining up motor attaching holes with regulator assembly, the regulator lift arm may be moved into position manually so that motor pinion gear will mesh with teeth on regulator sector gear. After installation of front door window assembly, cycle electric regulator several times before installing inner panel water deflector and door trim pad.

NOTE: Be sure to remove temporary nut and bolt securing regulator back plate to regulator sector gear before installing assembly into door.

FRONT DOOR WINDOW GLASS RUN CHANNEL ALL "39" STYLES AND 38-48-68000 SERIES "69" STYLES

Removal and Installation

1. Remove door trim assembly and detach inner panel water deflector.

2. With window approximately 1/3 down from full-up position, remove rear guide plate attaching bolts (Fig. 1D40) and remove guide plate.

3. Operate window up to gain working room in access hole, then remove glass run channel upper and lower attaching bolts (Fig. 1D39) and remove channel from door.

4. To install, reverse removal procedure. Adjust guide plate fore or aft to permit proper window operation.

FRONT DOOR WINDOW GLASS RUN CHANNEL "37"-"57"-"67" STYLES

Removal and Installation

1. Remove door trim assembly and inner panel water deflector.

2. With window slightly down from full-up position, remove glass run channel upper attaching bolt and lower adjusting stud nut (Fig. 1D40).

3. Disengage lower adjusting stud from slot in inner panel. Pull downward on run channel to disengage it from window assembly and remove run channel from door.

4. To install, reverse removal procedure. Adjust run channel for proper window operation.

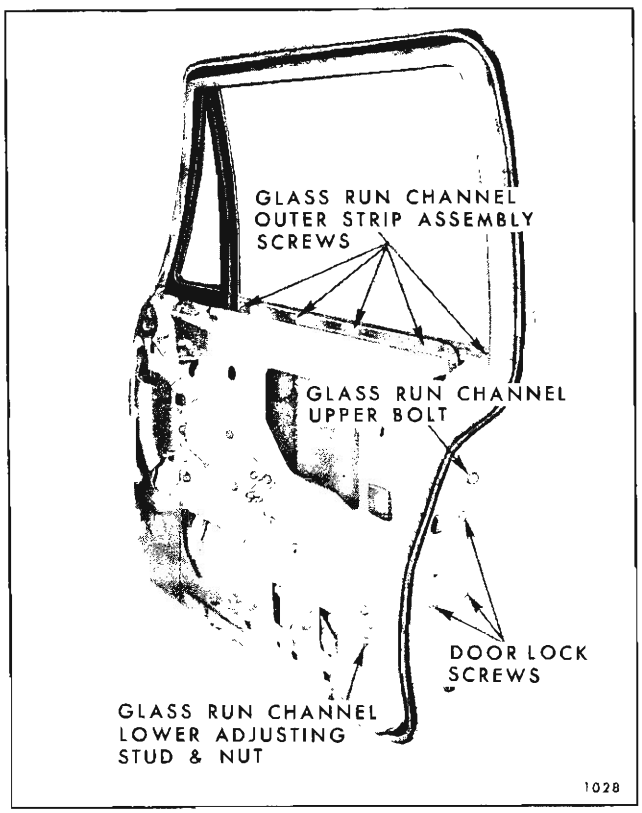


Fig. 1D43—Door Hardware Attachment

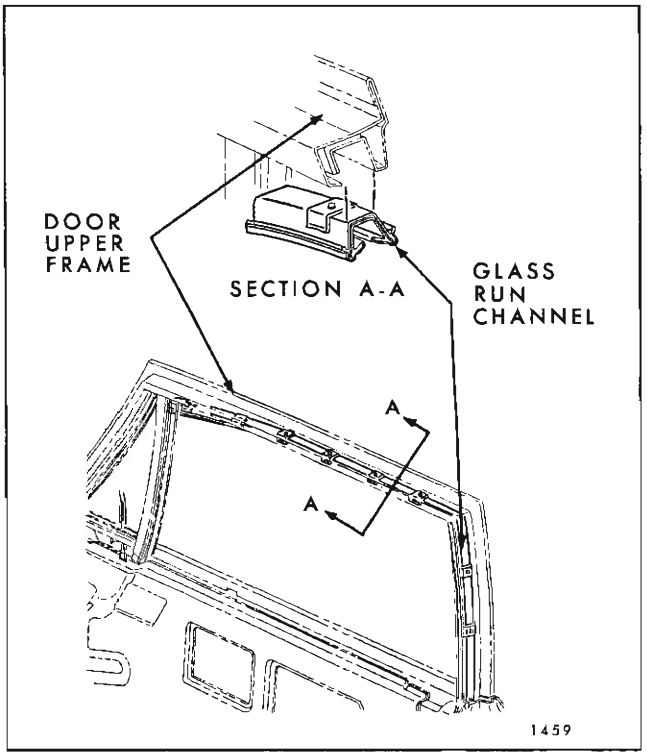


Fig. 1D44—Front Door Glass Run Channel

FRONT DOOR WINDOW GLASS RUN CHANNEL ALL "11"-"35" AND "45" STYLES AND ALL "69" STYLES EXCEPT 38-48-68000 SERIES

Removal and Installation

1. Remove front door ventilator as previously described.

2. With window in 1/2 down position, slide window sufficiently forward to enable removing run channel.

3. Remove glass run channel lower adjusting stud nut and run channel attaching bolt on door lock pillar at belt (Fig. 1D43).

4. Disengage run channel from door upper frame starting at ventilator division channel. Pry carefully at clip locations (Fig. 1D44) to avoid excessive distortion of clips.

5. When run channel is completely disengaged from door upper frame, remove it from door at beltline.

6. To install, reverse removal procedure. Prior to installation inspect run channel clips and saturated polyurathane foam sealing strips in door upper frame (Fig. 1D45). Reform distorted clips to insure adequate retention when installed. Replace damaged

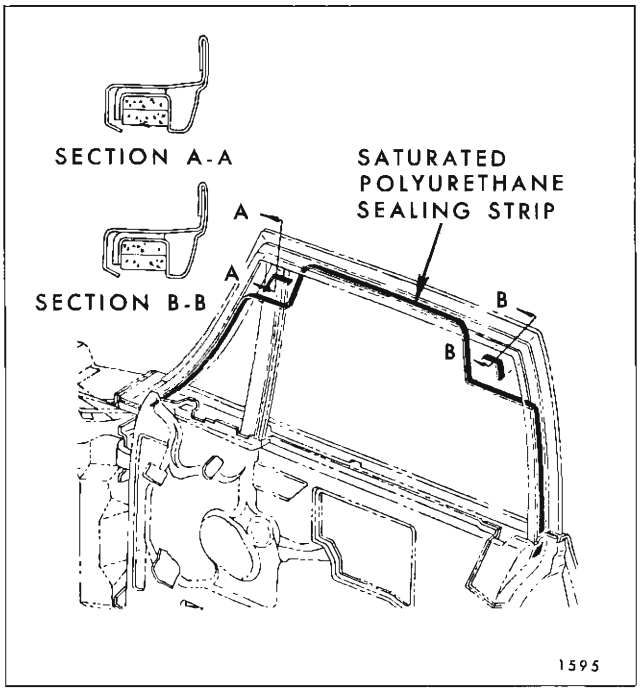


Fig. 1D45—Front Door Window Glass Run Channel Sealing

sealing strips with sections of polyurethane foam sealing material or equivalent available in 5 foot strips under part #4480378.

GLASS RUN CHANNEL OUTER STRIP ASSEMBLY ALL SERIES EXCEPT 68000

Removal and Installation

1. Remove door trim assembly and inner panel water deflector. Remove rubber bumper from down travel stop and operate glass to full-down position.

2. On styles with ventilator lower moldings, remove glass run channel outer strip assembly attaching screws (Fig. 1D43) and remove strip assembly.

3. On styles without ventilator lower moldings, remove front door ventilator as previously described. Then, remove glass run channel outer strip assembly screws shown in Figure 1D43, plus 2 other screws not shown in illustration, but hidden behind ventilator. Remove outer strip assembly from door.

4. To install, reverse removal procedure.

DOOR WEDGE PLATES "67" STYLES

Door wedge plates are used on convertible styles to give additional support to the door when it is in the closed position. One plate is installed to the body lock pillar and the other to the door lock pillar (Fig. 1D46). When properly shimmed, the plates should contact each other to the extent of a 1/32" interference when the door is closed. Body side wedge plate shims are available as a service part.

FRONT DOOR LOCK ALL STYLES

Removal and Installation

1. Remove door trim assembly and inner panel water deflector. Operate window to full-up position.

2. Working through large access hole, disengage remote control to lock connecting rod at lock as specified under "Door Lock Spring Clips" in the Front and Rear Door Section.

3. On styles with vacuum lock actuators, disconnect vacuum hoses from actuators.

4. Remove door lock attaching screws (Fig. 1D43) and remove lock from door.

NOTE: On styles with vacuum lock actuators, remove lock and actuator from door as an assembly.

5. To install, reverse removal procedure.

FRONT DOOR VACUUM LOCK ACTUATOR ASSEMBLY 35-36-38-48-68000 SERIES

The actuators that operate the locks are double acting vacuum diaphragms. Vacuum is supplied to either of the two sides of the diaphragm to lock or unlock the door lock assemblies. The diaphragm moves a rod that operates the locking lever of the lock to the desired position. All vacuum hoses and their corresponding actuator ports are color coded to assure correct hose-to-actuator installation. The orange coded vacuum hose provides the unlocking cycle of the door assembly and the yellow coded vacuum hose provides the locking cycle of the door lock assembly.

As the actuator is attached to the door lock with screws which are inaccessible with the lock installed, it is necessary to remove the door lock in order to remove the actuator. Once the door lock is removed, the actuator can be removed in a bench operation (Fig. 1D47).

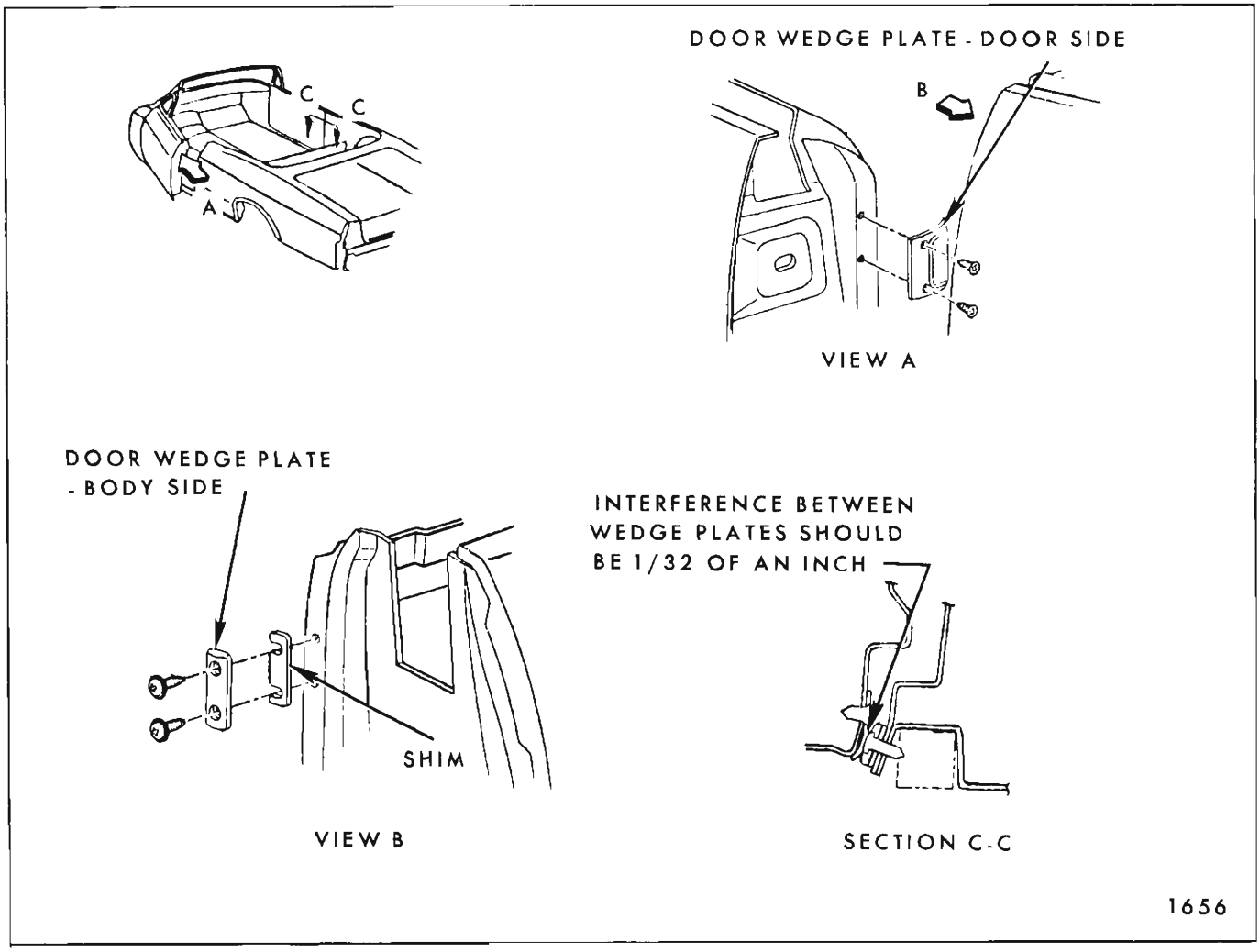


Fig. 1D46—Door Wedge Plates

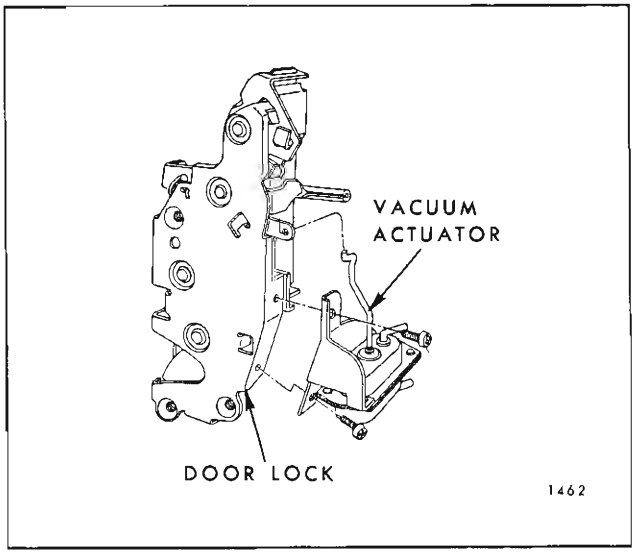


Fig. 1D47—Front Door Vacuum Lock Actuator

FRONT DOOR LOCK SELECTOR VALVE 35-36-38-48000 SERIES

The door lock selector valve is attached to the front door trim assembly and is similar to those used on past models. When the selector valve is actuated upward, all door locks will unlock simultaneously. When selector valve is actuated downward, all door locks will lock. Either front door selector valve may be actuated to lock or unlock all doors. The red color coded hose is the main vacuum supply line (Fig. 1D52). Vacuum is supplied at all times to the selector valve. Only when the selector valve is actuated is vacuum supplied to the balance of the system.

Removal and Installation

1. Remove door trim pad and carefully disconnect vacuum hose from selector valve.

2. Carefully disengage valve assembly from door trim assembly.

3. To install, reverse removal procedure. When installing vacuum hoses to selector valve, hose color codes must be installed to the proper connection on the selector valve for proper valve operation. Check all operations of door lock vacuum system prior to installing door trim and inside hardware.

FRONT DOOR LOCK TRANSFER VALVE 68000 SERIES

The 68000 series does not utilize a selector valve on the 1965 model. Instead of a separately mounted switch, this series incorporates a sliding control valve mounted to the base of each front door lock actuator. As the valve is directly connected to the inside locking rod, actuating the rod either up or down introduces vacuum to the remainder of the system and either locks or unlocks all door locks (Fig. 1D51).

Unlike a selector valve which returns to a neutral position, after being actuated, an actuated control valve remains in either a locked or unlocked position. Therefore, to prevent a constant surging of vacuum throughout the system, a transfer valve is incorporated between the door lock control valve and remote control valve to interrupt the vacuum once all locks have been actuated. Vacuum is present in the red color-coded hose at all times and will also be constant to the transfer valve in either the white or green hoses depending on whether the system is being locked or unlocked. When the system is operated, vacuum is introduced into the opposite hose (from green to white or white to green) actuating a diaphragm in the transfer valve. This action creates a slight vacuum in the remote control valve, which then operates the remainder of the locks, and at the same time, blocks off the supply of vacuum from traveling beyond the transfer valve.

As shown in Figures 1D48 and 1D49, the transfer valve is located above the remote control valve. To gain access to the transfer valve it is necessary

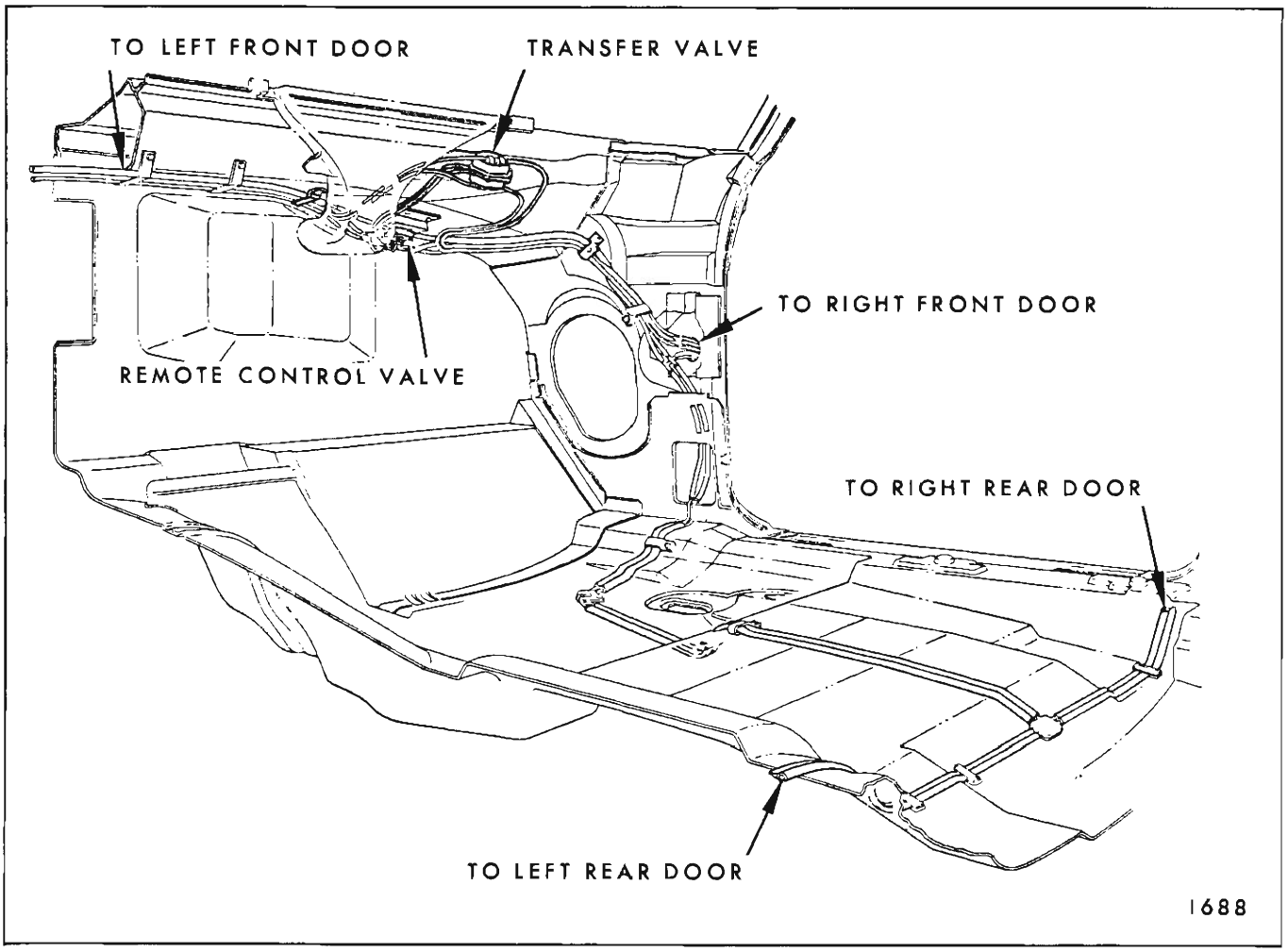


Fig. 1D48—Vacuum Door Lock Vacuum Hose Routing - Right Side of Body

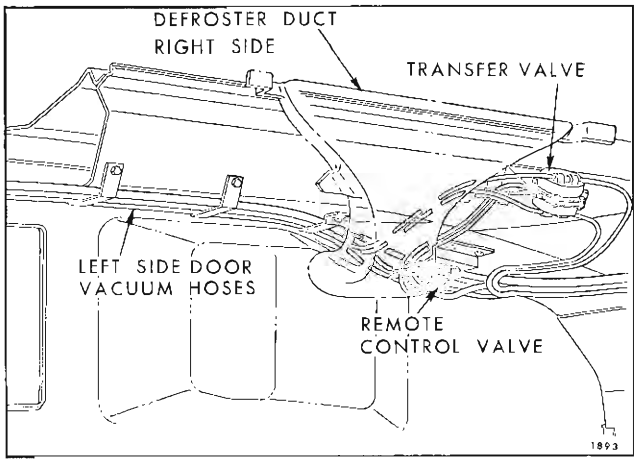


Fig. 1D49—Transfer Valve and Remote Control Valve Installation

to remove the instrument panel glove compartment. The bracket that retains the transfer valve is slotted so the attaching bolts must only be loosened to remove the valve.

NOTE: Figure 1D51 illustrates a system in the process of being locked. The left front door inside locking rod has been depressed, but the remainder of the system is not yet actuated.

DOOR VACUUM LOCK REMOTE CONTROL VALVE ASSEMBLY 35-36-38-48-68000 SERIES

The remote control valve is attached below the right hand defroster duct with screws, (Fig. 1D48). The remote control valve is designed to supply vacuum from the storage tank to the lock actuators when the door lock selector valve is actuated. All vacuum hoses and their corresponding remote valve ports, as shown in Figure 1D50 are color coded to assist in proper hose to valve port installation.

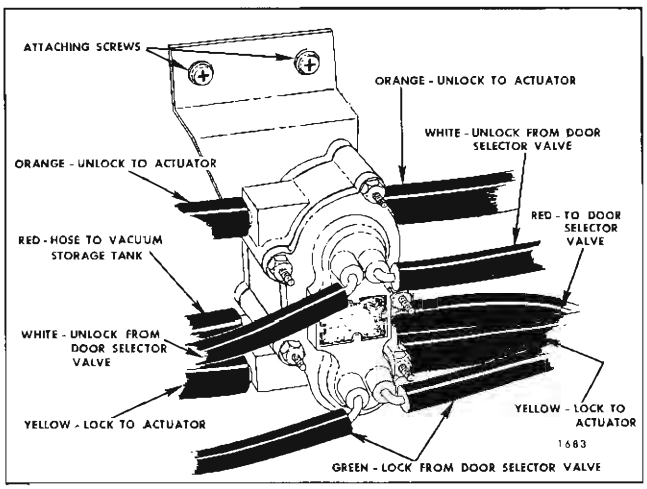


Fig. 1D50—Vacuum Lock Remote Control Valve

Removal and Installation

1. Remove two screws securing remote control valve assembly to cowl panel.

2. Carefully disconnect vacuum hoses from remote control valve assembly, Figure 1D50, and remove valve assembly from body.

3. To install, reverse removal procedure. Check operation of locking system prior to installation of chassis parts.

DOOR LOCK VACUUM STORAGE TANK AND CHECK VALVE ASSEMBLY 35-36-38-48-68000 SERIES

The door lock vacuum storage tank is mounted in the engine compartment and is connected to the engine manifold by a hose from the tank check valve to the manifold.

The check valve maintains the vacuum in the tank. The storage tank then supplies vacuum at all times to the remote valve and the door lock selector or control valves. The storage tank should provide a minimum of three complete cycles of operation (lock and unlock) immediately after the engine has been shut off. The main vacuum supply hose is color coded red and connects the vacuum storage tank with the remote control valve assembly.

Removal and Installation

1. Raise hood and carefully disconnect check valve to manifold attaching hose from storage tank.

2. Carefully disconnect remote control valve attaching hose from storage tank.

3. Remove screws securing tank to engine compartment and remove tank from engine compartment.

4. To install, reverse removal procedure. With engine running, check all operations of locking system. Turn engine off: lock assemblies should operate through a minimum of three complete cycles (lock and unlock) before storage tank vacuum supply is exhausted.

VACUUM DOOR LOCK TROUBLE DIAGNOSIS PROCEDURE

The vacuum locking system is designed so that the storage tank supplies vacuum at all times to the remote control valve and the door lock selector or control valves.

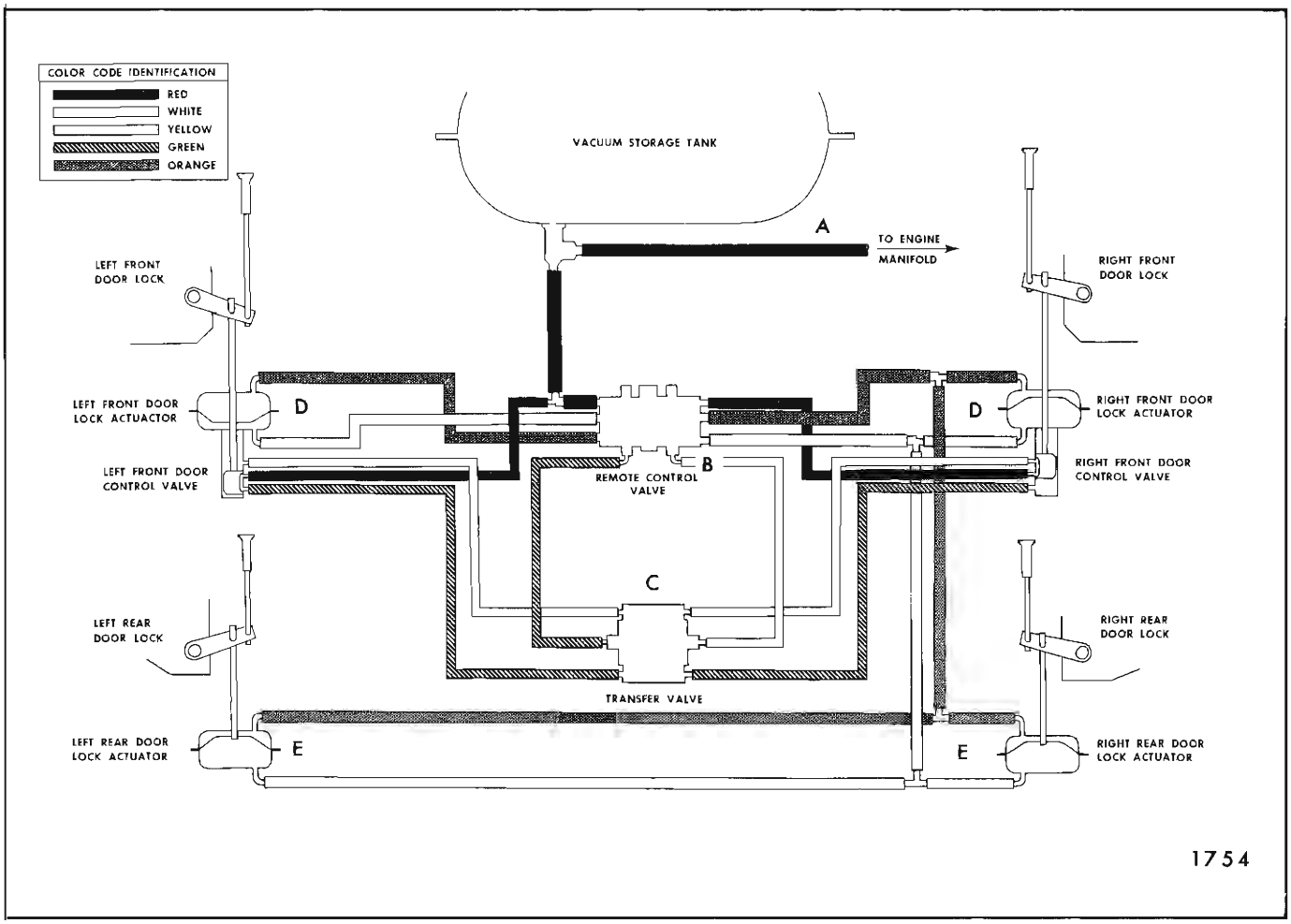


Fig. 1D51—Vacuum Door Locking System - 68000 Series

Vacuum is not introduced to the door lock actuators until the door selector or control valve is actuated.

Figure 1D52 (35-36-38-48000 Series) and Figure 1D51 (68000 Series) are schematic diagrams of the vacuum locking systems and are intended as an aid when trouble shooting a system.

IMPORTANT: The engine must be running to provide the necessary vacuum for testing the locking system. If a repair does not correct the trouble, return parts to original position before making another repair. Before checking a specific part, be sure all attaching hoses are in satisfactory condition and properly installed.

Test locks by actuating door lock selector or control valve. Failure of locks to function properly is caused by one or more of the following conditions listed in the vacuum door lock diagnosis chart.

VACUUM DOOR LOCK TROUBLE SHOOTING PROCEDURE

When an air leak in the vacuum locking system is not severe enough to be heard, the leak-down testing device shown in Figure 1D53 will aid in determining which part is leaking.

NOTE: Water level in testing jar should be approximately one inch above end of glass tube.

This device can be easily constructed from common items that are generally available. The following chart lists the necessary items. Key numbers refer to Figure 1D53.

Although most transparent glass containers are satisfactory for use as a testing device, a quart jar with a metal cap that can be sealed is recommended because it can be easily transported. Observation from most angles is also possible when using a quart container. After drilling holes in the metal cap, insert cap ports and solder ports to the

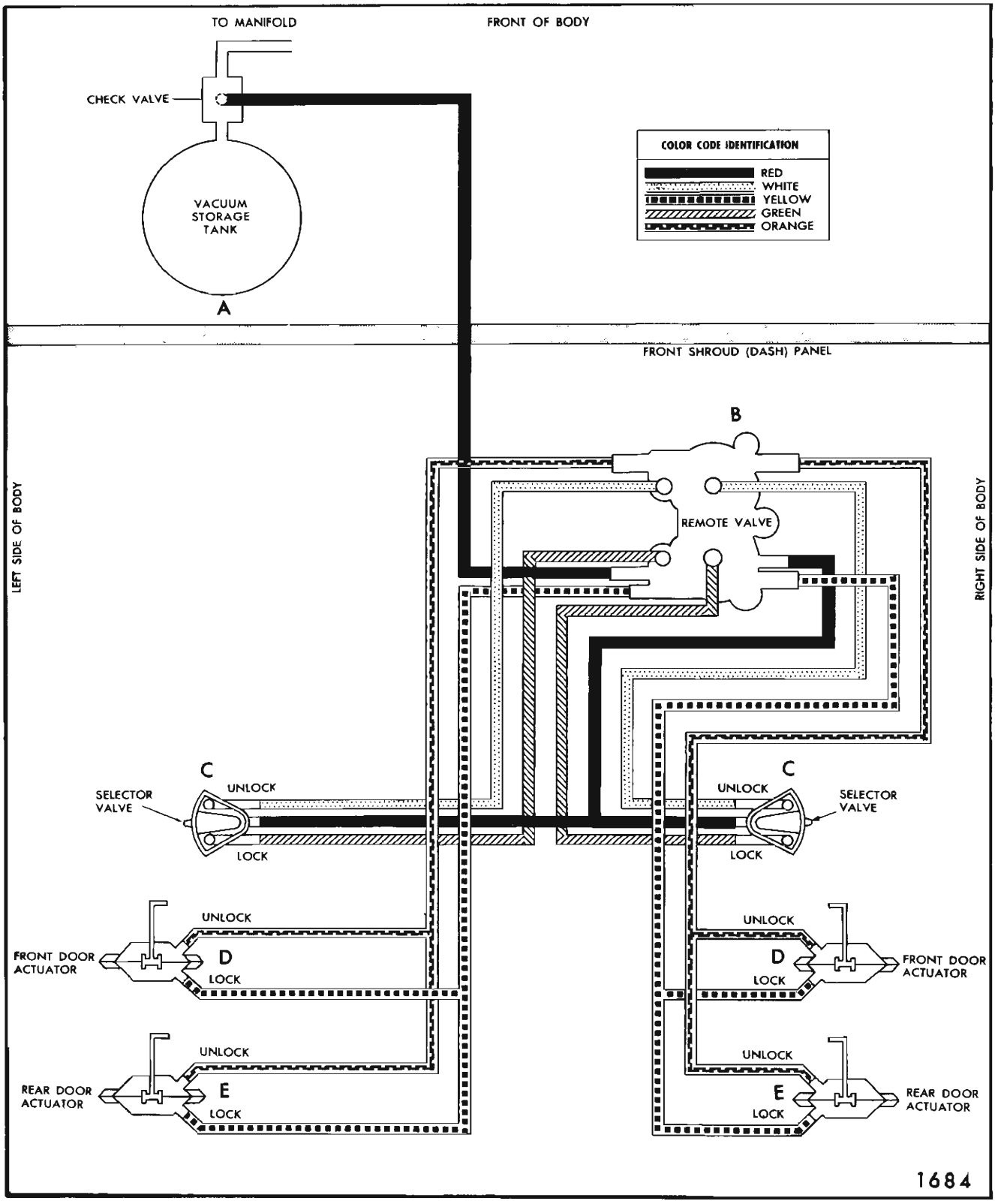


Fig. 1D52—Schematic Diagram - Vacuum Door Locking System

Key	Description	I.D.	O.D.	Length	Quantity
1	Quart Glass Container	-	-	-	1
2	Metal Cap	-	-	-	1
3	Cap Sealing Ring	-	-	-	1
4	Cap Ports	3/16"	1/4"	2 1/2"	2
5	Cap Port	3/16"	1/4"	2 1/2"	1
6	Hose	7/32"	3/8"	2.0'	2
7	Hose	5/32"	5/16"	1"	1
8	Glass Tube	1/8"	5/16" to 3/8"	4"	1

cap. (See Fig. 1D53). This container must not leak air through the cap or cap ports when used in testing a vacuum locking system. The glass tube (see Fig. 1D53) should be cut at a 45° angle at the lower section, as illustrated.

NOTE: If glass tubing is not available, plastic or similar transparent tubing may be substituted, provided tubing has the specified inside diameter.

A. Installation of Testing Device into Vacuum System:

The testing device is installed between the vacuum storage tank and the remote control valve. To install testing device, proceed as follows:

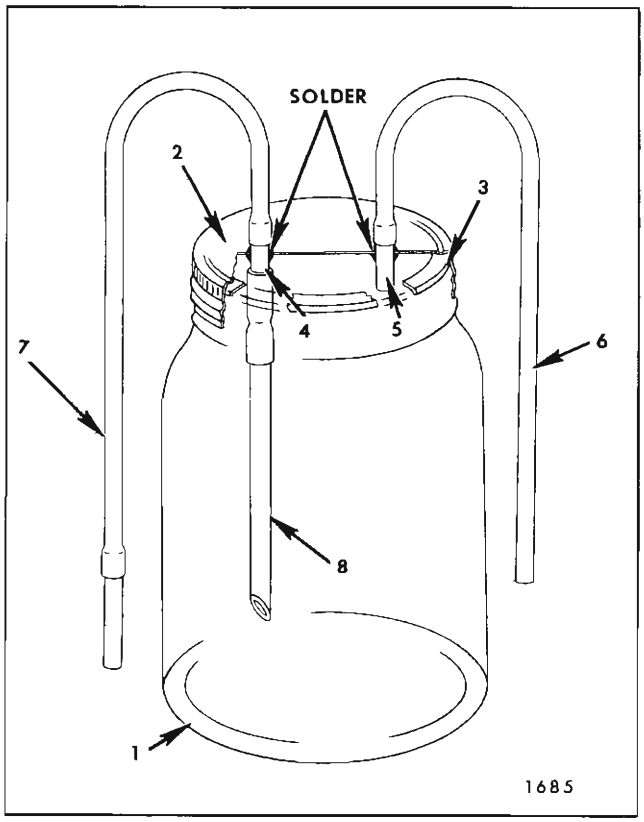


Fig. 1D53—Leak Down Testing Equipment

1. Raise hood and remove storage tank-to-remote control valve attaching hose (red) from bottom of check valve on storage tank.

2. Install hose from testing device (hose without port) to bottom of check valve on storage tank.

3. Install other hose, with attached port, from testing device to hose leading to remote control valve.

4. Set testing device in an upright position.

B. Recharging Vacuum Storage Tank:

Vacuum will usually have been depleted after four or five cycles of operation (locked or unlocked) of the door locks, or after testing device has been properly installed. To recharge storage tank to normal vacuum (22-24 inches of mercury), proceed as follows:

1. Turn testing device on its side until glass tube is out of water.

2. Start engine and continue running until tank is fully charged (approximately 30-45 seconds).

3. Turn engine off and return testing device to a normal upright position.

4. Allow 15 to 30 seconds for water in testing device to stop bubbling.

NOTE: This waiting period is necessary due to different pressures in the system on both sides of testing device. The bubbling is the result of these pressures trying to equalize themselves. The storage tank may be recharged as often as required when checking vacuum system for an air leak.

C. Determining Size of Air Leak From Bubbles on Testing Device:

If bubbles appear in water at a rate of approximately one every fifteen seconds or faster, an air leak is present in either the remote control valve or one of the door lock selector valves. The faster bubbles appear in the water, the more severe is the air leak. In most cases, where the air leak rate is only one bubble every fifteen seconds, the vacuum loss is usually insufficient to affect the operation of the vacuum locking system.

D. Isolating a Leaking Vacuum Part Using the Leak-Down Testing Device:

When a specific part has been isolated as the leaking component, first check all hoses color coded red that attach to that specific part. Make sure hose(s) are properly installed to the port and

that hoses are not split, thus being the cause of the apparent air leak.

After the testing device has been properly installed and storage tank recharged, watch glass tube in testing device and proceed as follows:

(35-36-38-48000 Series Only)

1. If water rises in glass tube, storage tank is leaking. Replace vacuum storage tank.

2. If bubbles appear in water, an air leak is present in either the remote control valve or in one of the door lock selector valves.

3. Remove right and left front door hinge pillar conduits.

4. Pinch right and left vacuum hose color coded red.

NOTE: This has eliminated the right and left door lock selector valves from vacuum system.

5. Check testing device. If bubbles continue to appear in water, the remote control valve is leaking. (If bubbles stop, see step 6).

6. If bubbles stop forming in testing device, air leak is at either door valve. Discontinue pinching left valve hose at hinge pillar.

7. Check testing device. If bubbles appear in water, left door valve is leaking. (If no bubbles appear, see step 8).

NOTE: Before replacing a door lock selector valve, tighten screws on back of valve, then recheck valve. If valve continues to leak, replace left door lock selector valve assembly.

8. If no bubbles appear in testing device after discontinuing pinching of left valve hose, then air leak is at right door valve. This may be shown by discontinuing pinching of right valve hose at hinge pillar. Bubbles will appear immediately in water of testing device.

68000 SERIES

1. If water rises in glass tube, storage tank is leaking. Replace vacuum storage tank.

2. If bubbles appear in water, an air leak is present in either the remote control valve or transfer valve.

3. If bubbles appear, remove right and left door hinge pillar conduits and simultaneously pinch right and left vacuum hose color coded red.

NOTE: This has eliminated the transfer valve from vacuum system.

4. Check testing device. If bubbles continue to appear in water, the remote control valve is leaking. If bubbles stop, air leak is at transfer valve or either door actuator.

5. If bubbles stop, alternately pinch red color coded hose at both right and left hinge pillar. If bubbles continue whether either right of left side red hose is being pinched, transfer valve is cause of leak. If bubbles stop while either side red hose is being pinched, the actuator on that side being pinched is defective.

VACUUM DOOR LOCK DIAGNOSIS
35-36-38-48000 SERIES
FIGURE 1D52

CONDITION	APPARENT CAUSE	REPAIR
A. System inoperative	1. Hoses crossed at vacuum supply tank.	Reverse hoses at vacuum supply tank.
	2. Vacuum supply hose pinched at remote valve.	Straighten hose at "B" (Red).
	3. Door valve supply hose pinched at remote valve.	Straighten hose at "B" (Red).
	4. Vacuum supply hose disconnected at tank, remote valve, or engine.	Install hose at "A" or "B" (Red).
	5. Remote valve diaphragm leaking.	Replace remote valve at "B"

VACUUM DOOR LOCK DIAGNOSIS
35-36-38-48000 SERIES

CONDITION	APPARENT CAUSE	REPAIR
B. All doors can be locked but not unlocked.	1. Main supply hose crossed lock supply hose at remote valve.	Reverse hoses at remote "B" (Red and Green).
	2. Unlock selector hose or supply hose disconnected at remote valve.	Hook up hose at remote "B" (White).
C. All doors can be unlocked but not locked.	1. Main supply hose crossed with unlock supply hose on remote valve.	Reverse hoses at remote "B" (Red and White).
	2. Lock selector hose or supply hose disconnected at remote.	Hook up hose at remote "B" (Green).
D. Moving either door valve to lock or unlock produces the opposite action of all locks.	1. Door lock selector valve hoses (small) crossed at remote valve.	Reverse selector hoses at remote valve "B" (White and Green), or reverse selector hoses at each door lock selector valve "C" (White and Green).
	2. Actuator supply hoses (large) crossed at remote valve.	Reverse hoses at remote "B" (Orange and Yellow).
E. Moving one of the door valves to lock or unlock produces the opposite action of the lock.	1. Valve selector hoses crossed at one door valve.	Reverse small hoses at affected door valve "C" (White and Green).
	2. Door selector valve reversed in trim assembly.	Reverse affected door selector valve in trim assembly "C".
F. System inoperative from one door valve.	Vacuum supply hose pinched or disconnected at affected door valve.	Connect hose or check for pinching at: 1. Affected door valve "C". 2. Front door conduit on side affected "E".
G. System will not lock from one door valve, or system will not unlock from one door valve.	Lock or unlock selector valve hose pinched or disconnected from affected door valve.	Connect hose or check for pinching at: 1. Affected door valve "C" (White or Green). 2. Front door conduit on that side "E".
H. Lock movement on any one door not synchronized with other door(s).	Hoses crossed at affected door lock actuator.	At Front Door Reverse hoses at lock actuator "D" (Orange and Yellow). At Rear Door Reverse hoses at lock actuator in door "F" (Orange and Yellow). Or reverse hoses at tubing center pillar "G".

VACUUM DOOR LOCK DIAGNOSIS
35-36-38-48000 SERIES

CONDITION	APPARENT CAUSE	REPAIR
I. One door lock lags behind others when locked or unlocked.	Lock or linkage binding.	Front Door 1. Lubricate lock and check inside locking control rod for freedom of movement. 2. Check drive link for freedom of movement in lock trip lever. Rear Door 1. Lubricate lock and check inside locking control rod and linkage for freedom of movement. 2. Check clearance of lock and actuator to door hardware. Coupe 1. Lubricate lock and check inside locking control rod for freedom of movement. 2. Check freedom of movement of actuator and lock.
J. One door lock will not lock or unlock.	Actuator hoses pinched or disconnected.	Front Door 1. Check for pinched hoses at front door conduit on side affected. 2. Check for hose disconnected at affected actuator. (Orange or Yellow). Rear Door 1. Check for pinched hose at rear door conduit and at center pillar. 2. Check for kinked or flattened hoses under front door carpet support plate. 3. Check for disconnected hose at metal tubing or at actuator (Orange or Yellow).
K. System will not hold vacuum for 48 hours.	1. Excessive leakage in any one of the following units can be the cause: a. Remote valve b. Door valves (2) c. Storage tank and check valve. d. That part of the harness assembly that contacts these components.	1. Actuate system through several lock and unlock cycles, and recheck leakage. 2. Isolate leaking component and replace. ***IMPORTANT:*** If a door valve is found to be leaking, tighten screws on back of valve, then recheck valve. If valve continues to leak, replace valve.

VACUUM DOOR LOCK DIAGNOSIS
35-36-38-48000 SERIES

CONDITION	APPARENT CAUSE	REPAIR
L. Lock(s) inoperative with front door closed but operates with door open.	Door valve vacuum supply hose pinched at front body hinge pillar on side affected.	Check for pinched hose of affected door at conduit.
M. Door selector valve leaks.	Pinch vacuum supply hose (Red) at affected valve. If air leak stops, valve is defective.	Replace affected selector valve. ***IMPORTANT:*** If selector valve leaks, first tighten screws on back of valve, then recheck valve. If valve continues to leak, replace valve assembly.
N. Storage tank leaks.	Turn engine off and disconnect manifold to storage tank supply hose at tank check valve; then pinch storage tank to remote valve supply hose. Actuate either door lock selector to equalize pressure in balance of system. If air continues to leak, tank is defective.	Replace vacuum storage tank.
O. Actuator assembly inoperative.	Connect hose or check for pinched hose at front door hinge pillar conduit "E", at rear door hinge pillar conduit "H" or at remote control valve "B", then actuate door lock selector valve. If actuator does not operate, actuator is defective.	Replace actuator assembly.
P. Remote valve leaks.	Check remote valve for pinched or disconnected hose(s). If balance of system is checked and found to be in satisfactory condition, replace remote valve with new part. If system then operates properly, original remote valve was defective.	Replace remote control valve assembly.

VACUUM DOOR LOCK DIAGNOSIS
68000 SERIES
1D51

CONDITION	APPARENT CAUSE	REPAIR
A. System Inoperative.	1. Hoses crossed at vacuum supply tank.	Reverse hoses at vacuum supply tank.
	2. Vacuum supply hose pinched at remote valve.	Straighten hose at "B" (Red).
	3. Door valve supply hose pinched at remote valve.	Straighten hose at "B" (Red).
	4. Vacuum supply hose disconnected at tank, remote valve; or engine.	Install hose at "A" or "B" (Red).
	5. Remote valve diaphragm leaking.	Replace remote valve at "B".
	6. Transfer valve leaking.	Replace transfer valve at "C".
B. All doors can be locked but not unlocked, or unlocked but not locked.	Hoses reversed at remote control valve or transfer valve.	Match color-coded hoses with color-coded ports on remote control valve "B" and Transfer valve "C".
C. Moving either door valve to lock or unlock produces the opposite action of all door locks.	1. White and green hoses between remote control valve and transfer valve are reversed.	Match color-coded white and green hose with respective color-coded ports on remote control valve "B" and transfer valve "C".
	2. Actuator supply hoses reversed at remote valve.	Match orange and yellow hoses with respective color-coded ports on remote control valve "B".
D. Moving one of the door valves to lock or unlock produces the opposite action of other locks.	1. Hoses reversed at door control valve.	Match white and green hoses with respective color-coded ports on door control valve at "D".
	2. Hoses reversed at transfer valve.	Match white and green hoses extending from actuator with respective color-coded ports on transfer valve "C".
E. System inoperative from one door valve.	Vacuum supply hose pinched or disconnected at affected door valve.	Connect hose or check for pinching at: 1. Affected door valve. 2. Door conduit on side affected.
F. Vacuum constant at door actuator and must be over-ridden to operate system.	Internal leak in transfer valve permitting vacuum in entire system.	Replace transfer valve at "C".

VACUUM DOOR LOCK DIAGNOSIS
68000 SERIES

CONDITION	APPARENT CAUSE	REPAIR
G. One door lock lags behind others when locked or unlocked.	Lock or linkage binding.	Lubricate lock and linkage and check inside locking rod for freedom of movement.
H. System will not hold vacuum for 48 hours.	Excessive leakage in any one of the following: 1. Remote valve. 2. Door valve or actuator. 3. Transfer valve. 4. Storage tank and check valve. ***NOTE:*** The remote control valve and door valves have a designed small amount of bleed-off.	Isolate leaking component with leak-down testing device as described previously in this procedure.
I. Lock inoperative with door closed, but operates with door open.	Vacuum supply hose (red) pinched at front body hinge pillar.	Reposition hose to eliminate kink.

REAR DOORS

The procedures included in this section concern components peculiar to rear doors only. Procedures for the removal of trim, inside and outside door handles, and door weatherstrips, which are similar for both front and rear doors, are found in the "Front and Rear Door" section.

Figures 1D54, 1D55, and 1D56, which are illustrations of the "39" style, "69" style (except 68069 style) and the 68069 style rear door hardware mechanisms, identify the specific hardware components and show their relationship to each other.

REAR DOOR HINGES
ALL STYLES

As the rear door hinges are secured with screws to both the door and center pillar, the door can be removed by either removing the door from the hinges or by removing the door and hinges as an assembly from the center pillar.

Removal

1. With a pencil, mark location of hinges on door

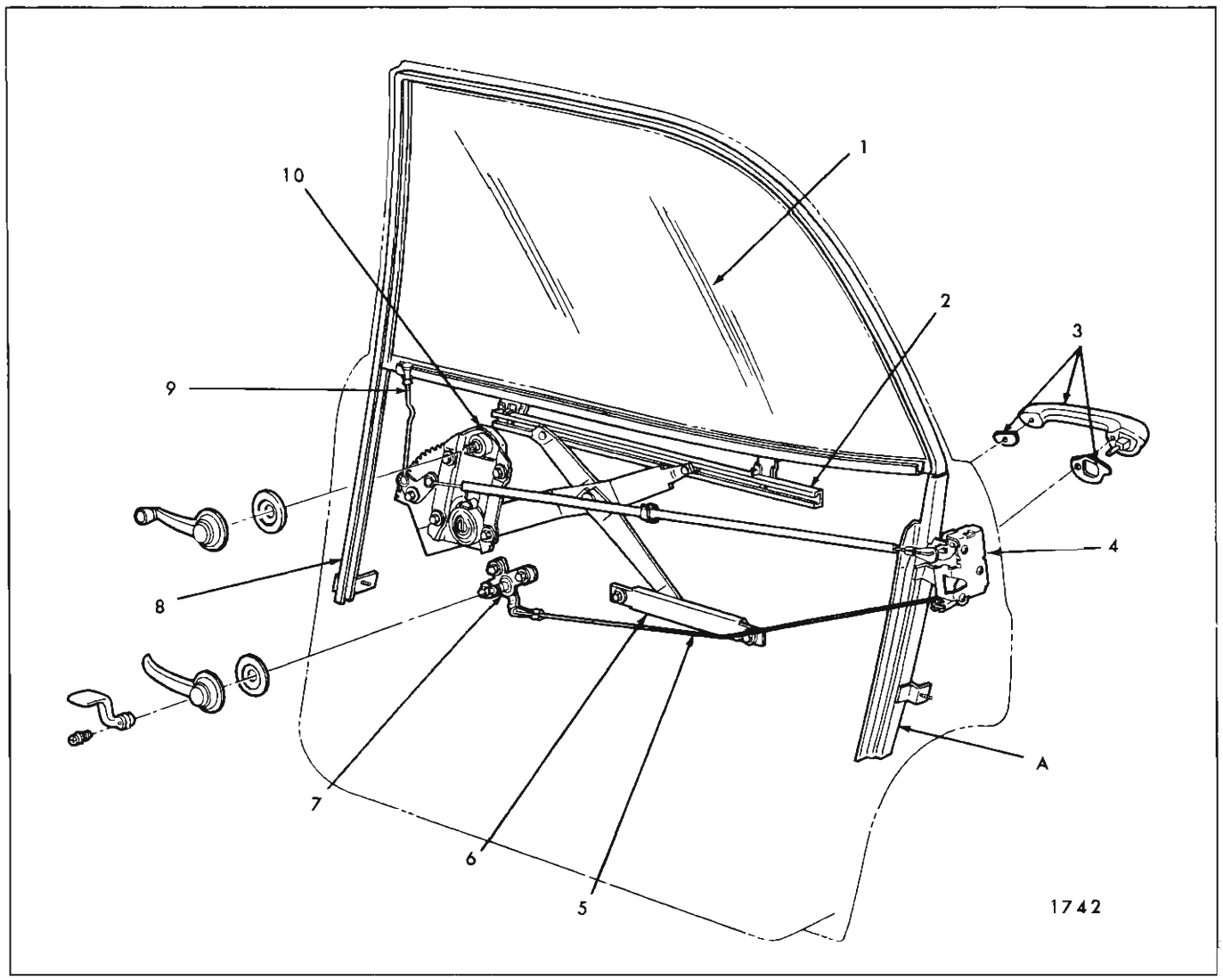


Fig. 1D54—Rear Door Hardware - "69" Styles Except 38-48-68000 Series

1. Window Assembly
2. Lower Sash Channel Cam
3. Outside Handle and Sealing Gaskets
4. Door Lock
5. Remote Control Connecting Rod
6. Inner Panel Cam
7. Remote Control
8. Glass Run Channel (Extends Completely Around Window to Point "A")
9. Inside Locking Rod
10. Window Regulator

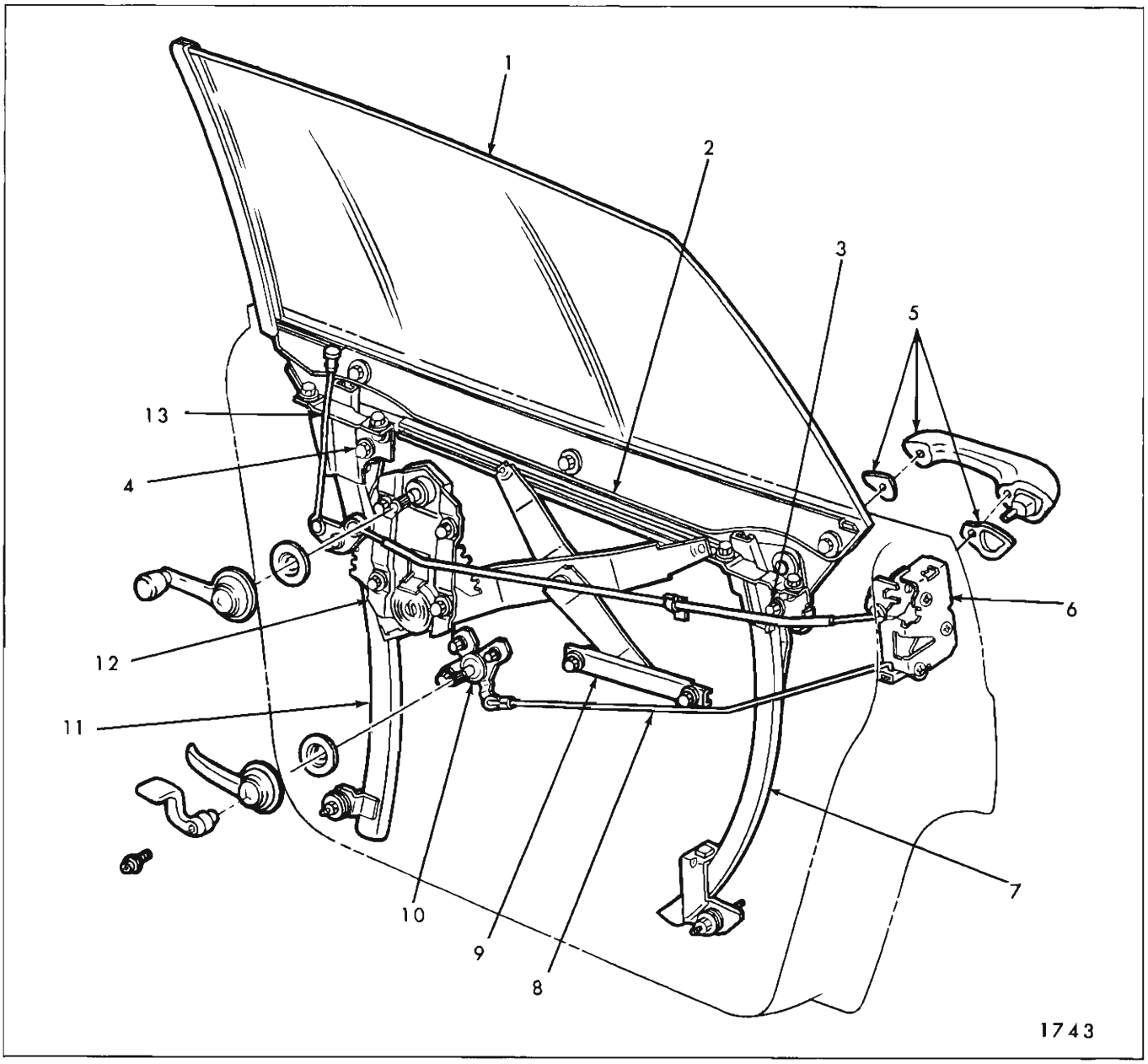


Fig. 1D55—Rear Door Hardware - "39" Styles

1. Window Assembly
2. Lower Sash Channel Cam
3. Window Rear Upper Stop
4. Window Front Upper Stop
5. Outside Handle and Sealing Gaskets
6. Door Lock
7. Window Rear Guide
8. Remote Control Connecting Rod
9. Inner Panel Cam
10. Remote Control
11. Window Front Guide
12. Window Regulator
13. Inside Locking Rod

or center pillar depending on removal method being used.

2. On styles equipped with electric window regulators or vacuum operated locks, proceed as follows:

a. Remove door trim assembly and inner panel water deflector.

b. Disconnect wire harness connector from regulator motor and/or vacuum hoses from lock actuator.

c. Remove electrical conduit from door, then remove wire harness and/or vacuum hoses from door through conduit access hole.

3. With door properly supported, remove upper and lower hinge attaching screws from door or center pillar (Fig. 1D57 or 1D58) depending on removal method being used. Then, remove door from body.

Installation

1. Clean off old sealer at hinge attaching areas.

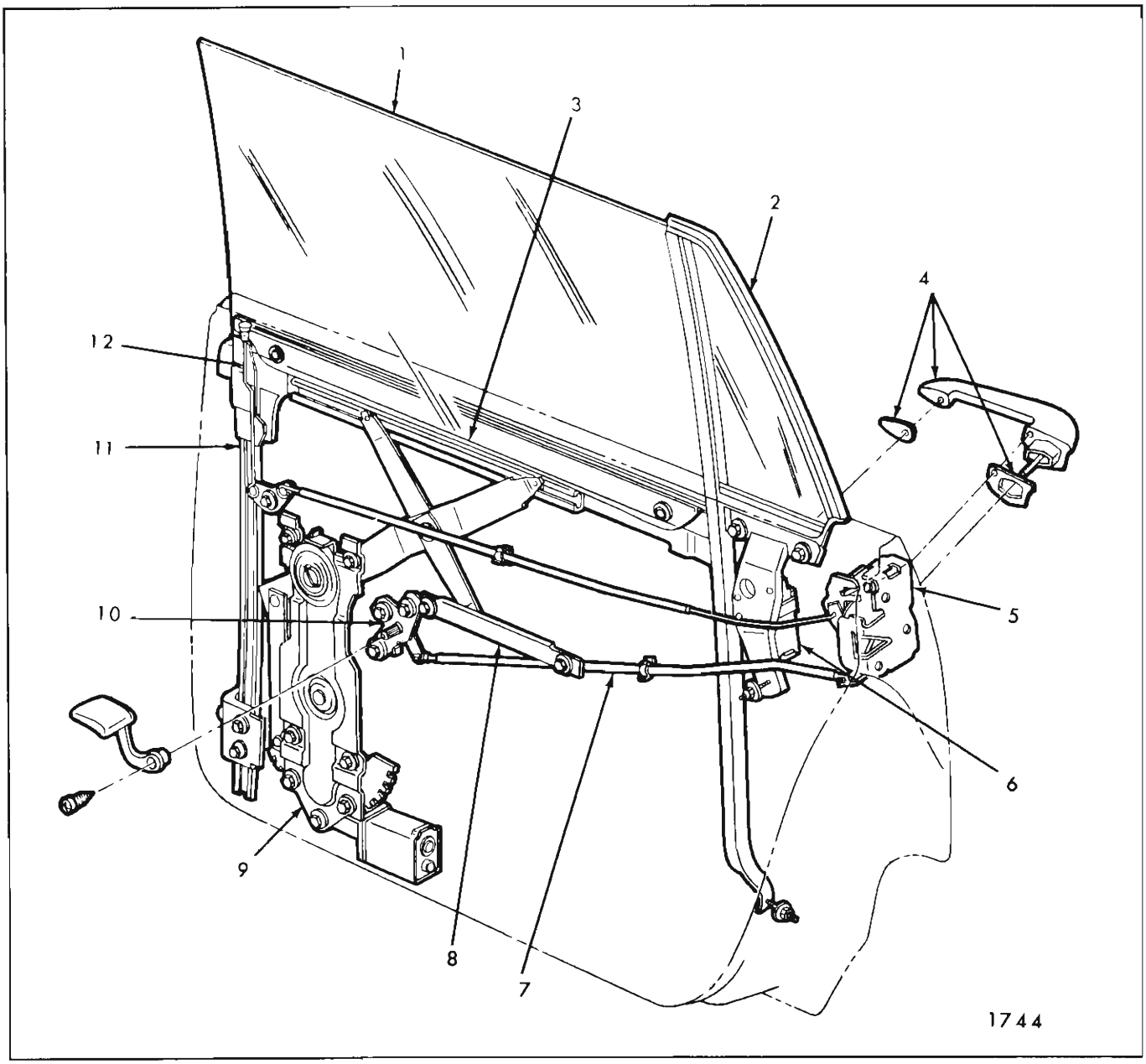


Fig. 1D56—Rear Door Hardware - 68069 Style

1. Window Assembly
2. Ventilator Assembly
3. Lower Sash Channel Cam
4. Outside Handle and Sealing Gaskets
5. Door Lock
6. Ventilator Regulator (Power Operated)
7. Remote Control Connecting Rod
8. Inner Panel Cam
9. Window Regulator (Power Operated)
10. Remote Control
11. Window Front Guide
12. Inside Locking Rod

2. Apply a coat of heavy-bodied sealer to surface of hinge that mates with door or center pillar.

3. With the aid of a helper, lift door into position and loosely install hinge screws. Align hinges within pencil marks previously made and tighten hinge screws.

4. Install all previously removed parts and check door for proper alignment.

Adjustments

In-or-out and up-or-down adjustment is available at the door side hinge attaching screws. Fore-or-aft and a slight up-or-down adjustment is available at the body side (center pillar) hinge attaching screws.

CAUTION: Depending on the body style, part or all of the upper hinge is made of die-cast aluminum. Therefore, when making adjustments do

not subject hinge to excessive strain that could cause hinge to fail.

REAR DOOR INNER PANEL CAM ALL STYLES

Removal and Installation

1. Remove door trim assembly and inner panel water deflector.

2. Remove inner panel cam attaching bolts (Fig. 1D59). Disengage cam from regulator balance arm roller and remove cam from door.

3. To install, reverse removal procedure. Adjust front end of cam for proper window operation. Correct adjustment of cam will prevent a rotated (cocked) door window.

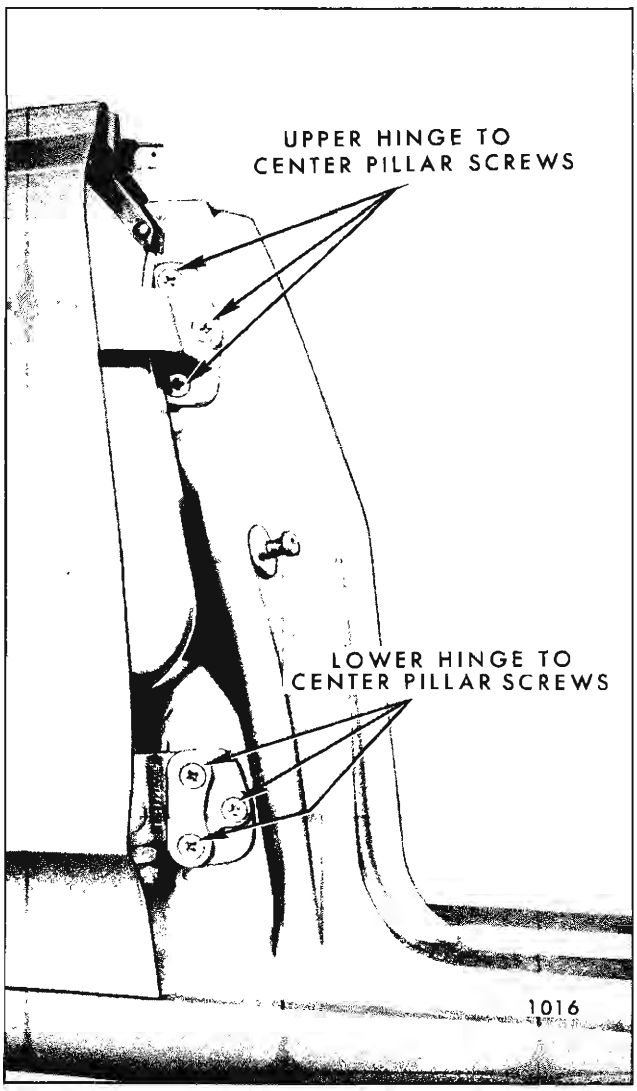


Fig. 1D57—Rear Door Hinge Attachment

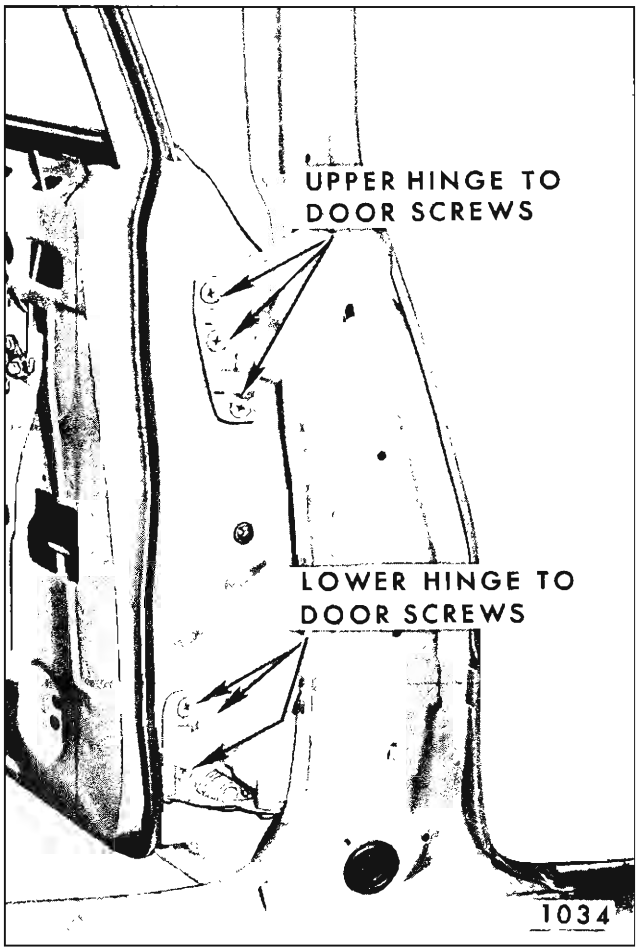


Fig. 1D58—Rear Door Hinge Attachment

REAR DOOR WINDOW ASSEMBLY "35"-"45"-"69" STYLES EXCEPT 38-48-68000 SERIES

Removal and Installation

1. Remove door trim assembly and inner panel water deflector.

2. On 35000 series "69" styles, lower window approximately 3" down from full-up position. Remove lower sash channel rear guide plate attaching screws through upper rear access hole and remove guide plate (Fig. 1D59).

3. Operate window to position shown in Figure 1D59 and remove lower sash channel cam attaching screws (window slightly down on electric styles and full down on manual).

4. Pivot window in opening (raise front edge) to disengage front and rear edges of glass from glass run channel, then remove window outboard of door upper frame.

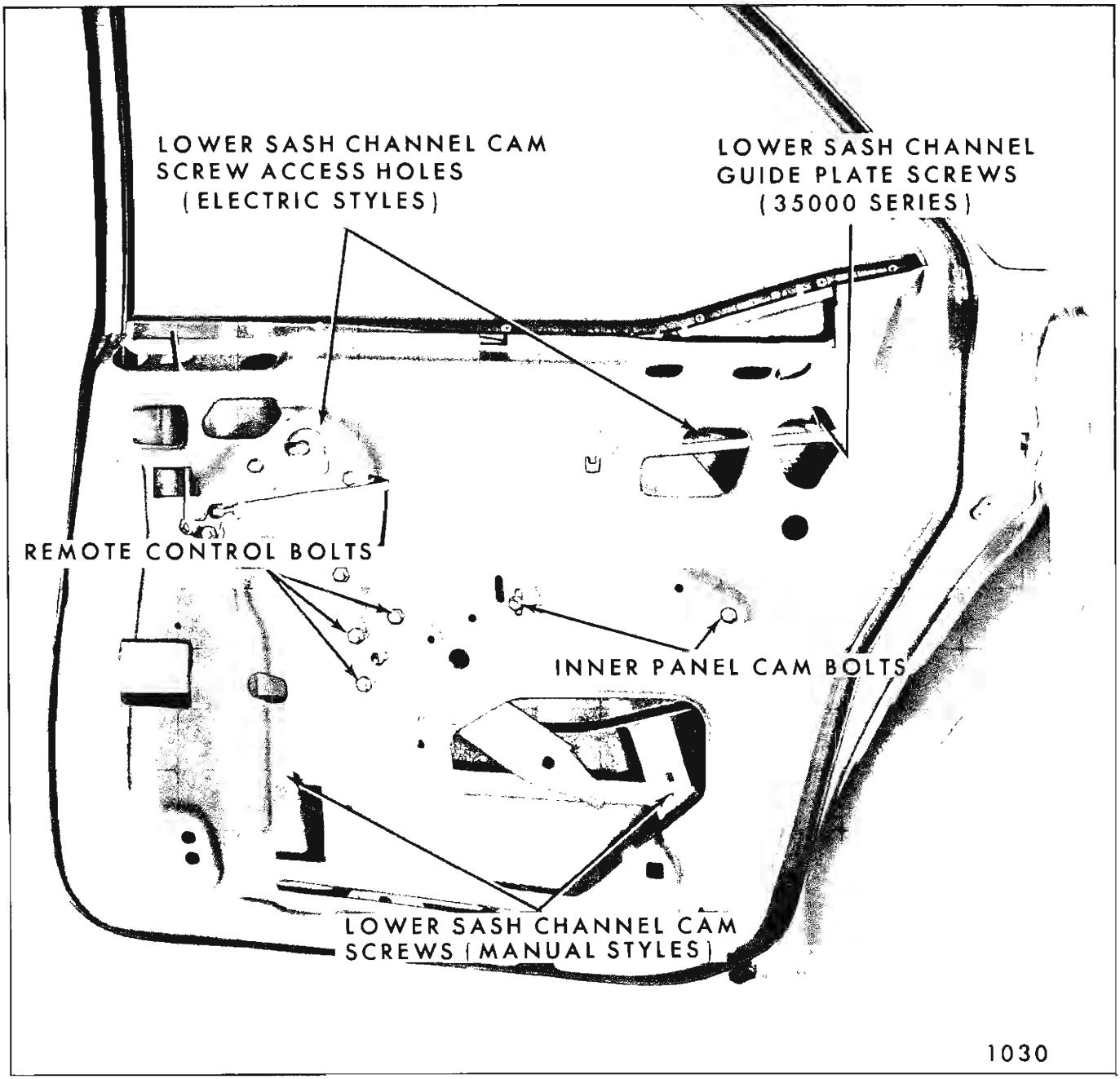


Fig. 1D59—Rear Door Hardware Attachment

5. To install, reverse removal procedure.

REAR DOOR WINDOW ASSEMBLY ALL "39" STYLES AND ALL 38-48-68000 SERIES "69" STYLES EXCEPT 68069

The rear door window assembly consists of a frameless piece of solid tempered safety plate glass and a bolt-on lower sash channel. With this design, the window is removed from the door as an assembly and door glass replacement made in a bench operation.

Figures 1D60 and 1D61 are exploded views of the "39" and "69" style (except 68069 style) rear door window assemblies and identify the specific components and their assembly sequence.

NOTE: When replacing door glass, replace glass to sash channel spacers. When installing glass to sash channel nuts, do not exceed torque of 50 inch lbs. (4 foot lbs.).

Removal and Installation

1. Remove door trim assembly and inner panel water deflector.

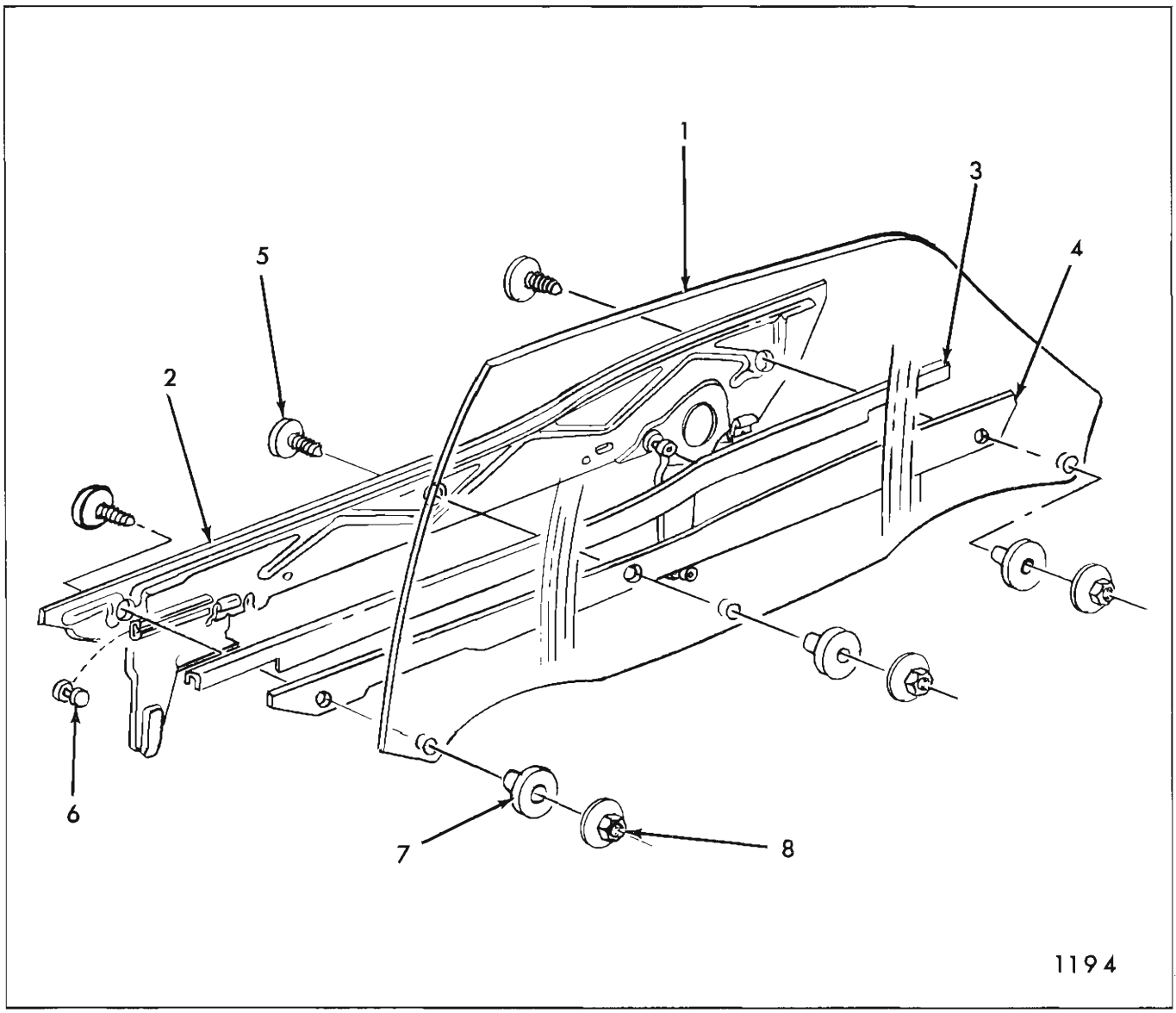


Fig. 1D60—Rear Door Window Assembly 38-48-68000 Series Except 68069

1. Rear Door Window Assembly
2. Lower Sash Channel Assembly
3. Lower Sash Channel Upper Outer Filler
4. Lower Sash Channel Lower Outer Filler
5. Glass to Lower Sash Channel Bolts
6. Lower Sash Channel Front Cam Roller
7. Glass to Lower Sash Channel Spacers
8. Glass to Lower Sash Channel Nuts

2. Loosen front and rear upper stop attaching bolts "D" and "E" (Fig. 1D62) and rotate stops into vertical position (Fig. 1D63).

3. Loosen front and rear guide upper attaching bolts "A" and "C" and lower adjusting stud nuts "F" and "H" (Fig. 1D62).

4. Operate window to required position as shown in Figure 1D62 and remove rear lower sash channel cam attaching screws at "B" or "G". (Window almost full-down for manual styles, and almost full-up for electric styles).

NOTE: On electric styles it is necessary to remove electric switch plastic cover from inner panel to gain access to sash channel cam front attaching screw.

5. Lift window and remove it from door at belt line.

6. To install, reverse removal procedure. Adjust guides and wedge plates for proper window operation as described below.

Adjustments

1. To adjust the top of the door glass in-or-out

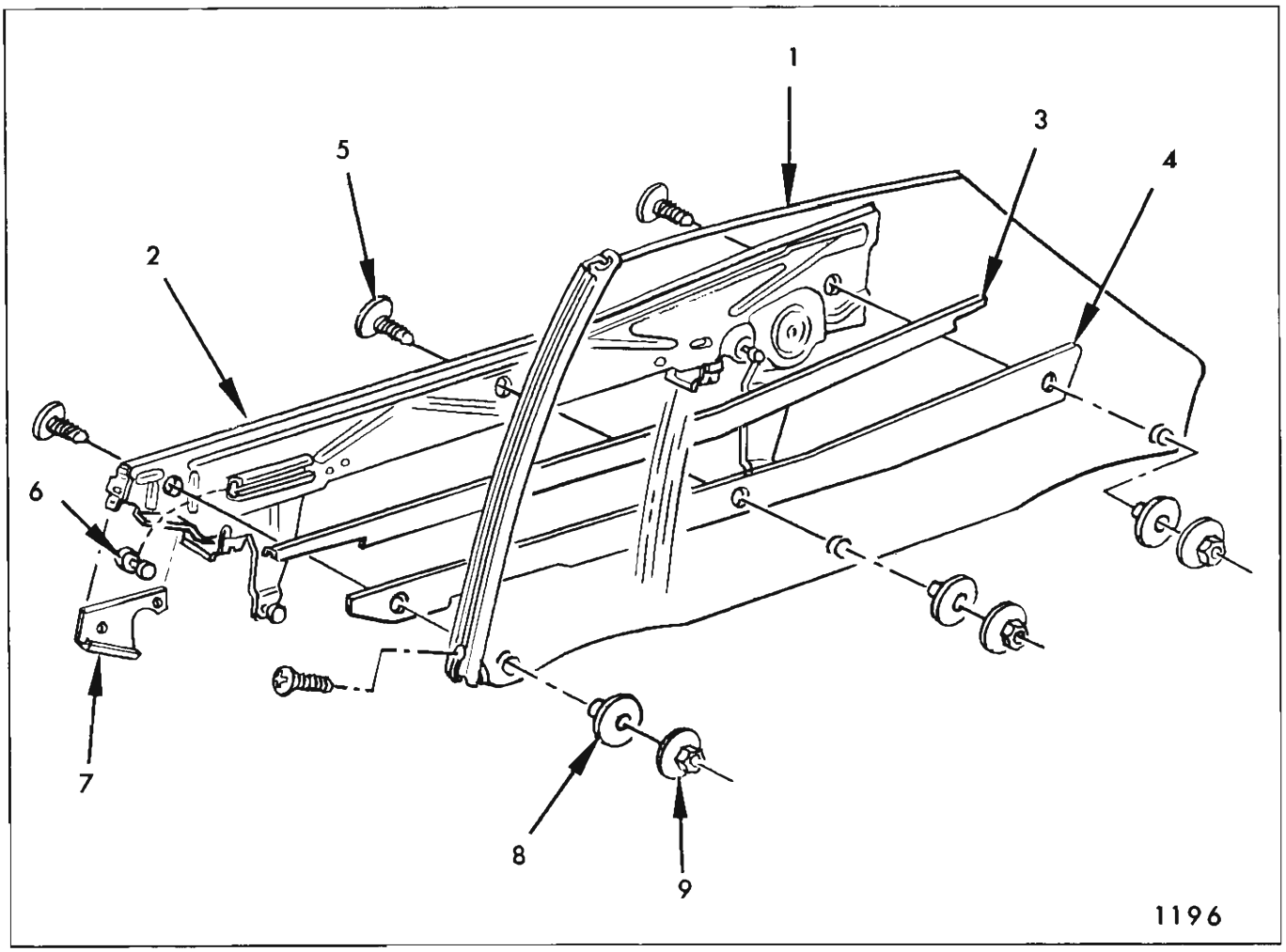


Fig. 1D61—Rear Door Window Assembly - "39" Styles

1. Rear Door Window Assembly
2. Lower Sash Channel Assembly
3. Lower Sash Channel Upper Filler
4. Lower Sash Channel Lower Filler
5. Glass to Lower Sash Channel Bolts
6. Lower Sash Channel Front Cam Roller
7. Lower Sash Channel Front Filler Plate
8. Glass to Lower Sash Channel Spacer
9. Glass to Lower Sash Channel Nuts

in relation to the side roof rail weatherstrip, loosen the front and rear guide lower adjusting stud nuts "F" and "H" (Fig. 1D62). Adjust studs in-or-out as required and tighten stud nuts.

2. To adjust window assembly fore-or-aft, or in-or-out, loosen front and rear guide upper attaching bolts "A" and "C" and lower adjusting stud nuts "F" and "H" (Fig. 1D62). Position window as desired and tighten guide attachments.

3. To correct a window that is rotated (cocked) in the opening, loosen inner panel cam attaching bolts "I" (Fig. 1D62). Adjust front of cam up-or-down as required and tighten bolts.

4. To adjust front or rear edge of glass in-or-out, loosen front or rear guide upper attaching bolts "A" and "C" (Fig. 1D62). Adjust guide in-or-out as required and tighten bolts.

5. To obtain proper up-travel of window for good contact with side rool rail weatherstrip, loosen front and rear upper stop attaching bolts "D" and "E" (Fig. 1D62). Operate window to desired up position. Then, tighten stop bolts while exerting slight downward force on stops.

NOTE: Upper stop adjustment can correct a slightly rotated (cocked) window, however, for major adjustment of this type, use inner panel cam adjustment.

REAR DOOR WINDOW ASSEMBLY 68069 STYLE

The rear door window assembly consists of a frameless piece of solid tempered safety plate glass and a bolt-on lower sash channel assembly.

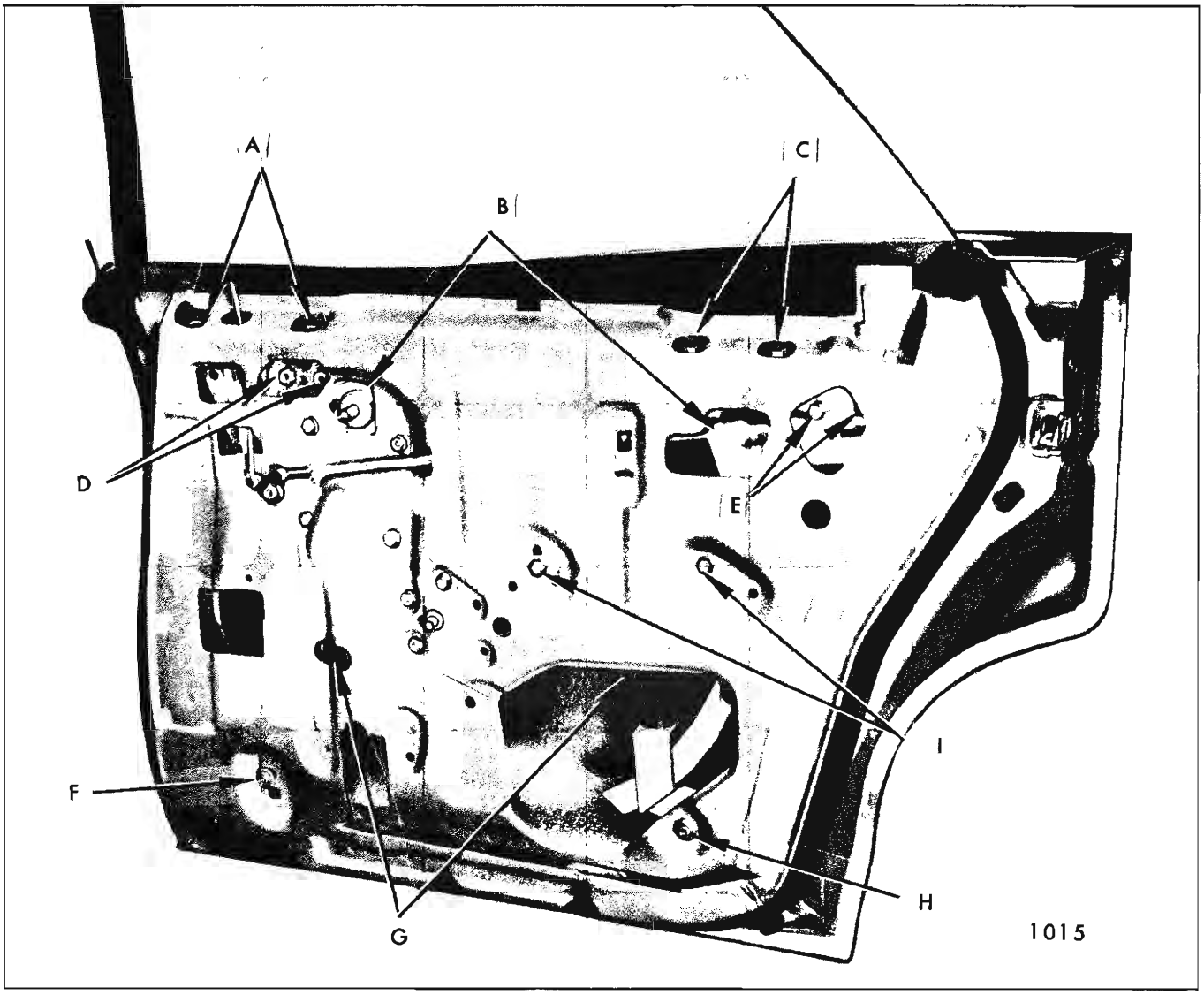


Fig. 1D62—Rear Door Hardware Attachment

A. Front Guide Upper Bolts
B. Lower Sash Channel Cam Screw Access Holes (Electric)
C. Rear Guide Upper Bolts
D. Front Upper Stop Bolts
E. Rear Upper Stop Bolts
F. Front Guide Lower Adjusting Stud Nut
G. Lower Sash Channel Cam Screw Access Holes (Manual)
H. Rear Guide Lower Adjusting Stud Nut
I. Inner Panel Cam Bolts

With this design, the window is removed as an assembly and door glass replacement made in a bench operation.

Figure 1D64 is an exploded view of the rear door window and identifies the various components and their assembly sequence.

NOTE: When replacing door glass, replace glass to sash channel spacers. When installing nuts on glass to sash channel attaching bolts, do not exceed torque of 50 inch lbs. (4 foot lbs.).

Removal and Installation

1. Remove rear door trim assembly and inner panel water deflector.

2. With glass in full-up position, remove front and rear up-travel stop attaching bolts, two bolts on front stop, one on rear (Figs. 1D65 and 1D66).

3. Lower glass approximately 2" and remove lower sash channel cam attaching screws (Fig. 1D67).

4. While supporting glass by pressing it rearward into ventilator division channel, remove lower sash channel to guide plate attaching nuts (Fig. 1D66).

5. Disengage lower sash channel from weld-on studs on sash channel guide plate and remove window assembly from door.

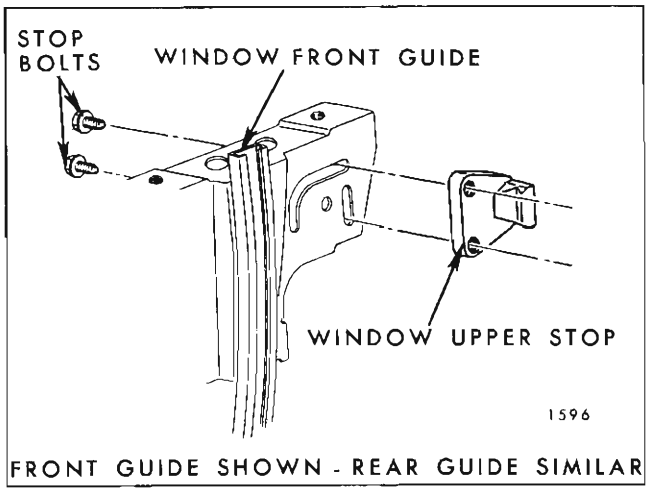


Fig. 1D63—Window Upper Stop Attachment

6. To install, reverse removal procedure. Adjust window for proper operation and alignment as described under "Rear Door Window and/or Ventilator Adjustments".

REAR DOOR VENTILATOR REGULATOR 68069 STYLE

Removal and Installation

1. Remove door trim assembly and inner panel water deflector. Operate door glass to full-up position.

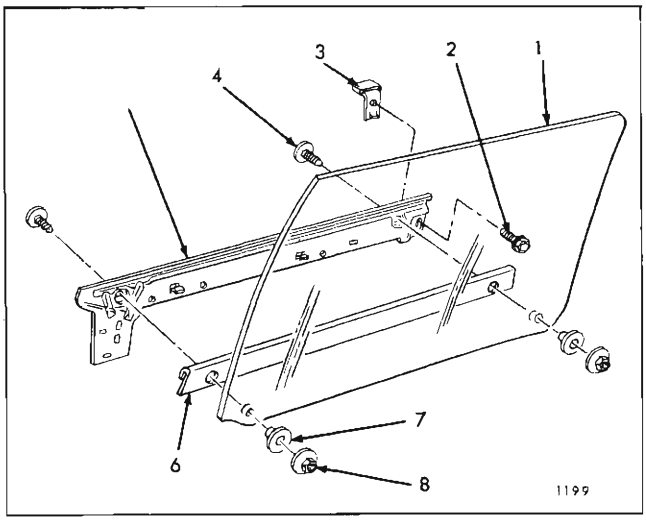


Fig. 1D64—Rear Door Window Assembly - 68069 Style

1. Door Window Glass
2. Rear Stop to Sash Channel Screw
3. Window Rear Stop
4. Glass to Lower Sash Channel Bolt
5. Window Lower Sash Channel
6. Window Lower Sash Outer Filler
7. Glass to Lower Sash Channel Spacer
8. Glass to Lower Sash Channel Nut

2. Disconnect ventilator regulator wire harness connector at regulator motor.

3. Remove ventilator "T-shaft" to regulator attaching bolt (Fig. 1D68).

4. Remove ventilator regulator to ventilator frame attaching bolts (Fig. 1D68).

5. Disengage ventilator regulator from ventilator "T-shaft" and remove regulator through access hole.

6. To install, reverse removal procedure.

REAR DOOR VENTILATOR ASSEMBLY 68069 STYLE

Removal and Installation

1. Remove rear door ventilator regulator as previously described.

2. Remove ventilator lower frame and ventilator division channel lower adjusting stud nuts (Fig. 1D68).

3. Remove ventilator lower frame attaching bolts (Fig. 1D68).

4. Lift ventilator assembly up approximately 3" and remove ventilator lower frame adjusting stud through access hole.

5. Lift ventilator upward and remove from door. Twist ventilator 90° to remove division channel lower adjusting stud at belt.

6. To install, reverse removal procedures. Adjust ventilator for proper operation and alignment as described under "Rear Door Window and/or Ventilator Adjustments".

Ventilator Disassembly:

1. Remove ventilator assembly from door as previously described.

2. Remove ventilator division pillar glass run channel strip assembly by disengaging lower end and pulling strip upward (Fig. 1D69).

3. Remove division pillar to ventilator stationary frame attaching screws (Fig. 1D69).

4. Remove division pillar to ventilator upper frame (and rubber bumper) attaching screw (Fig. 1D69) and separate ventilator frame and division channel.

5. Put ventilator window 90° to ventilator frame. Using hand pressure only, force ventilator downward to disengage ventilator upper pivot from ventilator frame.

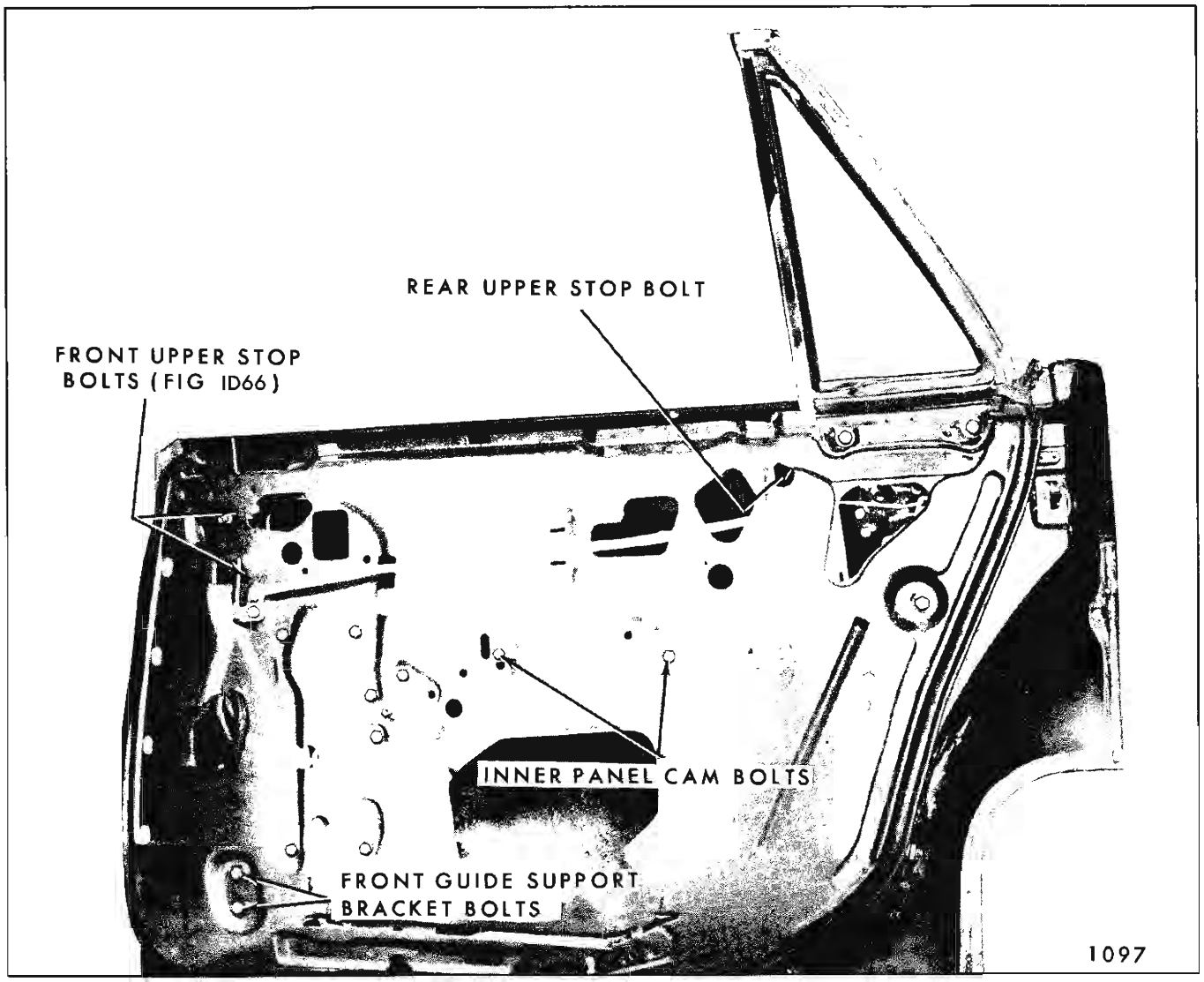


Fig. 1D65—Rear Door Window Removal - 68069 Style

6. Straighten division pillar weatherstrip bend-over tabs (Fig. 1D69) and remove weatherstrip.

7. Pull ventilator weatherstrip from front frame. Three clips retain it down front edge and it may be necessary to pry between weatherstrip and frame at these locations.

8. To assemble, reverse removal procedure.

NOTE: The above procedure covers complete disassembly of the ventilator, which in most cases, will not be required. When servicing a ventilator assembly, select only those steps necessary.

REAR DOOR WINDOW AND/OR VENTILATOR ADJUSTMENTS 68069 STYLE

1. To adjust door window or ventilator assembly in-or-out in relation to side roof rail, adjustment is provided at the following attachments:

a. Door window front guide to support assembly attaching bolt (Fig. 1D70). Access to this bolt can be gained through large access hole.

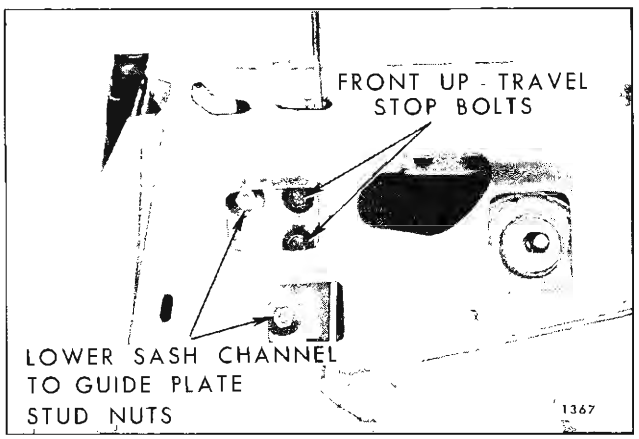


Fig. 1D66—Rear Door Window Removal - 68069 Style

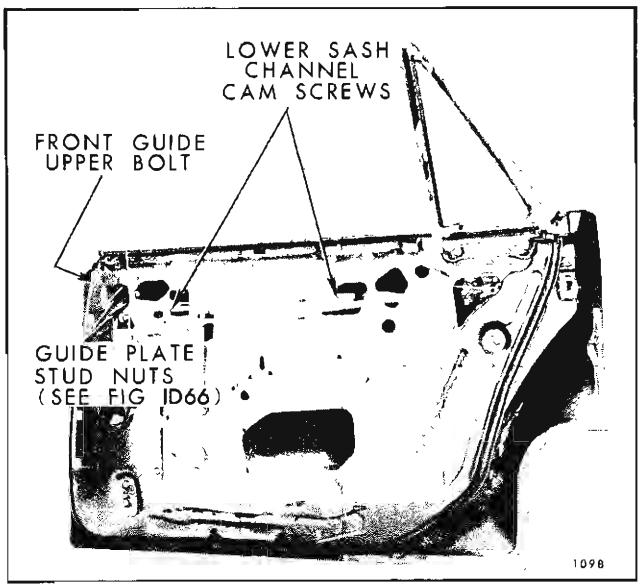


Fig. 1D67—Rear Door Window Removal - 68069 Style

b. Front guide upper attaching bolt (Fig. 1D67).

c. Ventilator division channel and ventilator frame lower adjusting studs (Fig. 1D68).

These attachments can be adjusted in combination or individually to achieve desired adjustment. When adjusting ventilator adjusting studs, loosen ventilator lower frame attaching bolts prior to adjustment, then, retighten after adjustment.

2. To adjust door window fore-or-aft, loosen guide plate to lower sash channel attaching nuts (Fig. 1D66). Adjust window fore-or-aft as required and tighten nuts.

3. To adjust ventilator fore-or-aft, or to rotate it in opening, loosen ventilator attaching bolts, adjusting stud nuts, and "T-shaft" attaching bolt (Fig. 1D68). Position ventilator as required and tighten loosened attachments.

4. To correct a rotated (cocked) window, loosen inner panel cam attaching bolts (Fig. 1D65). Adjust cam as required and tighten bolts.

5. To obtain proper up-travel of door window, loosen front and rear up-travel stop attaching bolts (Fig. 1D65). Operate window to desired position. While exerting upward force on stops, tighten stop attaching bolts.

6. To eliminate a bind between ventilator division channel and front guide (improve operation of a properly adjusted door window), loosen front guide support bracket attaching bolts and front guide to support bracket attaching bolt (Figs. 1D65 and 1D70). Operate glass to full-down position and tighten support bolts. Operate glass 1/3 up from down position and tighten guide to support attaching bolt.

REAR DOOR WINDOW FRONT GUIDE ALL "39" STYLES AND ALL 38-48-68000 SERIES "69" STYLES EXCEPT 68069

Removal and Installation

1. Remove rear door window assembly as previously described.

2. Remove front guide attaching bolts at belt line and lower adjusting stud nut. (Fig. 1D71).

3. Remove inside locking rod connecting link attaching bolt (Fig. 1D71). Disengage guide from inside locking rod and remove guide through access hole.

4. To install, reverse removal procedure. Adjust guide for proper window operation as described in the window adjustment procedure.

REAR DOOR WINDOW REAR GUIDE ALL "39" STYLES AND ALL 38-48-68000 SERIES "69" STYLES EXCEPT 68069

Removal and Installation

1. Remove door trim assembly and inner panel water deflector.

2. Operate window to full-up position.

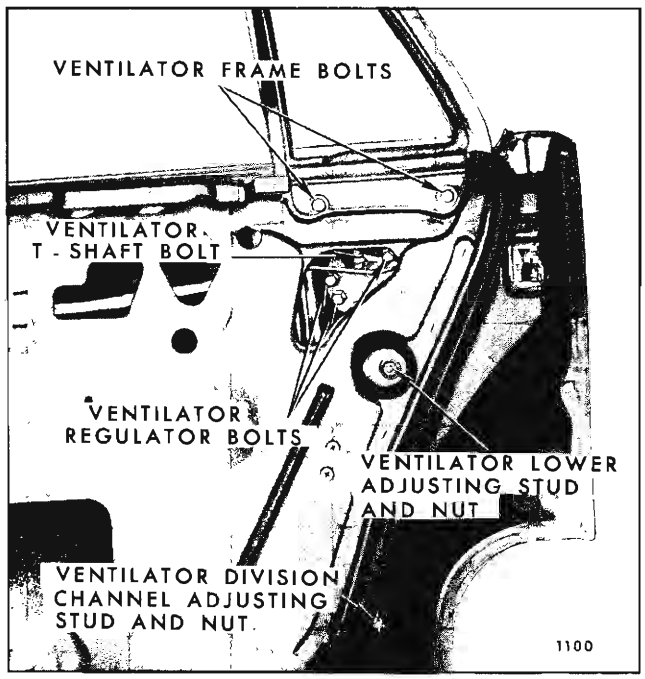


Fig. 1D68—Rear Door Ventilator Attachments

3. Remove rear guide upper attaching bolts (Fig. 1D71 - Locations "A" for 38-48-68000 Series, Locations "B" for remaining styles). Remove rear guide lower adjusting stud nut.

4. Lower guide and swing bottom end forward to disengage guide from rollers on lower sash channel and lower sash channel balance arm.

5. Remove guide, upper end first, through large access hole.

6. To install, reverse removal procedure. Adjust guide for proper window operation as described in the door window adjustment procedure.

REAR DOOR WINDOW GLASS RUN CHANNEL ALL "35"-"45"-"69" STYLES EXCEPT 38-48-68000 SERIES

Removal and Installation

1. Remove rear door window assembly as previously described.

2. Remove glass run channel front attaching bolt located on door hinge pillar (arrow "B", Fig. 1D72).

3. On 45-46000 series, remove glass run channel rear lower attaching bolt located on door lock pillar (arrow "A", Fig. 1D72).

4. Working through large access hole, remove glass run channel rear attaching bolts (Fig. 1D73 - one bolt for 45-46000 series, two bolts for remaining styles).

5. Pull run channel into window opening to disengage run channel clips from door upper frame and remove run channel from door.

6. To install, reverse removal procedure. Prior to installation, apply a continuous bead of caulking compound to door upper frame from beltline to belt line to effect a weathertight seal between door frame and run channel. If preferred, sealer can be applied to run channel rather than door upper frame.

REAR DOOR FRONT GUIDE AND GUIDE PLATE 68069 STYLE

Removal and Installation

1. Remove rear door trim assembly and inner panel water deflector.

2. Operate window to full-up position.

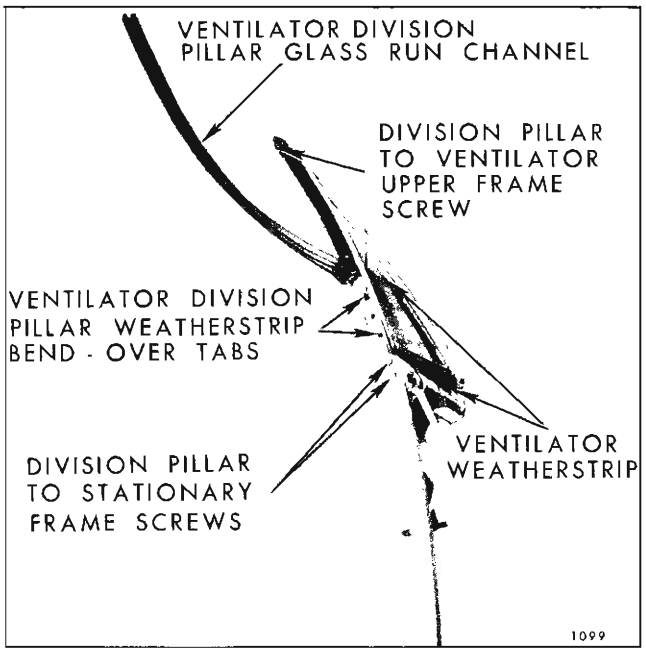


Fig. 1D69—Rear Door Ventilator Assembly - 68069 Style

3. Remove front upper stop attaching bolts and remove stop (Fig. 1D65).

4. Remove front guide support bracket attaching bolt (Fig. 1D65).

5. Remove front guide upper attaching bolt (Fig. 1D67).

6. Remove guide plate to lower sash channel attaching stud nuts (Figs. 1D67 and 1D66).

7. Remove front guide and guide plate as an assembly through access hole (Fig. 1D74).

8. To install, reverse removal procedure. Adjust front guide for proper window operation as described in door window adjustment procedure.

REAR DOOR WINDOW REGULATOR— MANUAL AND ELECTRIC ALL STYLES

Removal and Installation

1. Remove rear door trim assembly and inner panel water deflector.

2. Remove lower sash channel cam attaching screws (Fig. 1D76 for "closed" styles, 1D75 for "hardtop" styles).

While supporting glass, disengage cam from rollers on regulator lift and balance arms and remove cam.

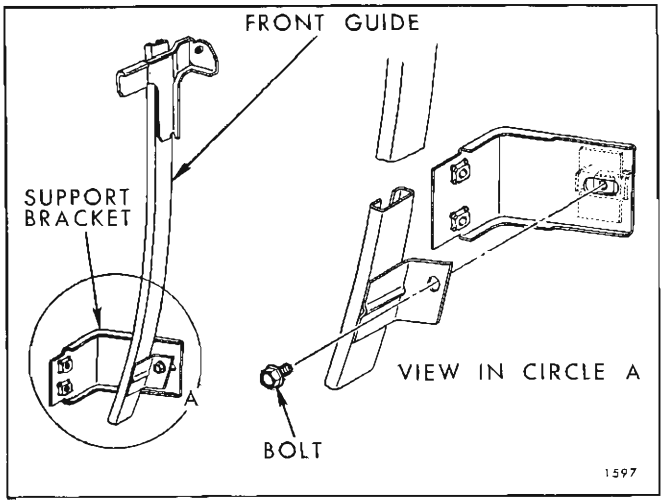


Fig. 1D70—Front Guide to Support Bracket Attachment - 68069 Style

3. Raise window and prop it in full-up position.

4. Remove inner panel cam attaching bolts (Fig. 1D76 for closed styles, Fig. 1D75 for "hardtop" styles).

5. On styles equipped with electric window regulators, disconnect body wire harness from window regulator at window regulator motor.

6. Remove window regulator attaching bolts and remove regulator through large access hole. (Figs. 1D75 and 1D76).

REAR DOOR WINDOW REGULATOR ELECTRIC MOTOR ASSEMBLY ALL STYLES

The electric motor assembly which powers the

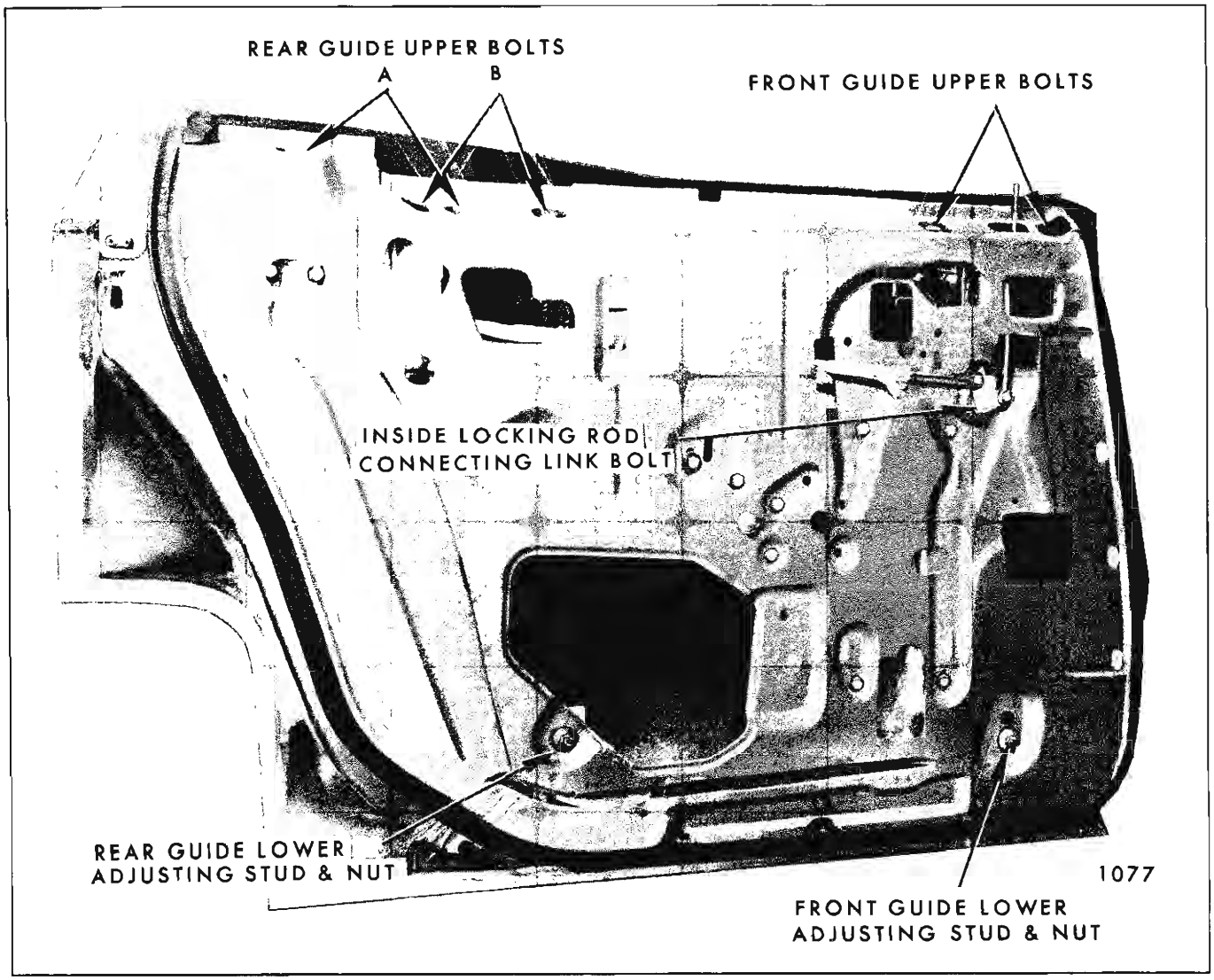


Fig. 1D71—Rear Door Window Guides

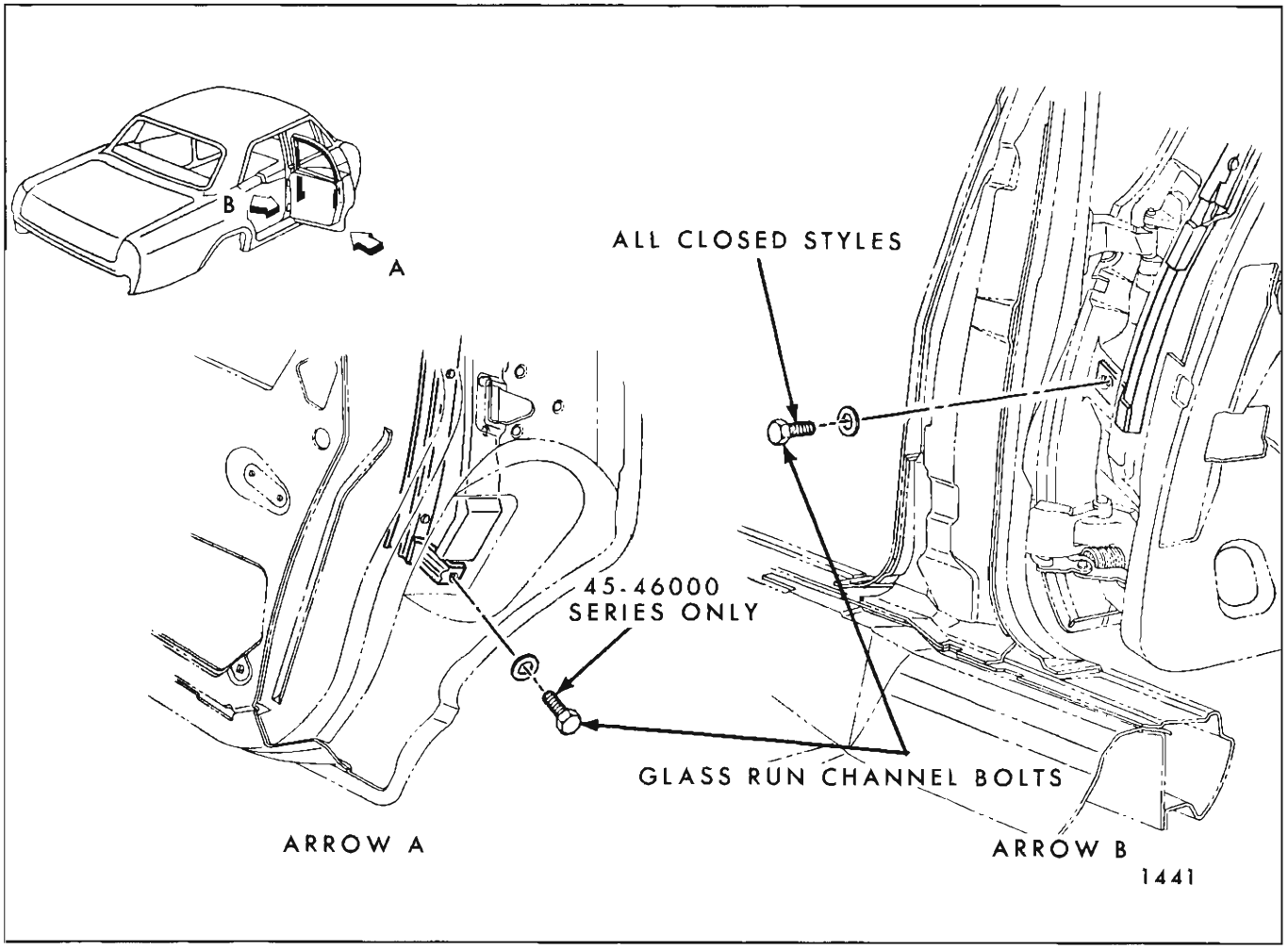


Fig. 1D72—Rear Door Window Glass Run Channel Retention

window regulator on electrically-operated windows is a 12-volt reversible motor with a built-in type circuit breaker and a self-locking gear drive. The motor is attached to the regulator assembly with bolts.

Removal and Installation

1. Remove electric window regulator assembly from door and/or rear quarter and clamp securely in vise (see Fig. 1D77).

NOTE: The position of the regulator clamped in the vise will vary with type of regulator and position of lift arm.

CAUTION: BE SURE TO PERFORM STEPS 2 and 3 BEFORE ATTEMPTING TO REMOVE MOTOR FROM REGULATOR. The regulator lift arm, which is under tension from the counterbalance spring, can cause serious injury if the motor is removed without locking the sector gear in position.

2. Drill a 1/4" hole through regulator sector gear and back plate. The exact point of this hole will be dependent on the position of the regulator lift arm.

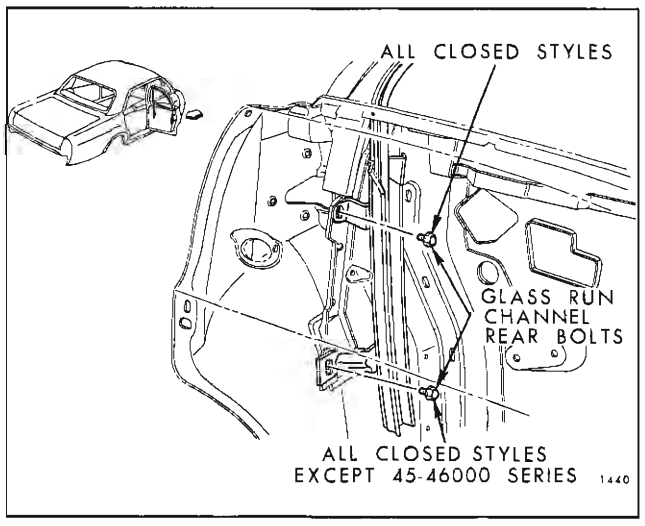


Fig. 1D73—Rear Door Window Glass Run Channel Retention

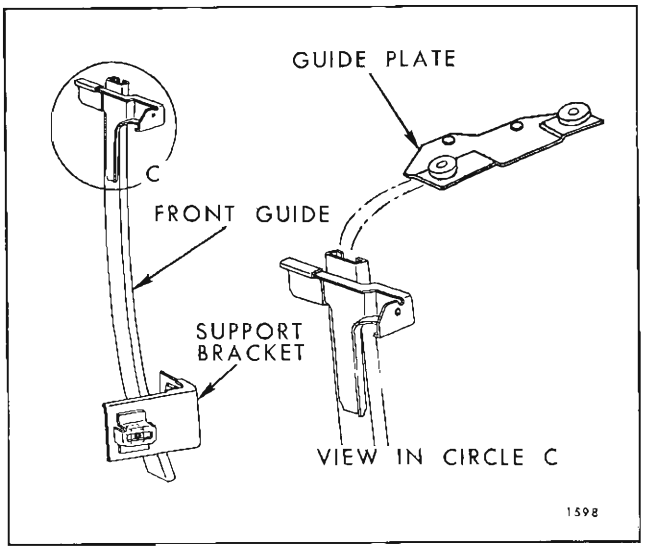


Fig. 1D74—Rear Door Front Guide and Guide Plate - 68069 Style

IMPORTANT: DO NOT drill into the motor housing, part of which is indicated by the dotted line illustrated in Figure 1D77. In addition, locate hole a sufficient distance from edge of sector gear to insure proper retention of sector gear to back plate.

3. Insert a 3/16" bolt through hole in back plate and sector and install nut to bolt (do not tighten nut).

4. Remove motor attaching bolts and remove motor assembly from regulator (see Fig. 1D77).

NOTE: Clean off steel chips from regulator sector and motor pinion gear after drilling operation.

5. To install, reverse removal procedure. If difficulty is encountered when trying to line up motor assembly attaching holes, the regulator lift arm may be moved up or down manually so that motor

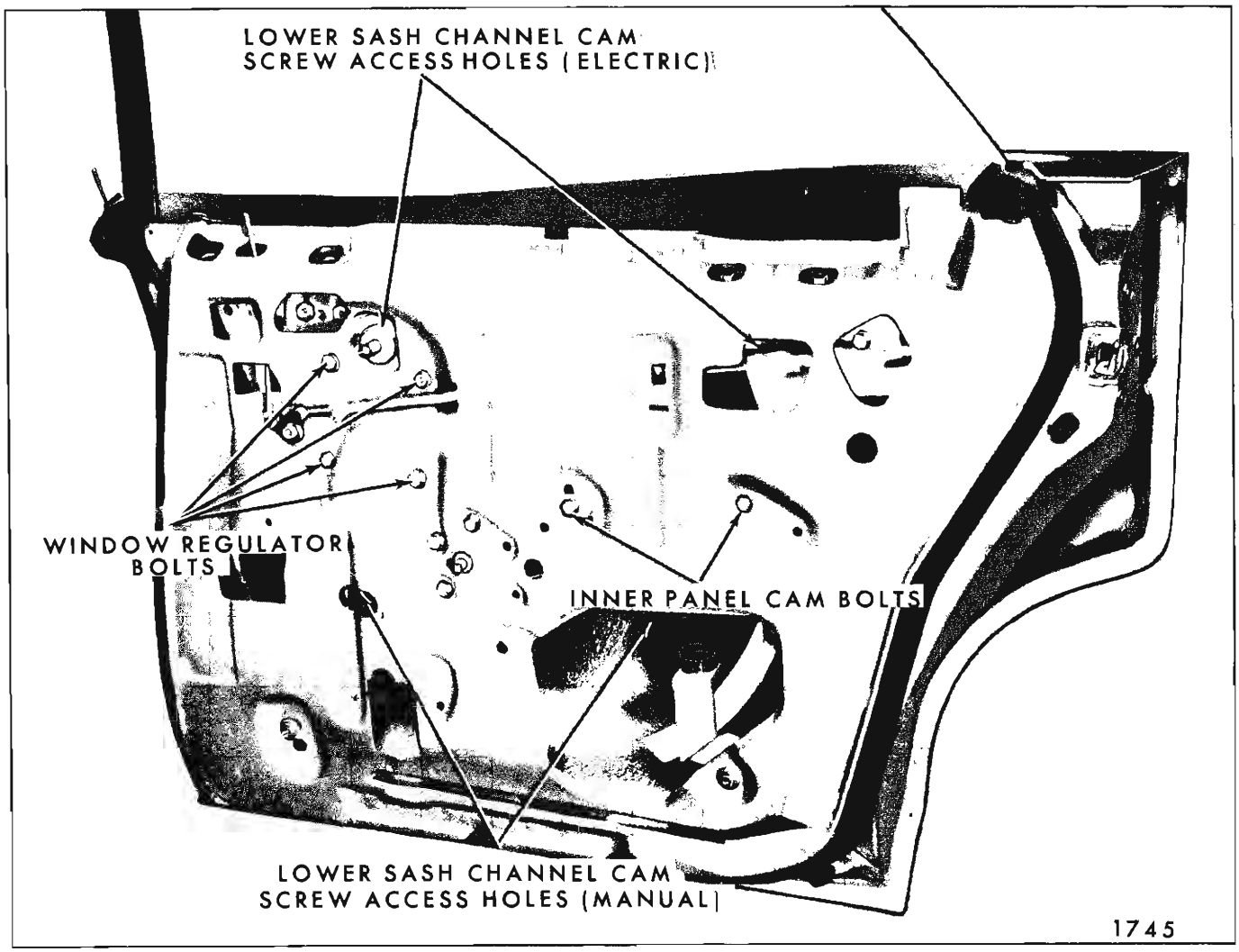


Fig. 1D75—Window Regulator Removal

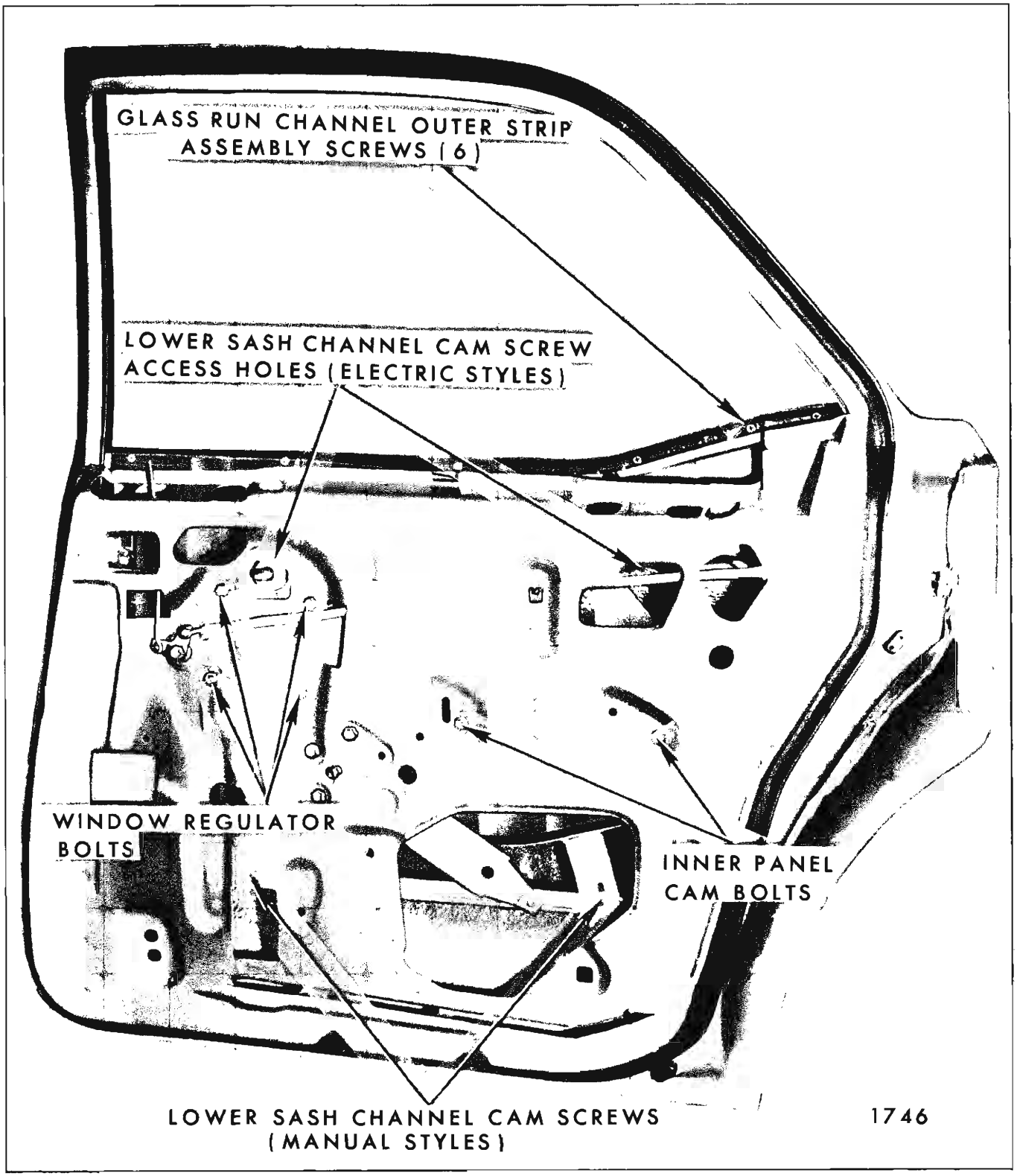


Fig. 1D76—Window Regulator Removal

pinion gear will mesh with teeth on regulator sector gear, and regulator attaching holes will line up.

NOTE: Be sure to remove temporary nut and bolt from regulator before installing it into door or rear quarter panel.

REAR DOOR LOCK REMOTE CONTROL ALL STYLES

Removal and Installation

1. Remove rear door trim assembly and inner panel water deflector.

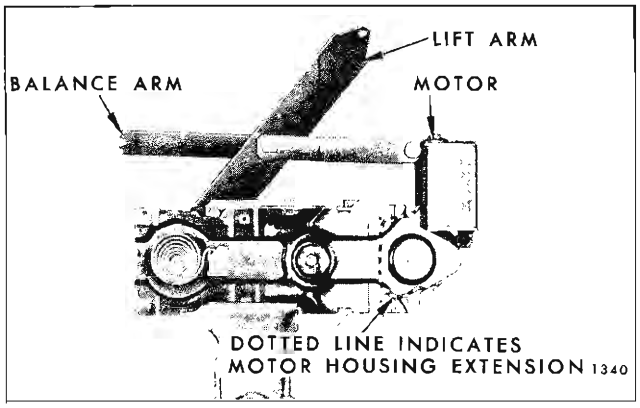


Fig. 1D77—Door Window Regulator and Electric Motor Assembly

2. Remove remote control attaching bolts (Fig. 1D78).

3. Pivot remote to disengage it from remote control to lock connecting rod and remove remote control from door.

4. To install, reverse removal procedure. Make certain anti-rattle clip on lock connecting rod is properly positioned.

REAR DOOR LOCK ASSEMBLY "35"-"45"-"69" STYLES EXCEPT 38-48-68000 SERIES

Removal and Installation

1. Remove rear door trim assembly and inner panel water deflector.

2. Remove door lock remote control.

3. Remove inside locking rod to lock connecting rod link attaching bolt (Fig. 1D78)

4. Remove lock attaching screws (Fig. 1D79-hardtop style shown, closed styles similar).

5. Disengage connecting rods from clips on door lock (for clip disengagement refer to "Door Lock Spring Clips" in Front and Rear Door section) and remove lock from door.

6. To install, reverse removal procedure. Check lock for proper operation prior to installing water deflector.

REAR DOOR LOCK ASSEMBLY ALL "39" STYLES AND 38-48-68000 SERIES "69" STYLES EXCEPT 68069

Removal and Installation

1. Remove door trim assembly and inner panel water deflector.

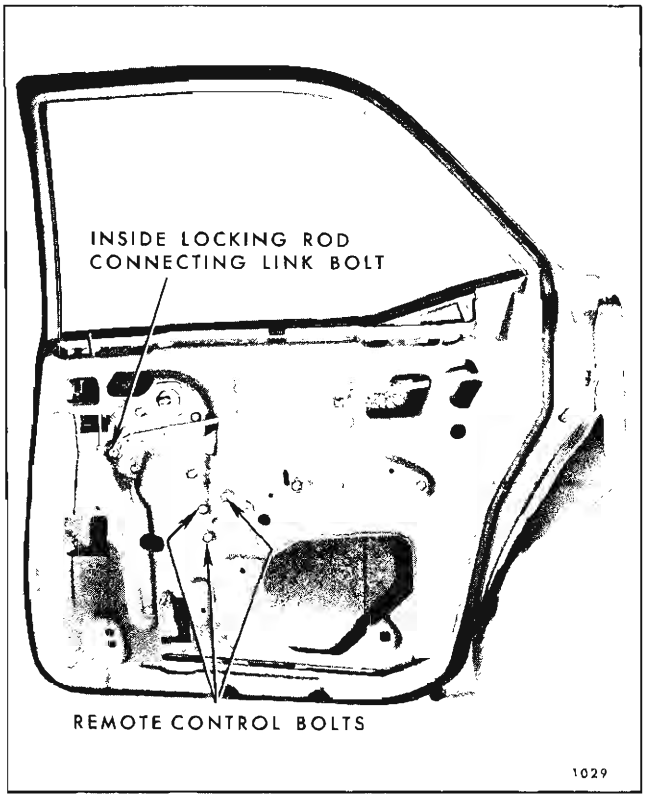


Fig. 1D78—Door Lock Remote Control

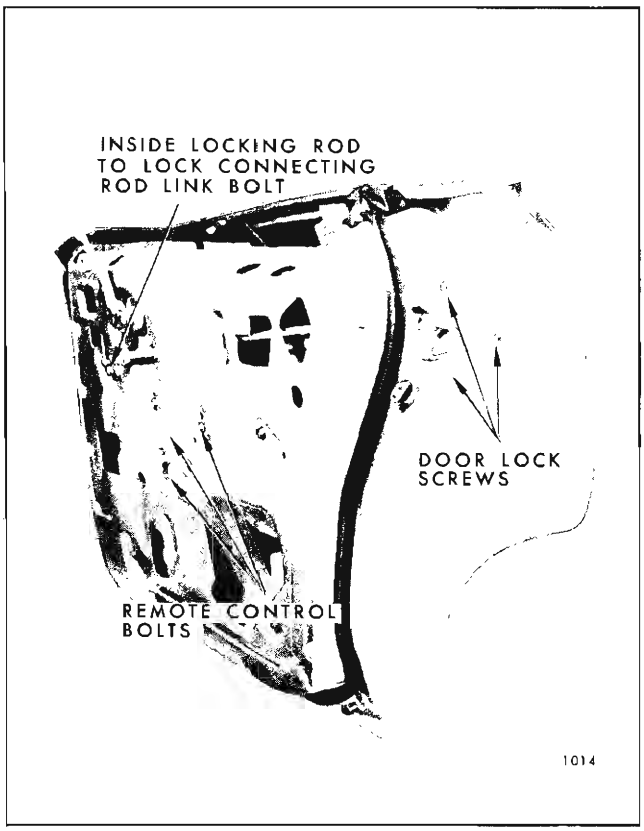


Fig. 1D79—Rear Door Lock Removal

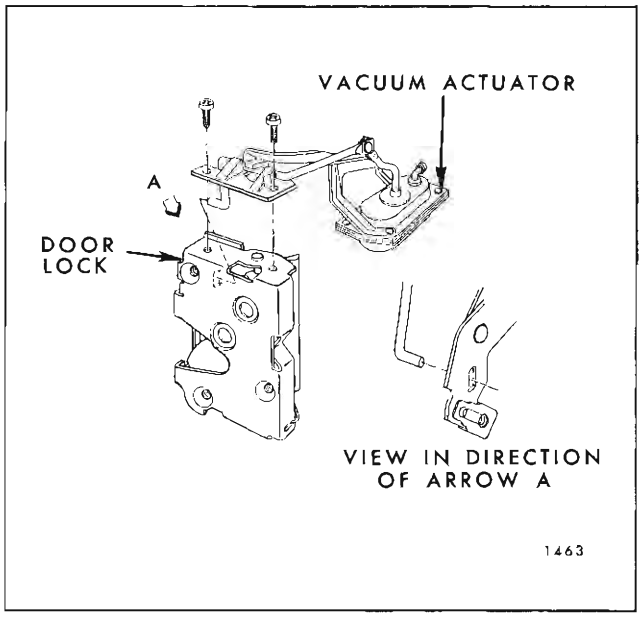


Fig. 1D80—Rear Door Vacuum Lock Actuator Attachment

2. Operate glass to full-up position.

3. Working through access hole, disengage lock connecting rods from spring clips on door lock (for clip disengagement refer to "Door Lock Spring Clips" in Front and Rear Door Section).

4. Remove door lock attaching screws (Fig. 1D79) and remove lock from door.

5. To install, reverse removal procedure.

NOTE: On styles equipped with vacuum lock actuators (except 68069 styles), disconnect vacuum hoses from actuator and remove lock and actuator as an assembly. Vacuum actuator is attached to lock with screws which can be removed only in a bench operation (Fig. 1D80).

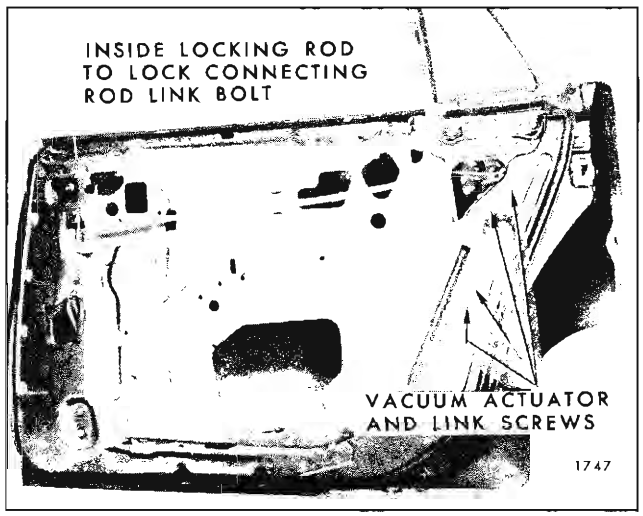


Fig. 1D81—Vacuum Lock Actuator, and Link Assembly Removal

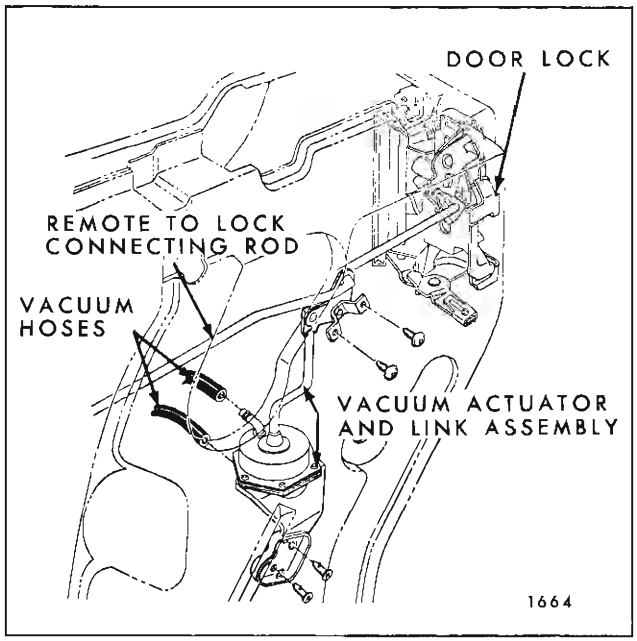


Fig. 1D82—Rear Door Vacuum Lock Actuator and Link Assembly - 68069 Style

REAR DOOR LOCK VACUUM ACTUATOR 68069 STYLE

Removal and Installation

1. Remove door trim assembly and inner panel water deflector.

2. Disconnect inside locking rod from door lock spring clip (Refer to Front and Rear Door section under "Door Lock Spring Clips" for disengagement).

3. Remove inside locking to lock connecting rod link bolt (Fig. 1D81).

4. Disconnect vacuum hoses from vacuum actuator.

5. Remove vacuum actuator and link assembly attaching screws (Figs. 1D81 and 1D82).

6. Pivot (rotate) actuator and linkage assembly, then, pull connecting rod forward through linkage. Remove actuator assembly from door.

7. To install, reverse removal procedure. Check lock operation prior to installing water deflector.

GLASS RUN CHANNEL OUTER STRIP ASSEMBLY (AT BELT)

Removal and Installation

1. Remove door trim assembly and inner panel water deflector.

2. Remove rubber bumper from door window lower stop and operate window to full-down position.

3. Remove screws securing glass run channel outer strip assembly to door outer panel return flange (Fig. 1D76) and remove strip assembly.

4. To install, reverse removal procedure.

REAR QUARTER

TRIM

REAR QUARTER TRIM ASSEMBLY "11" STYLES

Removal and Installation

1. Remove the applied type rear quarter arm rest and window regulator inside handle (manual styles) as outlined in the door section of the Body Service Manual.

2. Remove rear seat cushion and seat back assemblies as outlined in the "Seat" section of the Body Service Manual.

3. Remove rear quarter window garnish moldings.

4. With tool J-6335, or any other suitable flat-bladed tool, pry rear quarter trim assembly retaining nails from tacking strip; then lift trim assembly upwards to disengage from retainers at top of rear quarter inner panel and remove assembly from quarter panel.

NOTE: On styles with electrically-operated windows, disengage trim assembly from retainers at top of inner panel; then disconnect window switch junction block from switch and remove trim assembly.

5. To install rear quarter trim assembly, reverse removal procedure.

REAR QUARTER ARM REST ASSEMBLY "37" AND "57" STYLES

Removal and Installation

1. Remove rear seat cushion, seat back, and seat back filler panel.

2. Remove attaching screws at front and rear of arm rest.

3. On styles with electrical devices in arm rest assembly, carefully detach arm rest from rear quarter inner panel sufficiently to disconnect wire harness connectors. Figures 1E-1 and 1E-2 are indicative of electrical installations in rear quarter arm rests.

4. Remove arm rest assembly from rear quarter panel.

5. To install arm rest assembly, reverse removal procedure. Check operation of any electrical devices.

REAR QUARTER TRIM ASSEMBLY "37" AND "57" STYLES

Removal and Installation

1. Remove rear seat cushion and seat back assemblies.

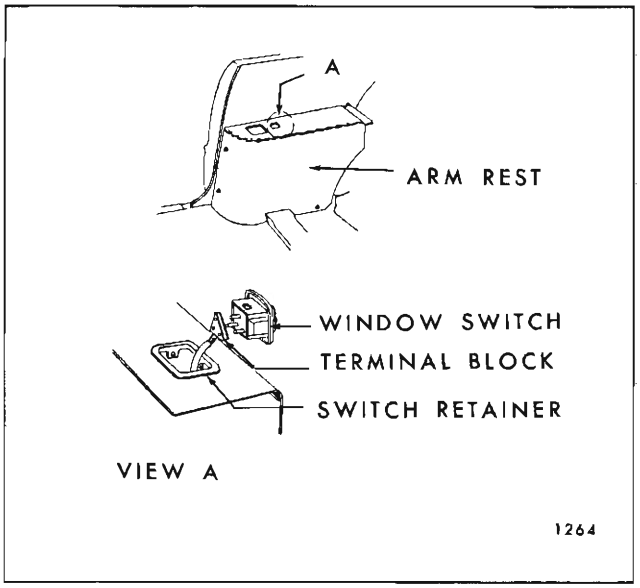


Fig. 1E1—Rear Quarter Arm Rest Assembly

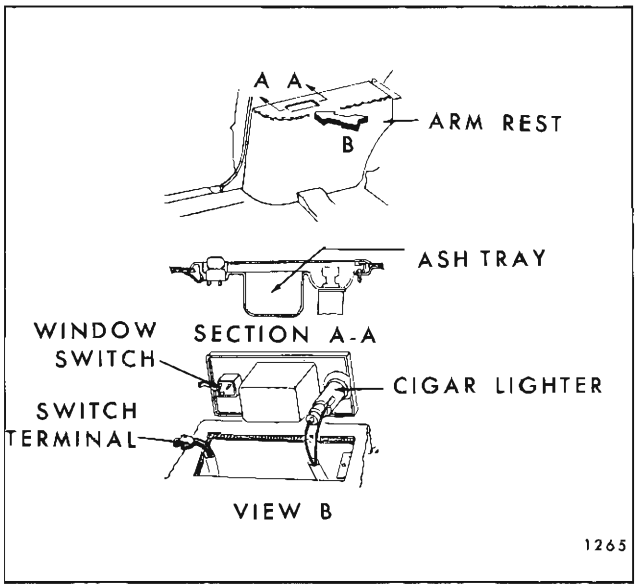


Fig. 1E2—Rear Quarter Arm Rest Assembly

2. Remove rear quarter arm rest assembly. Remove quarter belt finishing moldings where present.

3. On styles with manually-operated windows, remove window regulator handle and anti-friction washer.

4. Remove screws securing rear quarter filler panel to quarter panel and remove filler panel.

5. Using a trim panel removing tool (No. J-6335), or equivalent, carefully pry trim assembly retaining nails from tacking strip; then lift trim assembly upward to disengage from retainers at top of rear quarter inner panel and remove assembly from body.

6. To install rear quarter trim assembly, reverse removal procedures.

NOTE: If any retaining nails are broken off, they can be replaced with door trim assembly nailing strip replacement tabs which are available as a service part.

FOLDING TOP COMPARTMENT SIDE TRIM PANEL ASSEMBLY "67" STYLES

Removal and Installation

1. Remove rear seat cushion and seat back assemblies.

2. Remove attaching screw securing front and rear of side trim panel.

3. Raise trim panel and move it inboard.

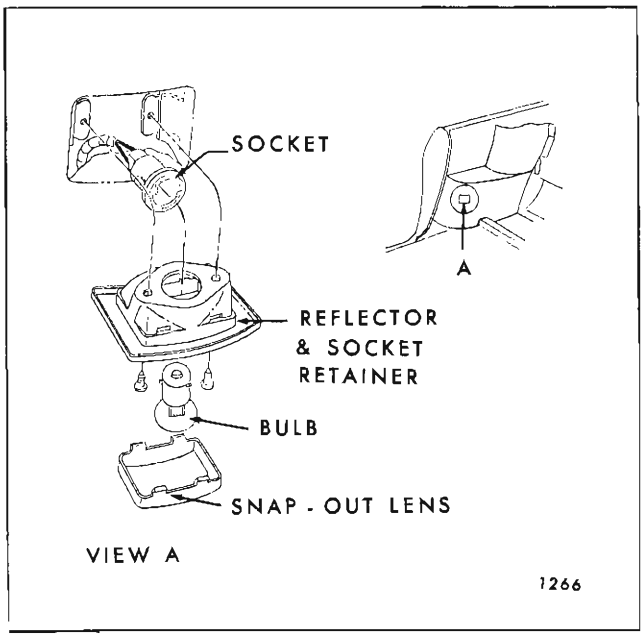


Fig. 1E3—Rear Quarter Arm Rest Lamp Assembly

4. Disconnect electrical leads, where present, and remove side trim panel.

NOTE: On styles equipped with rear quarter lamp assemblies, disconnect lamp as shown in Figure 1E-3.

5. To install, reverse removal procedure.

REAR QUARTER TRIM ASSEMBLY "67" STYLES

Removal and Installation

1. Remove folding top compartment side trim panel assembly.

2. On styles with manually-operated windows, remove window regulator handle and anti-friction washer.

3. Using a trim panel removing tool, carefully pry trim assembly retaining nails from tacking strips; then lift assembly upward to disengage from retainers at top of rear quarter inner panel and remove assembly from body.

4. To install rear quarter trim assembly, reverse removal procedure.

NOTE: If any retaining nails are broken off, they can be replaced with door trim assembly nailing strip replacement tabs which are available as a service part.

REAR QUARTER LOWER TRIM ASSEMBLY "39" AND "69" STYLES

Removal and Installation

1. Remove rear seat cushion and rear seat back assemblies.

2. Remove back window and rear quarter or roof rail garnish moldings as required.

3. With tool J-6335, or any other suitable flat-bladed tool, pry trim assembly retaining nails from tacking strip (see Fig. 1E-4).

4. Lift trim assembly upward to disengage from retainer at top of rear quarter inner panel and remove trim assembly.

5. To install, reverse removal procedure.

REAR QUARTER INNER TRIM PANEL (LEFT SIDE) "35" AND "45" STYLES

Removal and Installation

1. On styles so equipped, remove screws securing courtesy lamp and switch assembly to trim

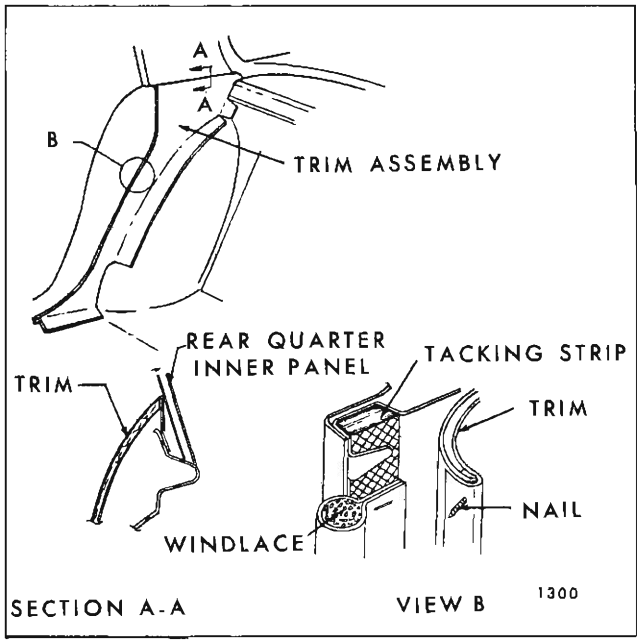


Fig. 1E4—Rear Quarter Lower Trim Assembly

panel and carefully remove assembly sufficiently to disengage wires at rear of lamp and switch.

2. Remove rear quarter stationary window front and lower garnish moldings.

3. Remove all screws securing trim panel to rear quarter inner panel.

4. With a suitable flat-bladed tool, carefully disengage trim retainers from rear quarter inner panel along leading edge of rear body lock pillar (on front edge of rear quarter front trim assembly) (see Fig. 1E-5).

5. Lift assembly upward slightly to disengage from rear quarter inner panel and remove assembly from body.

NOTE: The rear quarter front trim assembly can be removed at this point, as a bench operation, by breaking cement bond between trim and metal panel of rear quarter inner trim panel assembly. The rear quarter front trim is a sub-assembly of the rear quarter inner trim panel; left and right sides.

6. To install, reverse removal procedure.

REAR QUARTER WHEELHOUSE COVER PANEL (RIGHT SIDE) "35" AND "45" STYLES

Removal and Installation

1. Remove spare tire cover.

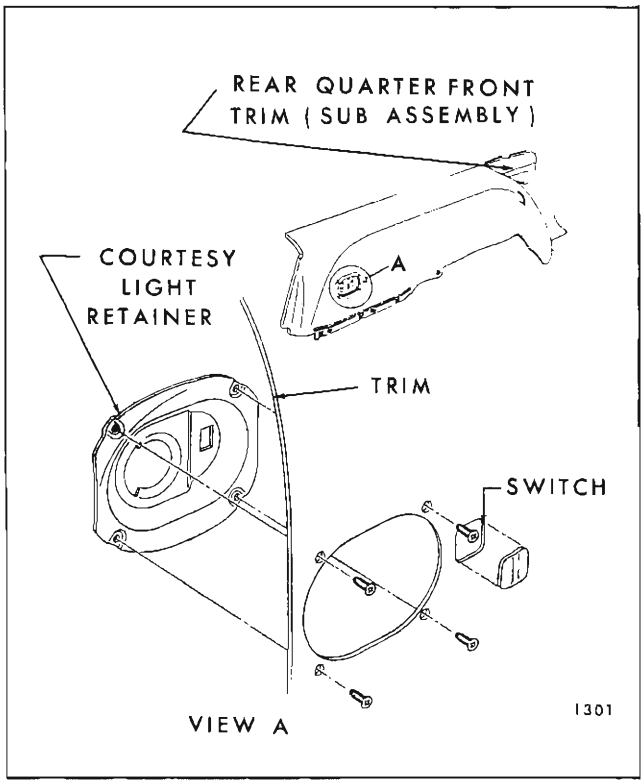


Fig. 1E5—Rear Quarter Inner Trim Panel Assembly

2. Remove rear quarter stationary window front and lower garnish moldings.

3. Remove all screws securing trim panel to rear quarter inner panel.

4. With a suitable flat-bladed tool, carefully disengage trim retainers from rear quarter inner panel along leading edge of rear body lock pillar (on front edge of rear quarter front trim assembly).

5. Remove spare tire cover support.

6. Lift assembly upward slightly to disengage from rear quarter inner panel and remove assembly from body.

7. To install, reverse removal procedure.

SPARE TIRE COVER PANEL "35" AND "45" STYLES

The spare tire cover panel is secured to a retainer at the belt line by a folding catch type handle. To remove the panel, disengage the catch and lift the panel upward. To install, reverse removal procedure.

The handle can be adjusted "in" or "out" to increase or decrease closing effort. To adjust, loosen the handle attaching screws; position the handle as desired and tighten the screws.

HARDWARE

REAR QUARTER STATIONARY WINDOW ASSEMBLY RETENTION "35" AND "45" STYLES

The stationary rear quarter window is retained in the body opening by a self-curing synthetic rubber adhesive caulking material that adheres to both glass and window opening pinchweld flange.

Applied to the glass while in a soft state, the material begins to cure soon after exposure to air. Due to this fast curing characteristic, installation of glass into body opening must follow quickly after application of material to glass.

Because the cured material adheres to both glass and pinchweld flange, it is necessary to cut through it to remove the rear quarter stationary window. Adhesive Caulking Kit #4226000 (or equivalent), which is designed for a "short method" windshield installation, has some of the materials required to remove and replace a rear quarter stationary window. The other materials needed to complete the installation are available as service parts or at local supply houses.

Adhesive Caulking Kit #4226000 consists of:

a. One tube of adhesive caulking material.

b. One dispensing nozzle.

c. Steel music wire.

d. Adhesive Caulking Primer (for priming original caulking material remaining on pinchweld flange).

The materials that are required to remove and install a stationary rear quarter window are as follows:

*a. Two Adhesive Caulking Kits (Part No. 4226000, or equivalent).

b. One caulking gun (standard household type reworked as described in procedure).

c. Two pieces of wood for handles of cutting wire.

d. Black weatherstrip adhesive.

*e. Painted surface primer (needed only if pinchweld flange is repainted).

*f. Rubber glass spacers (see procedure for amount and usage).

1. Spacer (Part No. 4459429, or equivalent) .20 x .63 x 1.0 (flat).

2. Spacer (Part No. 4871330, or equivalent) .34 x .44 x 1.0 (rectangle).

*Available as a service part.

To remove a stationary rear quarter window, it is necessary to first remove the quarter window reveal moldings. Following are service procedures for removing both the moldings and rear quarter stationary window.

STATIONARY REAR QUARTER WINDOW REVEAL MOLDINGS "35" AND "45" STYLES

Removal and Installation

The reveal moldings are retained by clips which are attached to the back window opening by screws. To disengage a molding from retaining clips, use tool J-21549-3, as shown in Figure 1E-6.

NOTE: Adhesive caulked window glass tool set J-21549-02 is available as a service parts package and consists of:

J-21549-1 - - - - Handle
*J-21549-2 - - - - Reveal molding remover (flat-blade).
**J-21549-3 - - - - Reveal molding remover (angle-blade).

*also available as J-21549
**also available as J-9698

As the stationary rear quarter window reveal moldings telescope into each other, it is necessary

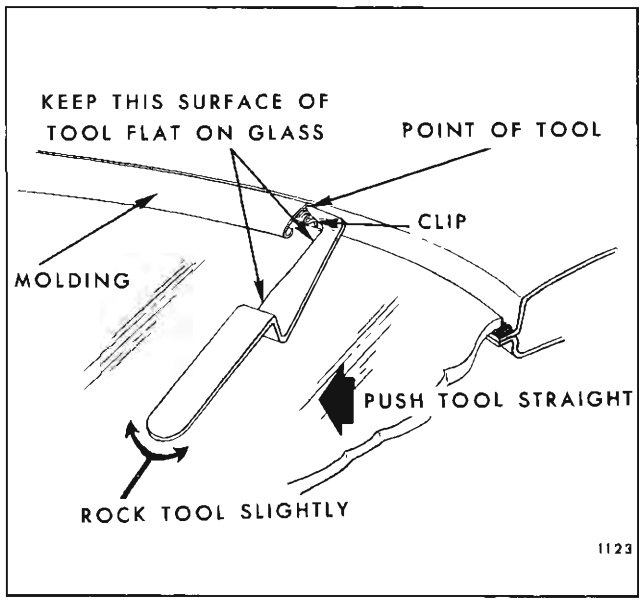


Fig. 1E6—Usage of Tool J-21549-3 (J-9698)

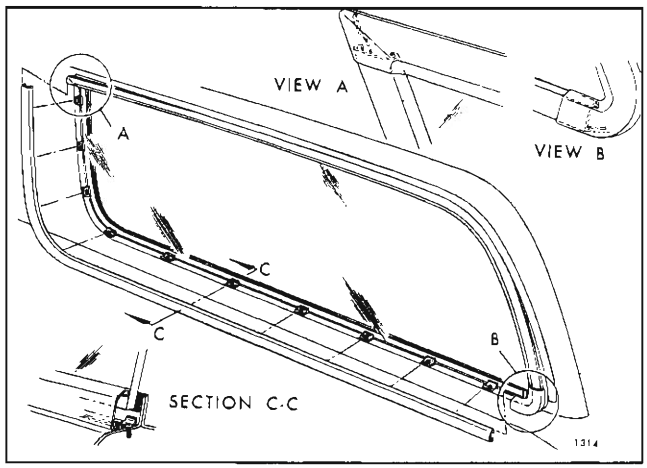


Fig. 1E7—Rear Quarter Window Reveal Molding Retention

to begin removal (disengaging clips) in the middle of a molding rather than at an end. In addition, when only one molding is to be removed, adjacent moldings must be disengaged sufficiently to allow disengagement of the telescoped ends.

If all moldings are to be removed, first disengage lower ends of upper and lower reveal moldings sufficiently to remove lower corner escutcheon (see View "B" in Fig. 1E-7). Both the upper and lower reveal moldings telescope into this escutcheon. Next, remove the lower reveal molding and then the upper reveal molding.

NOTE: The forward end of the lower reveal molding telescopes into an integral escutcheon of the upper reveal molding (see View "A" in Fig. 1E-7).

STATIONARY REAR QUARTER WINDOW ASSEMBLY (GLASS INTACT) "35" AND "45" STYLES

Removal

1. Remove all reveal and garnish moldings.

2. Remove rear quarter inner trim panel or rear quarter wheelhouse cover panel and spare tire cover; dependent on side from which quarter glass is to be removed.

3. Secure one end of steel music wire to a piece of wood (for handle). Insert other end of wire through caulking material at lower corner of quarter window and secure end to another piece of wood (handle).

4. With the aid of a helper, cut (pull steel wire) through caulking material, up side of quarter window, across top, down opposite side and across bottom (see Fig. 1E-8).

5. Remove stationary rear quarter window from body opening. If original glass is to be reinstalled, place it on a protected surface or glass holding fixture and remove major portion of caulking material from glass with a sharp chisel or razor blade. Remove all remaining traces with a toluene or thinner dampened rag.

NOTE: DO NOT use an oil base solvent! Any trace of oil on glass will prevent adhesion of new caulking material to glass.

6. Using a small stick or screwdriver, remove the neutral colored sealer from the lower pinchweld flange.

7. Using a sharp scraper or wood chisel, remove the major portion of adhesive caulking compound from the pinchweld flange completely around the opening.

NOTE: It is not necessary to clean off all of the old caulking material from the pinchweld flange; however, there should not be any loose pieces remaining.

Installation

NOTE: If a new stationary rear quarter window is to be installed because the original window shattered, perform steps 1, 2, 3 and 7 of removal procedure before proceeding with the installation.

1. Check all reveal molding retaining clips. If upper end of clip is bent away from body excessively, preventing proper installation of reveal molding, replace clip.

NOTE: Check all clip attaching screws and tighten as required.

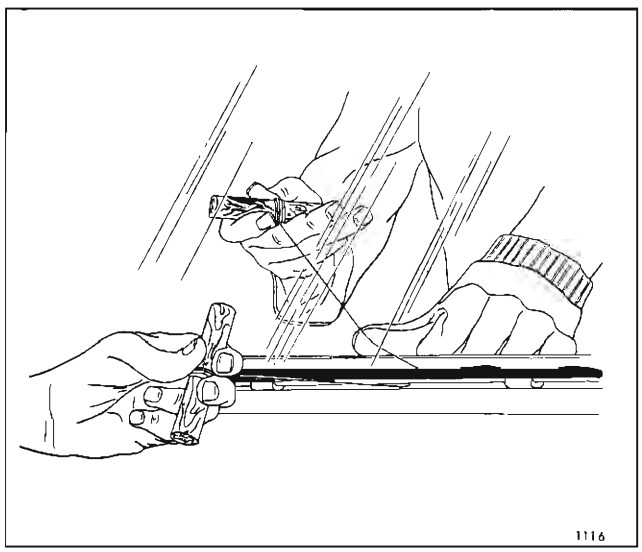


Fig. 1E8—Adhesive Caulked Glass Removal

2. With black weatherstrip adhesive, cement four (4) flat spacers (.20 x .63 x 1.0 - Part No. 4459429, or equivalent) to pinchweld flange; two at top and two at bottom (see Fig. 1E-9). Cement forward top spacer approximately 25 inches from center line of glass and the top rearward spacer approximately 15 inches from centerline of glass. Cement lower forward spacer approximately 12 inches from centerline of glass and lower rearward spacer approximately 27 inches from centerline of glass.

3. With black weatherstrip adhesive, cement four (4) rectangular spacers (.34 x .44 x 1.0 - Part No. 4871330, or equivalent) to rear quarter window opening rabbet; two at sides and two at bottom (see Fig. 1E-9). Cement forward lower spacer approximately 11 inches from centerline of glass and lower rearward spacer approximately 26 inches from centerline of glass. Both side spacers should be cemented in the approximate position depicted in Figure 1E-9.

NOTE: Production utilizes a rubber "dam" in lieu of spacers. This "dam", however, is not recommended for service usage.

4. With the aid of a helper, carry glass to body as shown in Figure 1E-10. Then, with helper supporting glass with both hands, reach one hand around body pillar, and support glass while helper also reaches around pillar to assume position shown in Figure 1E-11. Position glass in opening by making contact along upper edge first and then swing in lower edge.

5. Position rear quarter window in body opening. Carefully check relationship of glass to body pinchweld flange completely around opening. The overlap of glass to body pinchweld and retaining flanges should be equal with a minimum overlap. Where necessary, use waterproof shims under rubber spacers to obtain the required overlap (3/16"). Apply a piece of masking tape over each side of glass and body pillars. Slit tape vertically at edge

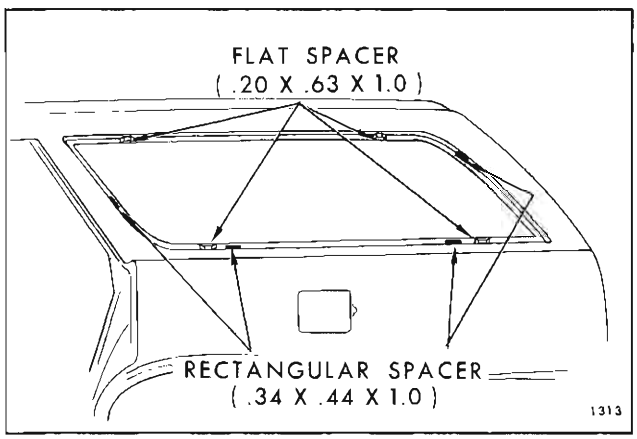


Fig. 1E9—Rear Quarter Window Spacer Installation

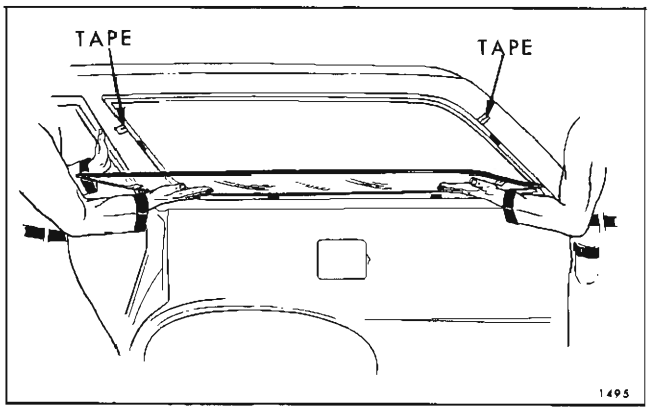


Fig. 1E10—Stationary Quarter Window Installation

of glass so that when glass is installed, tape on glass can be aligned with tape on body. Remove glass from opening and place it on a protected surface or glass holding fixture (lay glass down with inside surface up).

6. Apply one inch masking tape to inner surface of glass 1/4" inboard from outer edge completely around periphery of glass (see Fig. 1E-12) to aid in clean-up after installation and to give a clean edge to adhesive material.

7. Using a clean, lint free cloth, liberally dampened with adhesive caulking primer, briskly rub primer over and into original adhesive caulking material that remains on pinchweld flange. Perform the following steps while allowing primer to dry for a minimum of five to ten minutes. If the pinchweld flange has been repainted, prime flange with Painted Surface Primer, or equivalent.

8. Engage dispensing end of one nozzle by cutting out notch along scoreline indicated at "A" in Figure 1E-12. This nozzle will be used to apply the bead of adhesive material to glass. Cut nozzle from the second kit at a 45 degree angle as indicated at "B" in Figure 1E-12. This latter nozzle will be used to apply a smear bead to pinchweld flange of stationary rear quarter window opening.

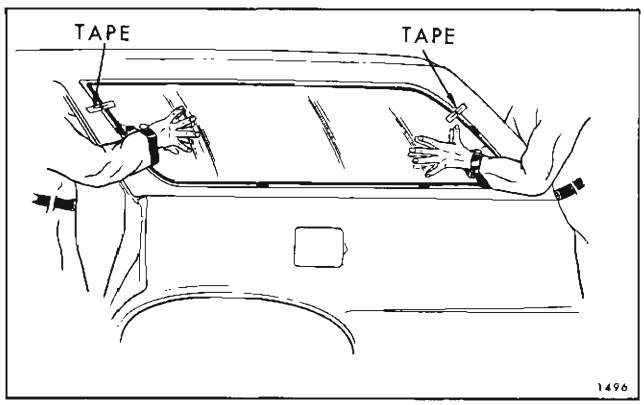


Fig. 1E11—Stationary Quarter Window Installation

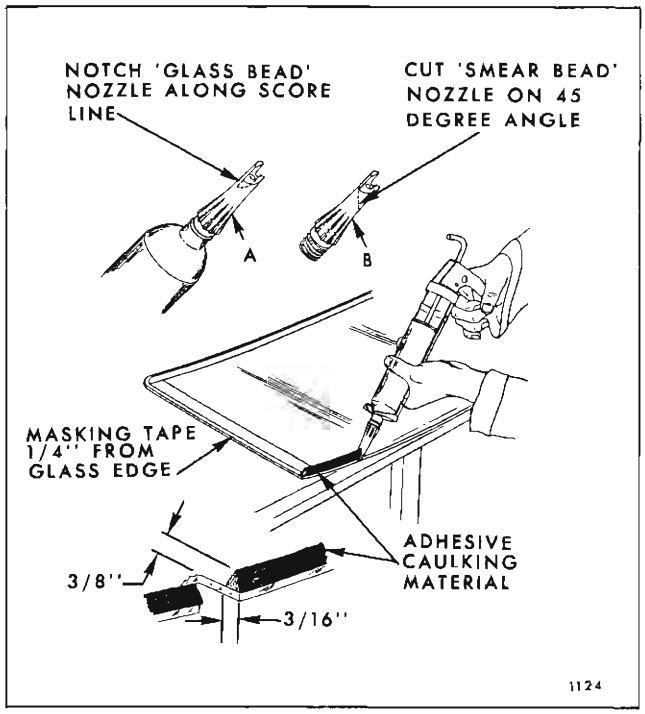


Fig. 1E12—Adhesive Caulking Material Application - Extended Method

9. Wipe surface of glass to which bead of adhesive caulking material will be applied (between masking tape and edge of glass) with a clean water-dampened rag. Dry glass thoroughly with a clean dry rag.

10. Remove cap and protective cover from one tube of adhesive caulking material and insert "glass bead" nozzle (one cut on score line).

11. Insert tube in a standard household type caulking gun, reworked as follows:

a. Widen end-slot of caulking gun with a file sufficiently to accept dispensing end of tube.

b. Grind down disc on plunger rod so that disc will fit into large end of tube.

12. With caulking gun and nozzle positioned as illustrated in Figure 1E-12, carefully apply a smooth continuous bead of caulking material 3/8" high by 3/16" wide at base completely around inside edge of glass.

NOTE: When material in first tube is dispensed, quickly insert second tube and continue application of bead. This material begins to cure after fifteen (15) minutes exposure to air; therefore, perform the following steps immediately and install glass in the opening as quickly as possible.

13. Remove "glass bead" nozzle and insert "smear bead" nozzle (nozzle cut at a 45 degree angle in step No. 8). Holding caulking gun at an angle so that opening of nozzle rests flat on pinchweld flange, apply a thin (1/4" wide x 1/16" high) "smear bead" of adhesive caulking material completely around pinchweld flange.

14. With the aid of a helper, carefully install glass as described in step No. 4 (see Fig. 1E-10 and Fig. 1E-11). Make certain that glass sets properly on spacers and does not have to be shifted after material contacts pinchweld flange. Align tape on glass with tape on body to guide window into opening.

NOTE: When setting glass in opening, make contact with upper edge of glass first and then swing in lower edge.

15. Press glass (lightly) to adhere caulking material to pinchweld flange and install stationary rear quarter window reveal moldings.

16. From inside of body, run a flat-bladed stick around edge of pinchweld flange to force excess caulking compound back into opening between glass and pinchweld flange.

17. Watertest stationary rear quarter window immediately using a cold water spray. If any waterleaks are encountered, use a flat-bladed tool or stick to work caulking material into leak point.

NOTE: This can best be done from inside the body. After watertest, remove tape from inside surface of glass.

18. Install all previously removed trim and hardware and remove protective coverings.

NOTE: Unused adhesive caulking material remaining in tube can be stored for later use. To store, remove nozzle and insert end cap previously removed. Do not remove material from nozzle until it has cured. Once cured, material can be removed from nozzle in one piece with a pair of pliers.

MINOR WATERLEAK CORRECTIONS (WITH ADHESIVE CAULKING MATERIAL IN A CURED STATE)

Adhesive caulked glass installation waterleaks can be corrected in the following manner without removing and installing the glass.

NOTE: The following procedure is applicable only with the use of adhesive caulking material and primer furnished in GM Kit - Part No. 4226000; or equivalent.

1. Remove reveal moldings in area of leak.

2. Mark location of leak(s).

NOTE: If leak is between adhesive caulking material and body or between material and glass, carefully push outward on glass in area of leak to determine extent of leak. This operation should be performed while water is being applied to leak area. Mark extent of leak area.

3. From outside of body, clean any dirt or foreign material from leak area with water and then dry cleaned area with an air hose.

4. Using a sharp knife, trim off uneven edge of adhesive caulking material (see Operation "A" in Fig. 1E-13) at leak point and three to four inches on both sides of leak point or beyond limits of leak area.

5. Using a small brush, apply adhesive caulking material primer over trimmed edge of adhesive caulking material and over adjacent painted surface (see Operation "B" in Fig. 1E-13).

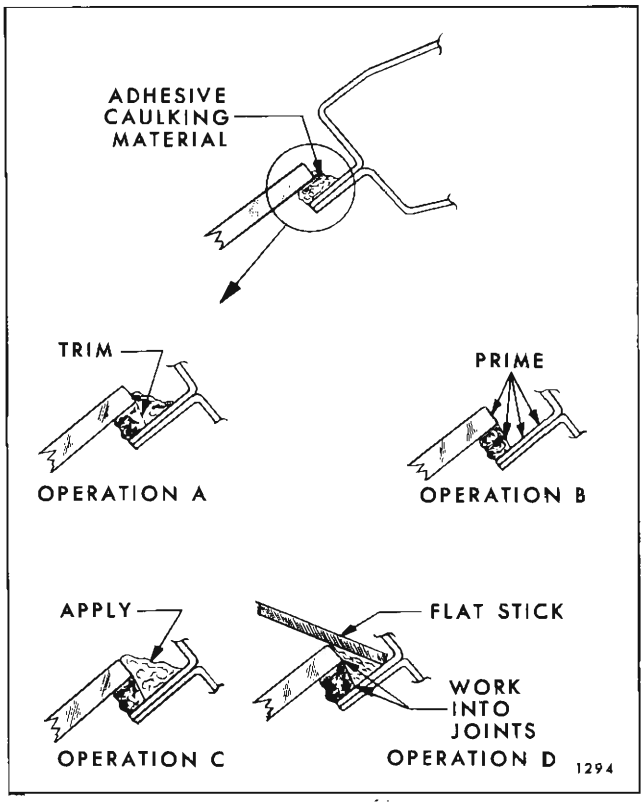


Fig. 1E13—Correction of Adhesive Caulked Glass Installation Waterleaks

A. Trim off adhesive caulking material along edge of glass.
B. Prime areas indicated using a small brush.
C. Apply adhesive caulking material (use Kit #4226000 or equivalvent).
D. Using a flat stick, work adhesive caulking material well into joints of original material, painted body flange and glass.

6. Apply adhesive caulking material, as shown in Operation "C" in Figure 1E-13, at leak point and three to four inches on both sides of leak point or beyond limits of leak area.

7. Immediately after performing step number 6, use a flat stick, or other suitable flat-bladed tool, to work adhesive caulking material well into leak point and into joint of original material and body to effect a watertight seal along entire length of material application (see Operation "D" in Fig. 1E-13).

8. Spray watertest to assure that leak has been corrected. DO NOT run a heavy stream of water directly on freshly applied adhesive caulking material.

REAR QUARTER INNER PANEL WATER DEFLECTOR "11"-"37"-"57" STYLES

A waterproof paper deflector is used to seal the rear quarter inner panel and prevent entry of water into body. The polyethylene (shiny or black) side of the deflector is placed against inner panel. The deflector fits into a retaining slot at bottom of inner panel and is further secured by a string-loaded sealing material along both front and rear edges and by the application of sealing tape at front and rear lower corners. When work is performed where the paper water deflector has been disturbed, the deflector must be properly sealed and taped to the inner panel to prevent waterleaks. If additional sealing material is required, body caulking compound is recommended for service sealing.

When access to the rear quarter inner panel is required, the deflector may be completely or partially detached from inner panel. If existing water deflector is damaged so that it will not properly seal the rear quarter, replacement of the deflector is required.

Removal

1. Remove rear quarter trim assembly.

2. Remove strips of waterproof body tape securing lower corners of water deflector.

3. With a putty-knife, or other suitable flat-bladed tool, carefully break cement bond securing upper corners of water deflector to rear quarter inner panel. Make sure string, located within sealer is against water deflector and carefully

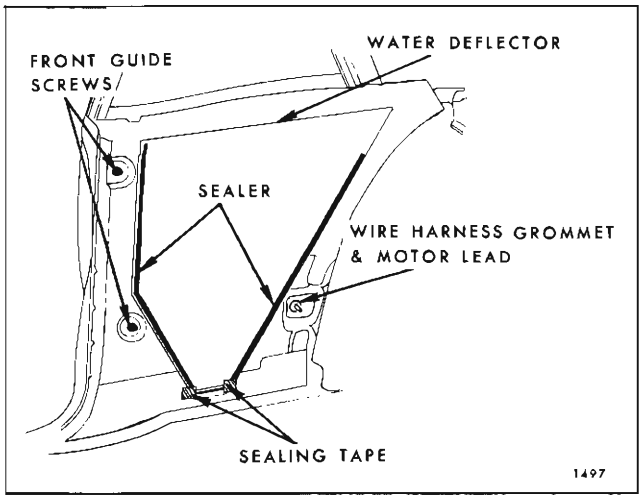


Fig. 1E14—Rear Quarter Inner Panel Sealing "11" Styles

slide putty knife between sealer and inner panel along both sides to disengage sides of water deflector from inner panel.

4. Disengage lower edge of water deflector from retaining slot in quarter inner panel and remove water deflector. See Figure 1E-14 for "11" styles and Figure 1E-15 for "37" and "57" styles.

NOTE: As illustrated in Figure 1E-14, the water deflector on "11" styles does not cover the front guide attaching screws which must be separately sealed with body caulking compound. In addition, on "11" styles equipped with electric rear quarter windows, the rear harness grommet and motor lead must also be separately sealed.

Installation

1. Inspect water deflector and, where necessary, repair any tears or holes with waterproof body tape applied to both sides of deflector. In addition, if bond between polyethylene and deflector paper has been torn, cut or damaged, apply waterproof body tape to both sides of deflector over damaged area to prevent water from wicking on uncoated side of deflector paper.

2. If a new water deflector is to be installed, use old deflector as a template. Trim new deflector to proper size and cut holes for all inside hardware. In addition, clean off old cement from quarter inner panel and apply a continuous bead of body caulking compound (approximately 3/16" diameter) to inner panel along line contacted by front and rear edges of water deflector.

3. Position water deflector to inner panel with polyethylene (shiny or black) side of deflector against rear quarter inner panel. Insert lower edge or deflector into retaining slot. Firmly roll or press sealed areas to obtain a good bond between deflector and inner panel.

4. Reinstall all trim and hardware components previously removed.

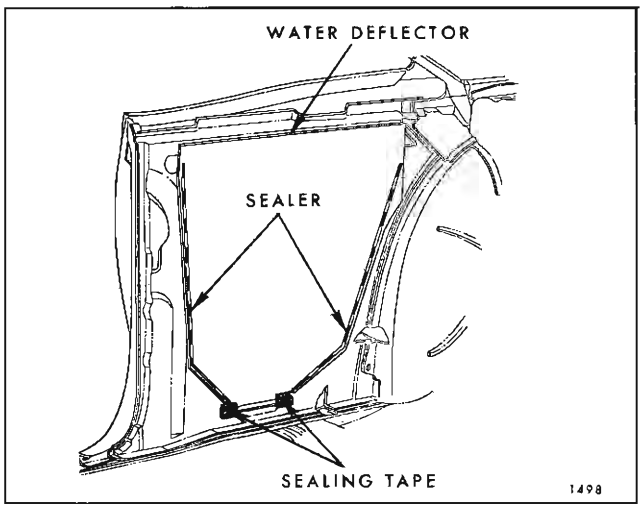


Fig. 1E15—Rear Quarter Inner Panel Sealing "37" & "57" Styles

REAR QUARTER INNER PANEL SEALING "67" STYLES

Whenever the seals in the rear quarter area have been disturbed, the location must be resealed before installation of rear quarter trim assemblies. 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 in Figure 1E-16.

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

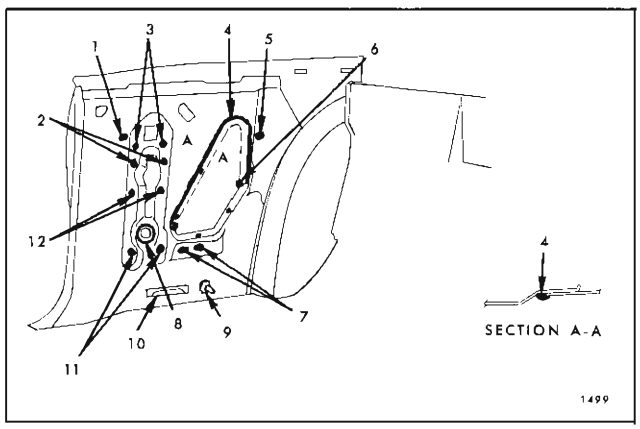


Fig. 1E16—Rear Quarter Inner Panel Sealing "67" Styles

1. Seal completely over front guide upper attaching screws.

2. Seal completely over regulator attaching bolts.

3. Seal completely over regulator attaching bolts.

4. Seal around entire periphery of access hole cover with special attention given to cross-over points indicated in Figure 1E16.

5. Seal completely over upper rear guide attaching screw.

6. Apply sealer at cross-over points as indicated in section A-A in Figure 1E-16.

7. Seal completely around and over lower front guide attaching screw.

8. Seal completely around and over front access hole plug.

9. Seal completely over wire harness grommet and motor lead.

10. Firmly apply body waterproof tape completely over rear quarter inner panel drain slot.

11. Seal completely over regulator attaching screws.

12. Seal completely over regulator lower attaching screws.

The procedures for servicing the rear quarter hardware are arranged by body style in the following sequence:

Two Door Sedans ("11" Styles)
Convertibles ("67" Styles)
Two Door Coupes ("37" and "57" Styles)

NOTE: Exercise care when performing service operations on or near rear quarter windows. All rear quarter windows are constructed of solid tempered safety plate glass that will shatter if abused.

REAR QUARTER WINDOW ASSEMBLY (MANUAL OR ELECTRIC) "11" STYLES

Figure 1E-17 is a phantom view of "11" styles. This illustration identifies the rear quarter hardware components and their relationship to each other. As noted in this illustration, manual and electric styles use the same hardware with the exception of window regulators.

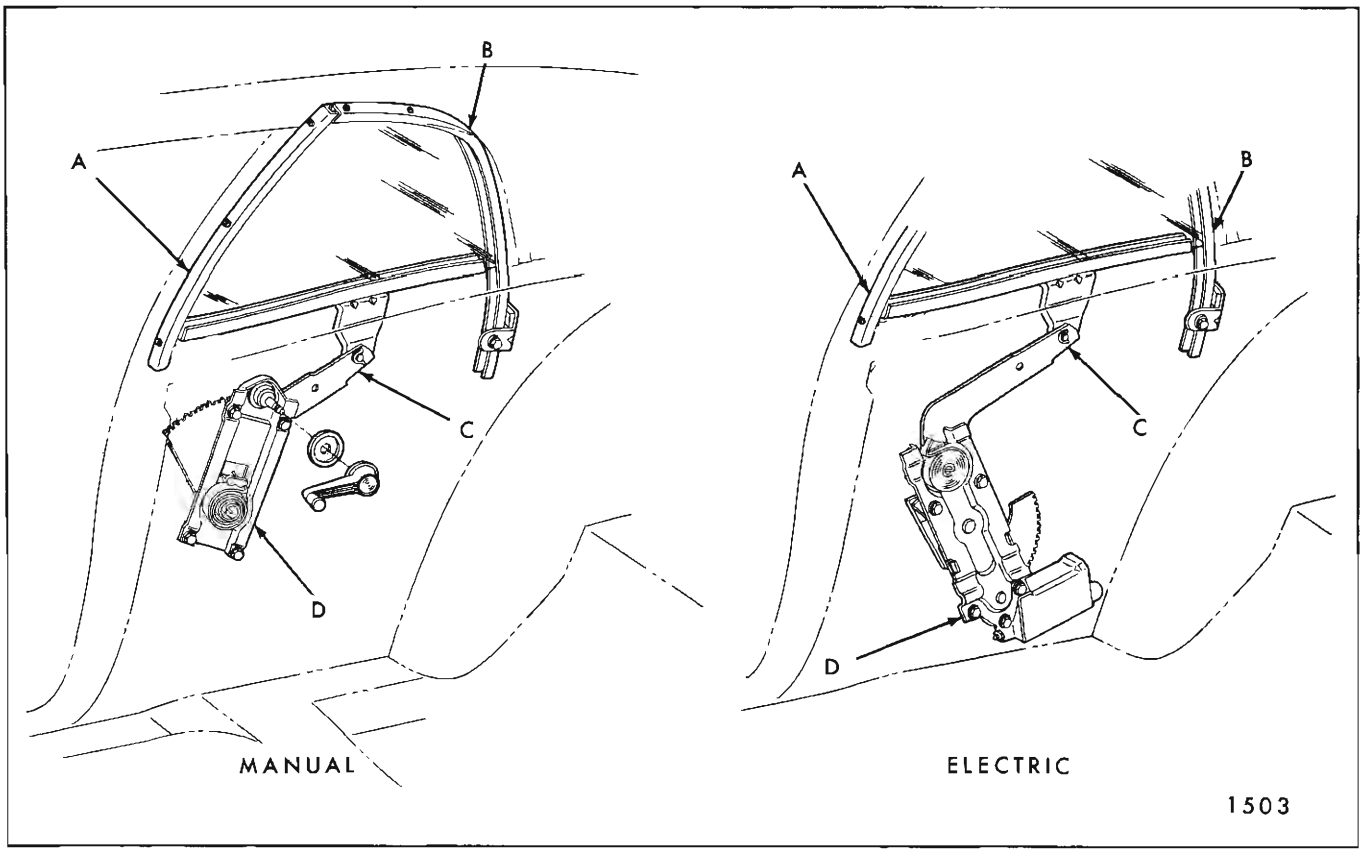


Fig. 1E17—Rear Quarter Window Hardware

A. Front Glass Run Channel
B. Rear Glass Run Channel
C. Snap-Ring Retainer
D. Window Regulator

Removal and Installation

1. Remove rear quarter trim assembly and inner panel water deflector.

2. Remove snap ring retainer securing regulator lift arm to pivot pin on window lower sash channel (see Fig. 1E-18).

3. While supporting glass by hand, disengage pivot pin from regulator lift arm and remove spring washer from pivot pin (see Fig. 1E-18). Lower front edge of glass down until nylon guide at top of window assembly comes out of front guide and rear edge comes out of rear glass run channel; then, lift glass up (rear edge first) and remove window from body outboard of window opening.

4. To install, reverse removal procedure.

Adjustments

All window assembly adjustments are provided at the window regulator attaching screws.

To obtain proper seating of the glass in the upper glass run channels, or proper contact between belt sealing strips and lower sash channel, loosen regulator attaching screws and adjust window as required.

To eliminate a fore and aft bind between the glass run channels (hard operating window), or a condition where window will not stay in rear run channel, loosen rear run channel attaching bolt and adjust run channel fore or aft as required.

REAR QUARTER WINDOW REGULATOR ASSEMBLY— (MANUAL AND ELECTRIC) "11" STYLES

Removal and Installation

1. Remove rear quarter window.

2. On electric styles, disconnect feed wire from regulator motor.

3. Remove attaching bolts securing regulator to rear quarter inner panel.

4. Remove regulator through large access hole by rotating assembly upward so that lift arm comes out first.

5. To install, reverse removal procedure. Cycle window to insure proper operation before installing rear quarter trim.

NOTE: The procedure for removing the electric motor from the regulator is described and illustrated under "Rear Door and/or Rear Quarter Window Regulator Electric Motor Assembly" in the Door Section.

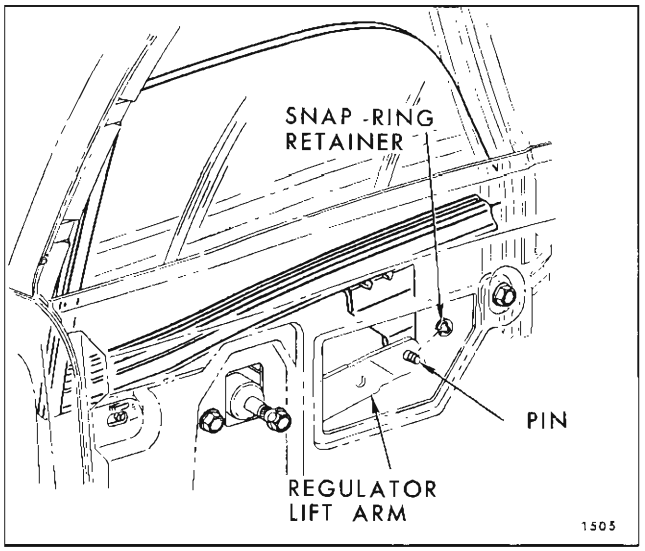


Fig. 1E18—Rear Quarter Window Attachment - "11" Styles

REAR QUARTER WINDOW REAR GLASS RUN CHANNEL "11" STYLES

Removal and Installation

1. Remove rear quarter trim assembly and inner panel water deflector.

2. Disengage window assembly from regulator lift arm by removing snap ring retainer (see Fig. 1E18).

3. Lower window to bottom of rear quarter and rest it against outer panel.

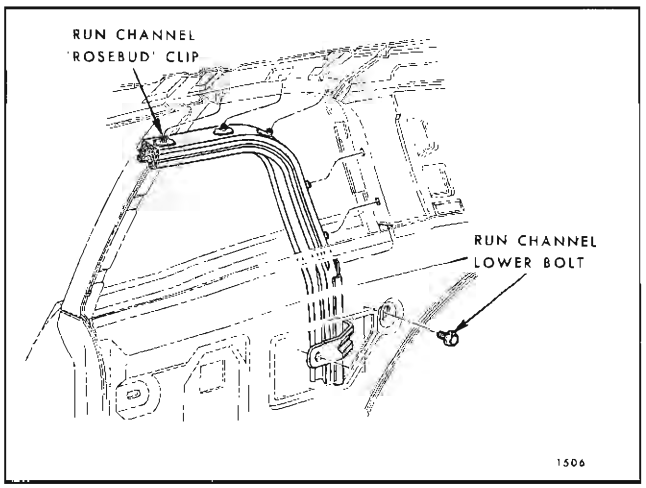


Fig. 1E19—Rear Quarter Window Rear Run Channel "11" Styles

4. Remove the single attaching bolt of rear run channel (see Fig. 1E-19).

5. With a screwdriver, or other suitable flat-bladed tool, carefully pry rear run channel attaching clips (rosebud) out from rear quarter and roof panel and remove run channel from body (see Fig. 1E-19).

6. To install, reverse removal procedure.

REAR QUARTER WINDOW FRONT GLASS RUN CHANNEL "11" STYLES

Removal and Installation

1. Remove rear quarter window rear glass run channel.

2. With a screwdriver, or other suitable flat-bladed took, carefully pry front run channel attaching clips (rosebud) out from rear body lock pillar and remove run channel from body (see Fig. 1E-20).

3. To install, reverse removal procedure.

REAR QUARTER WINDOW OUTER STRIP ASSEMBLY "11" STYLES

1. Remove rear quarter trim assembly and inner panel water deflector.

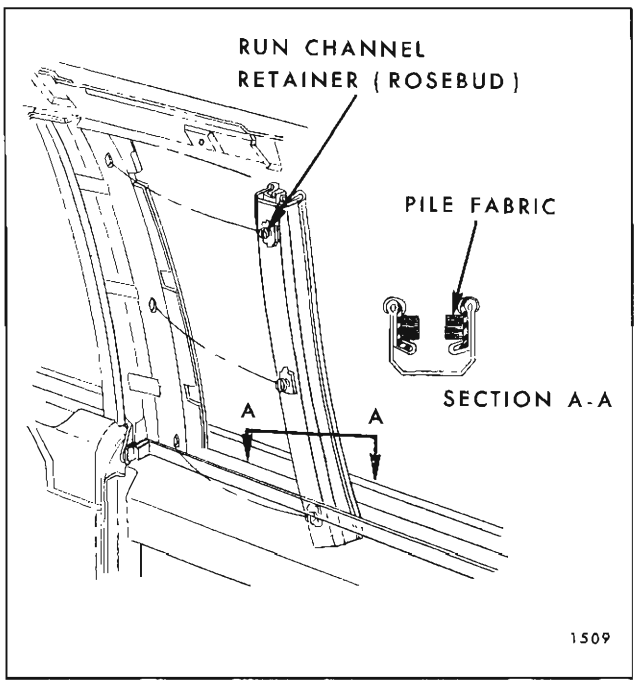


Fig. 1E20—Rear Quarter Window Front Glass Run Channel "15" - "11" Styles

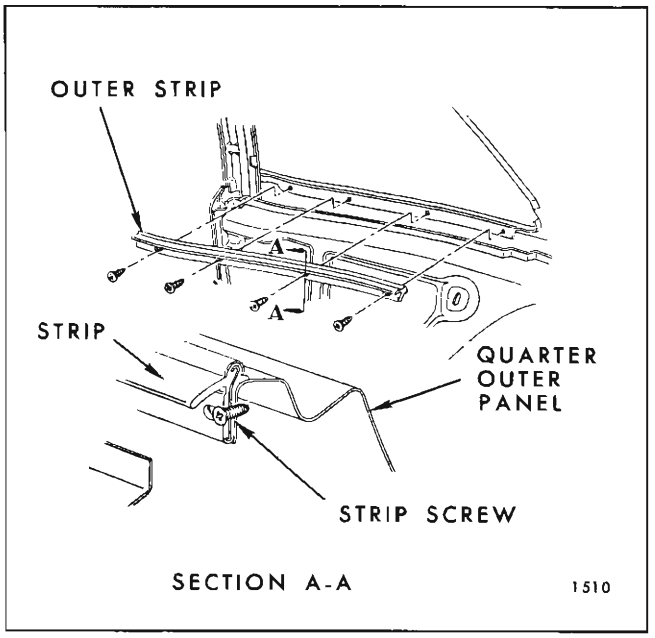


Fig. 1E21—Rear Quarter Window Outer Strip Assembly

2. Disengage window assembly from regulator lift arm by removing snap ring retainer (see Fig. 1E-18.

3. Lower window assembly to bottom of rear quarter and rest it against outer panel.

4. Remove screws securing outer strip to rear quarter outer panel return flange and remove strip from body (see Fig. 1E-21).

NOTE: Use care not to damage strip assembly or adjacent painted surfaces.

5. To install, reverse removal procedure.

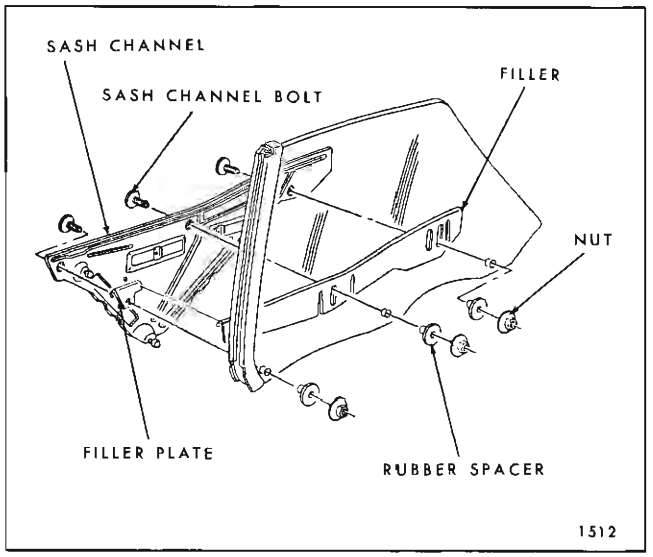


Fig. 1E22—Rear Quarter Window Assembly - "67" Style

REAR QUARTER WINDOW ASSEMBLY (MANUAL OR ELECTRIC) "67" STYLES

The rear quarter window is of a dropping design, constructed of safety solid plate glass on a compound curve for all styles (see Fig. 1E-22).

Figure 1E-23 is a phantom view of 67 styles. This illustration identifies the rear quarter hardware components and their relationship to each other.

Removal and Installation

1. Lower folding top and operate rear quarter window to a position of almost fully lowered.

2. Remove folding top compartment side trim panel, rear quarter trim assembly and inner panel cover.

3. On styles equipped with electric window regulators, disconnect motor wire harness at in-line connector. DO NOT attempt to disconnect permanent connector at regulator motor.

4. Remove rear quarter window up-stop attaching bolt and remove stop (see Fig. 1E-24).

5. While supporting glass by hand, remove lower sash channel cam attaching screws (2); slide cam rearward to disengage cam from regulator lift arm roller and remove cam (see Fig. 1E-24).

6. Lift quarter window up and remove assembly from body.

7. To install, reverse removal procedure.

Adjustments

Up travel limit of quarter glass is determined by

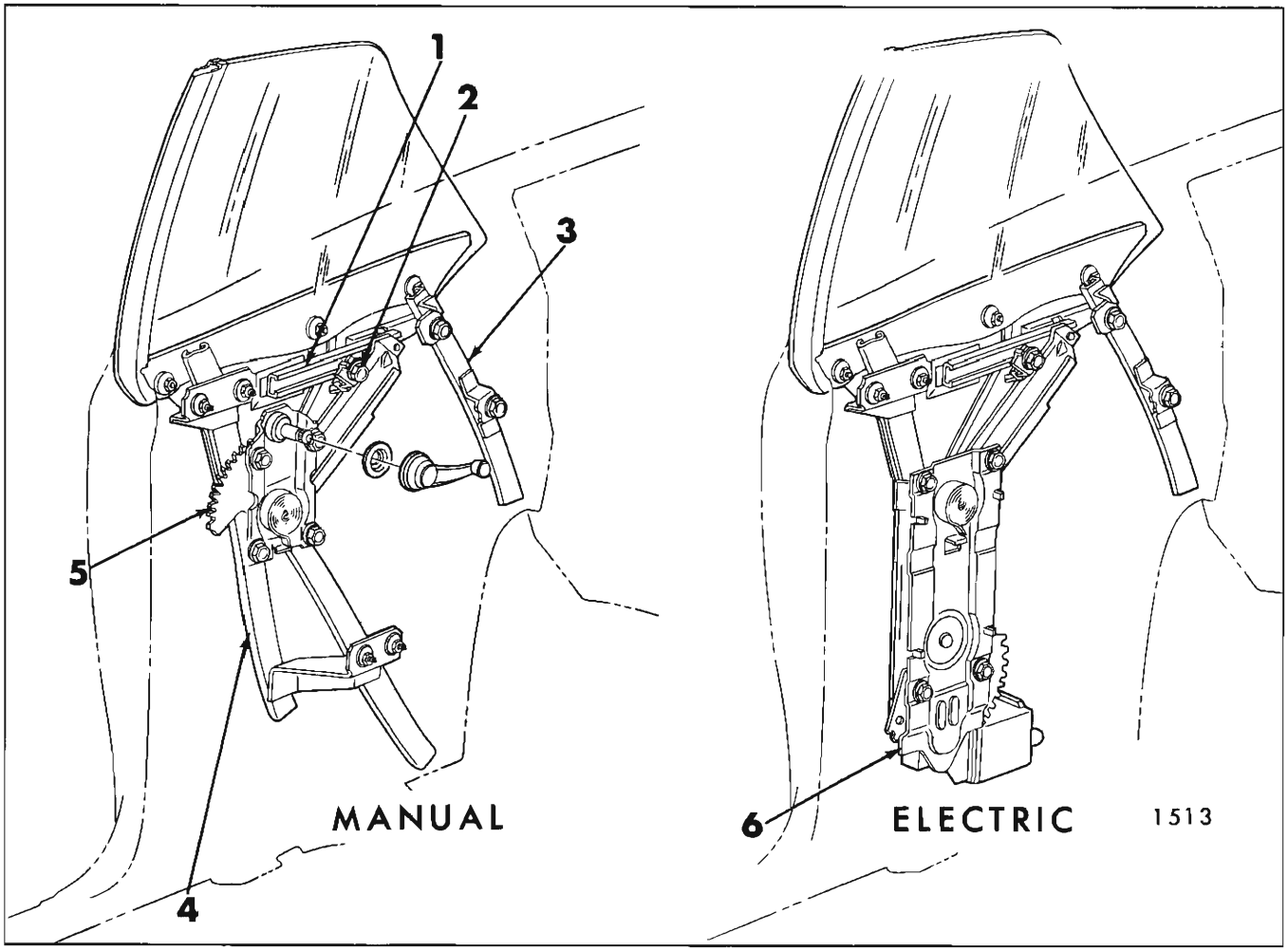


Fig. 1E23—Rear Quarter Window Hardware - "67" Styles

1. Window Sash Channel Cam
2. Window Up-Stop
3. Rear Guide
4. Front Guide
5. Regulator (Manual)
6. Regulator (Electric)

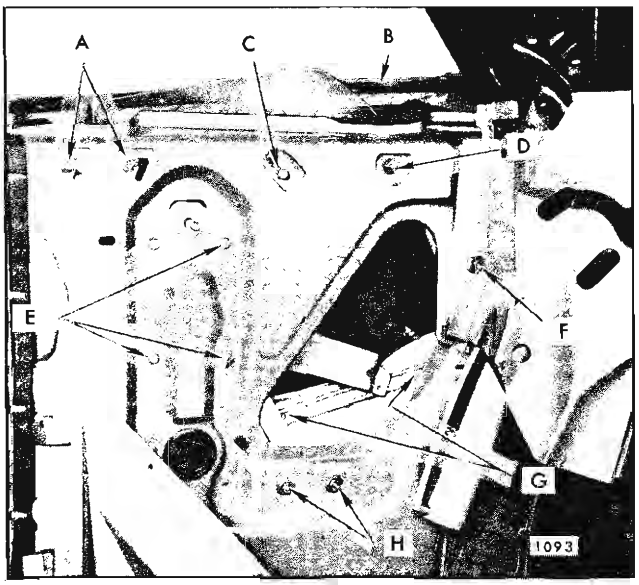


Fig. 1E24—"67" Style Rear Quarter Window Hardware

A. Front Guide Upper Adjusting Studs and Nuts
B. Outer Strip
C. Up-Stop Bolt
D. Rear Guide Upper Adjusting Stud and Nut
E. Regulator Bolts
F. Rear Guide Lower Adjusting Stud and Nut
G. Sash Channel Cam Attaching Screws
H. Front Guide Lower Adjusting Studs and Nuts

adjustment of up-stop (see Fig. 1E-24). Fore or aft and in or out adjustment is provided at front and rear guides (see Fig. 1E-24).

REAR QUARTER WINDOW REGULATOR ASSEMBLY (MANUAL OR ELECTRIC) "67" STYLES

Removal and Installation

1. Remove rear quarter window assembly.

2. On styles equipped with electric window regulators, disconnect regulator motor wire harness at in-line connector mounted on inboard side of rear quarter inner panel. DO NOT attempt to disengage permanent connector at regulator motor.

3. Remove bolts securing regulator to rear quarter inner panel and remove regulator and motor through large access hole (see Fig. 1E-24).

NOTE: The procedure for removing electric motor from window regulator is described and illustrated under "Door and Quarter Window Regulator Electric Motor Assembly" in the door Section 1-D.

4. To install, reverse removal procedure.

REAR QUARTER WINDOW FRONT GUIDE ASSEMBLY "67" STYLES

Removal and Installation

1. Remove rear quarter window assembly.

2. Remove front guide upper and lower adjusting stud nuts and remove guide assembly (see Fig. 1E-24).

3. To install, reverse removal procedure.

REAR QUARTER WINDOW REAR GUIDE ASSEMBLY "67" STYLES

Removal and Installation

1. Remove folding top compartment side trim panel, rear quarter trim assembly and inner panel access hole cover.

2. Remove rear guide upper and lower adjusting stud nuts (see Fig. 1E-24).

3. Slide rear guide downward to disengage roller on window sash channel and remove guide assembly.

4. To install, reverse removal procedure.

REAR QUARTER WINDOW OUTER STRIP ASSEMBLY "67" STYLES

Removal and Installation

All outer strip assemblies are secured to the

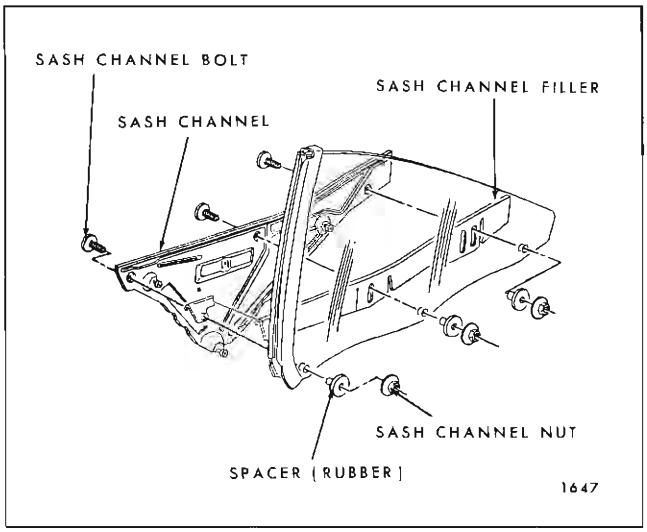


Fig. 1E25—Rear Quarter Window Assembly

rear quarter outer panel return flange by screws. Access to these screws can be achieved without removal of any trim or hardware (see Fig. 1E-24).

NOTE: Use care to protect paint and trim finishes when servicing outer strip assembly.

REAR QUARTER WINDOW ASSEMBLY (MANUAL OR ELECTRIC) "37" AND "57" STYLES

The rear quarter window is of a dropping design, constructed of safety solid plate glass on a compound curve for all styles (see Fig. 1E-25 for 16000, 25000, 26000, 35000, 36000, 45000 and 46000 Series and Fig. 1E-26 for 38000, 48000 and 68000 Series).

Figure 1E-27 and 1E-28 are phantom views of "37" and "57" styles. These illustrations identify the rear quarter hardware components and their relationship to each other (see Fig. 1E-27 for 16000, 25000, 26000, 35000, 36000, 45000 and 46000 Series and Fig. 1E-28 for 38000, 48000 and 68000 Series).

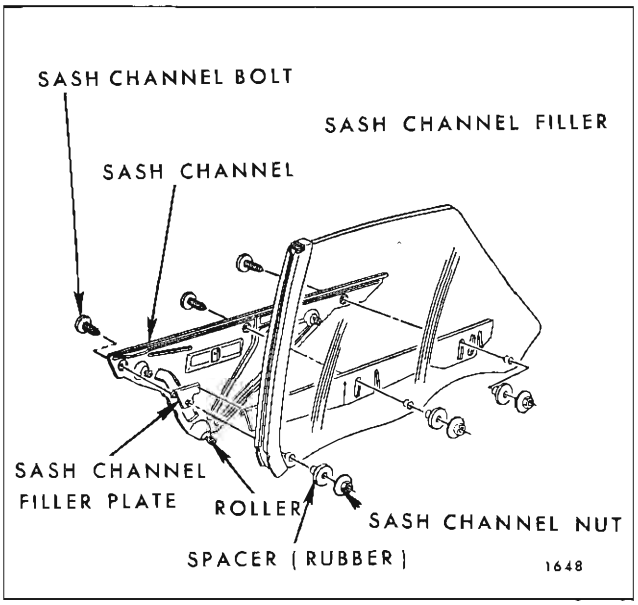


Fig. 1E26—Rear Quarter Window Assembly

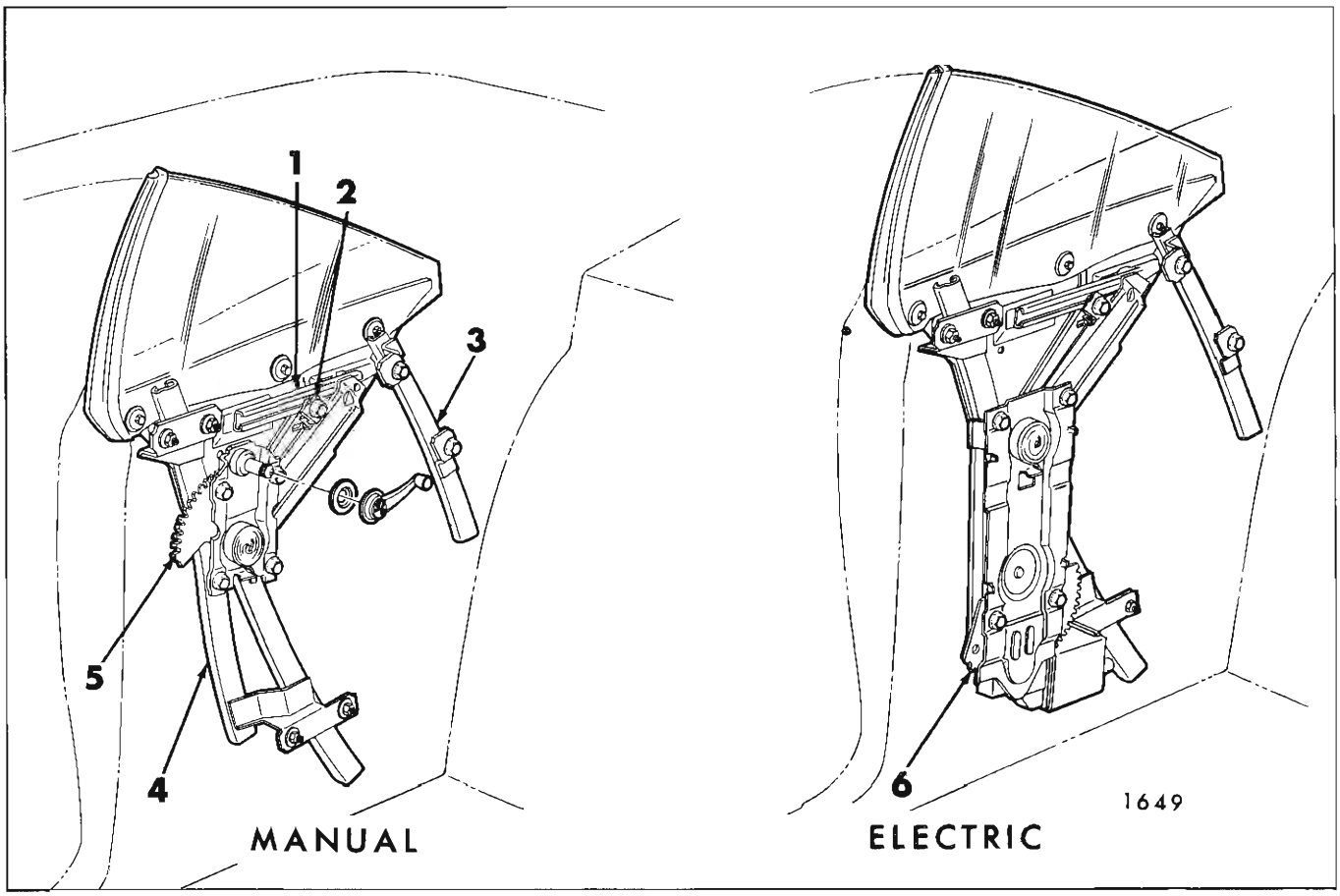


Fig. 1E27—Rear Quarter Window Hardware

1. Window Sash Channel Cam
2. Window Up-Stop
3. Rear Guide
4. Front Guide
5. Regulator (Manual)
6. Regulator (Electric)

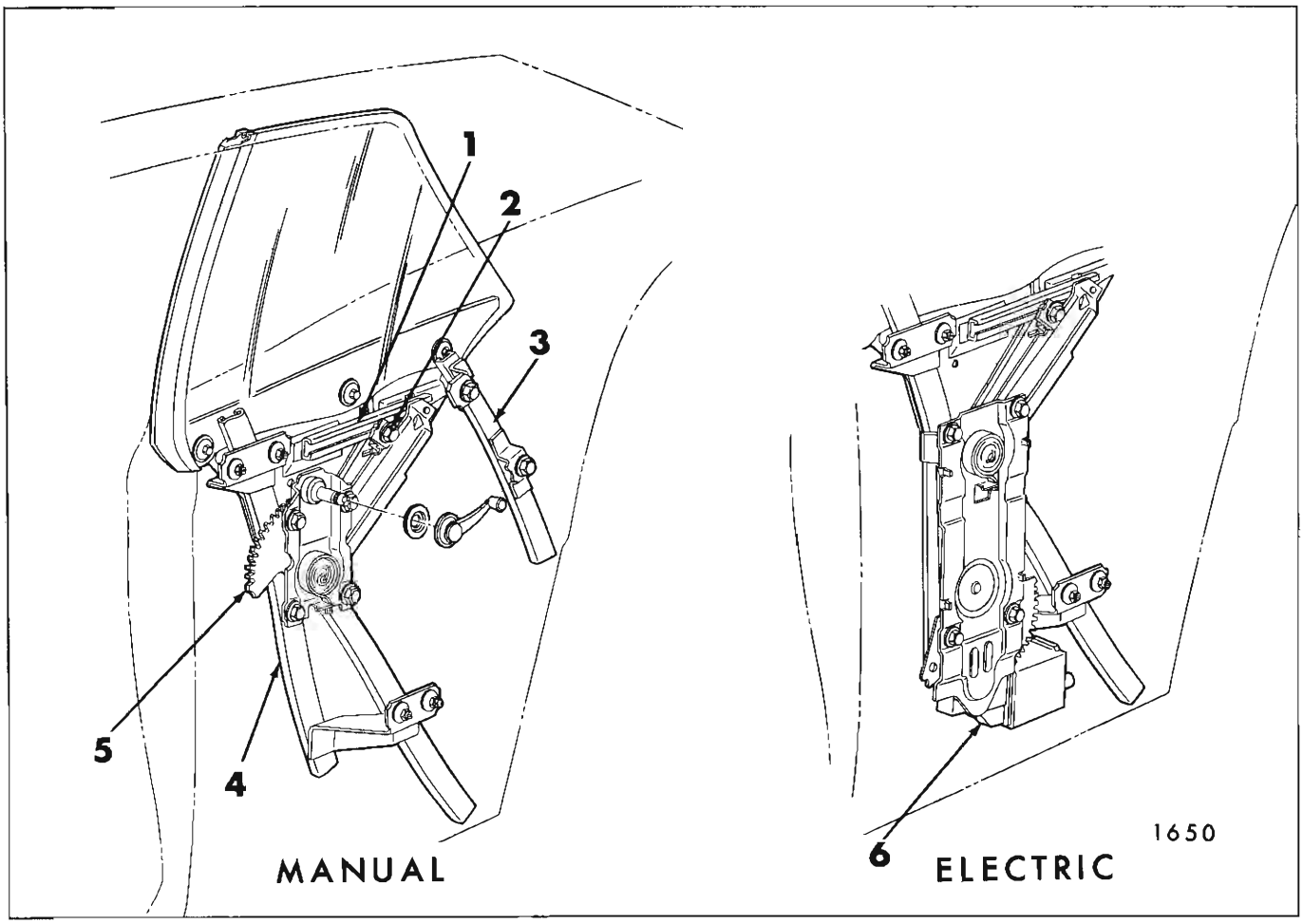


Fig. 1E28—Rear Quarter Window Hardware
"37" & "57" Styles

1. Window Channel Cam
2. Window Up-Stop
3. Rear Guide
4. Front Guide
5. Regulator (Manual)
6. Regulator (Electric)

Removal and Installation

1. Remove rear quarter trim assemblies and inner panel water deflector.

2. On styles equipped with electric window regulators, disconnect motor wire harness at in-line connector. DO NOT attempt to disconnect permanent connector at regulator motor.

3. Remove rear quarter window up-stop attaching bolt and remove stop (see Fig. 1E-29).

NOTE: Figure 1E-29 is for 16000, 25000, 26000, 35000, 36000, 45000 and 46000 Series but is indicative of hardware attachments for all "37" and "57" Styles.

4. While supporting glass by hand, remove lower sash channel cam attaching screws (2); slide cam rearward to disengage cam from regulator lift arm roller and remove cam (see Fig. 1E-29).

5. Lift quarter window up and remove assembly from body inboard of roof panel.

6. To install, reverse removal procedure.

Adjustments

Up travel limit of quarter glass is determined by adjustment of up-stop (see Fig. 1E-29). Fore or aft and in or out adjustment is provided at front and rear guides.

REAR QUARTER WINDOW REGULATOR ASSEMBLY (MANUAL OR ELECTRIC) "37" AND "57" STYLES

Removal and Installation

1. Remove rear quarter window assembly.

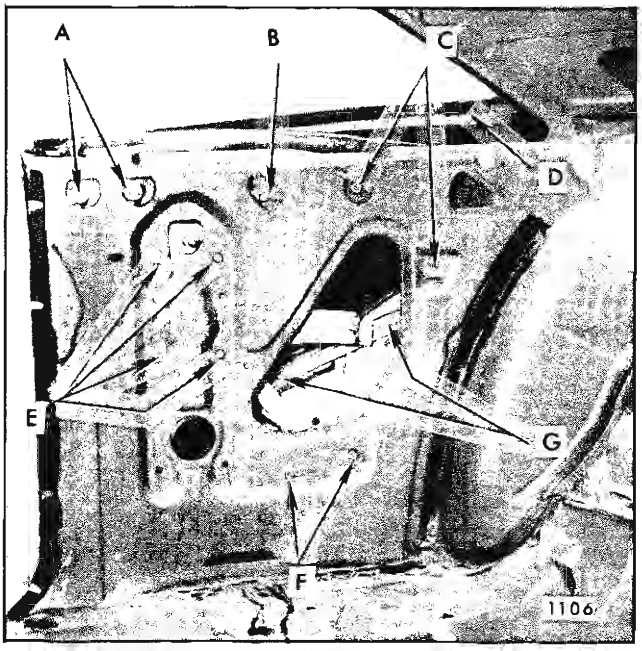


Fig. 1E29—Rear Quarter Hardware

A. Front Guide Upper Adjusting Studs and Nuts
B. Up-Stop Bolt
C. Rear Guide Studs and Nuts
D. Outer Strip Assembly
E. Regulator Bolts
F. Front Guide Lower Adjusting Studs and Nuts
G. Sash Channel Cam Screws

2. On styles equipped with electric window regulators, remove front guide assembly. Disconnect regulator motor wire harness.

3. Remove bolts securing regulator to rear quarter inner panel and remove regulator and motor through large access hole (see Fig. 1E-29).

NOTE: The procedure for removing electric motor from window regulator is described in the "Door" section of the Body Service Manual.

4. To install, reverse removal procedure.

REAR QUARTER WINDOW FRONT GUIDE ASSEMBLY "37" AND "57" STYLES

Removal and Installation

1. Remove rear quarter window assembly.

2. Remove front guide upper and lower adjusting stud nuts and remove front guide (see Fig. 1E-29).

3. To install, reverse removal procedure.

REAR QUARTER WINDOW REAR GUIDE ASSEMBLY "37" AND "57" STYLES

Removal and Installation

1. Remove rear quarter trim assemblies and inner panel water deflector.

2. Remove rear guide upper and lower adjusting stud nuts (see Fig. 1E-29).

3. Slide rear guide downward slightly to disengage roller on window sash channel and remove guide assembly.

4. To install, reverse removal procedure.

REAR QUARTER WINDOW OUTER STRIP ASSEMBLY "37" AND "57" STYLES

Removal and Installation

All strip assemblies are secured to the rear quarter outer panel return flange by screws. Access to these screws usually requires removal of quarter window (see Fig. 1E-29).

REAR END

BACK WINDOW

BACK WINDOW RETENTION ALL STYLES

The back window is retained in the body opening by a self-curing synthetic rubber adhesive caulking compound that adheres to both glass and window opening pinchweld flange.

Applied to the glass while in a soft state, the material begins to cure soon after exposure to air. Due to this fast curing characteristic, installation of glass into the body opening must follow quickly after application of material to glass.

Because the cured material adheres to both glass and pinchweld flange, it is necessary to cut through it to remove the back window. Adhesive Caulking Kit #4226000, which is designed for a "short method" windshield installation, has some of the material required to remove and replace a back window. The other materials needed to complete the installation are available either as service parts or at local supply houses.

Adhesive Caulking Kit #4226000 consists of:

a. One tube of adhesive caulking material

b. One dispensing nozzle

c. Steel music wire

d. Adhesive Caulking Primer (for priming original caulking material remaining on pinchweld flange).

The materials that are required to remove and install a back window are as follows:

*a. Two Adhesive Caulking Kits (Part No. 4226000 or equivalent).

b. One caulking gun (standard household type reworked as described in procedure).

c. Two pieces of wood for handles of cutting wire.

d. Black weatherstrip adhesive.

*e. Painted surface primer (needed only if pinchweld flange is repainted).

*f. Rubber glass spacers (see procedure for amount and usage).

1. Spacer (Part No. 4421823 or equivalent) .18 x .62 x 1.0 (flat).

2. Spacer (Part No. 4410043 or equivalent) .18 x .24 x .74 (insert).

3. Spacer (Part No. 4404196) or equivalent .30 x .44 x 1.0 (rectangle).

4. Spacer (Part No. 4871330 or equivalent) .34 x .44 x 1.0 (rectangle)

g. Glass handling suction cups

*Available as service parts.

To remove a back window, it is necessary to first remove the back window reveal moldings. Following are service procedures for removing both the moldings and back window.

BACK WINDOW REVEAL MOLDINGS ALL STYLES

Removal and Installation

The reveal moldings are retained by clips which are attached to the back window opening by screws. To disengage a molding from retaining clips use tool J-21549-2 (or J-9698) or any other suitable tool as shown in Figure 1F1.

NOTE: Adhesive caulked window glass tool set J-21549-02 is available as a service parts package and consists of:

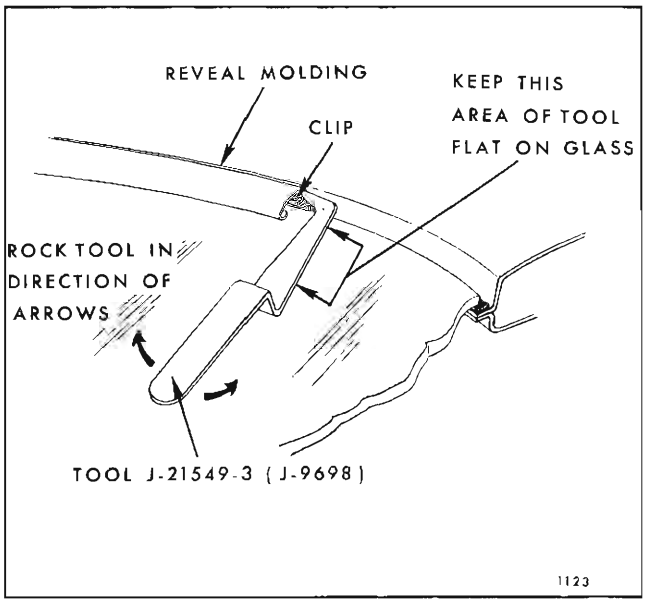


Fig. 1F1—Usage of Tool J-21549-3 (J-9698)

J-21549-1---Handle
*J-21549-2---Reveal molding remover (flat-blade)
**J-21549-3---Reveal molding remover (angle-blade)
*also available as J-21549.
**also available as J-9698.

As the back window reveal moldings telescope into each other, it is necessary to begin removal (disengaging clips) in the middle of a molding rather than at an end. In addition, when only one molding is to be removed, adjacent moldings must be disengaged sufficiently to allow disengagement of the telescoped ends.

If all moldings are to be removed, first remove back window lower reveal moldings.

NOTE: On 38000, 48000 & 68000 Series "69" styles, the lower reveal molding is a single piece. On 38000, 48000 & 68000 Series "37" styles, the lower reveal moldings (right and left) and side reveal moldings are joined together by a lower corner escutcheon which must be removed first. On all other styles, the lower reveal molding is a two piece section with the left lower reveal telescoped into the right lower reveal. This means, of course, that the right lower reveal must be removed first.

Next remove right and left side reveals and then upper reveal molding.

BACK WINDOW ASSEMBLY (GLASS INTACT) ALL STYLES

Removal

1. Remove back window reveal and garnish moldings. On 15000, 16000, 25000, 26000, 35000, 45000 & 46000 Series "11" & "69" styles so equipped, remove back window finishing lace.

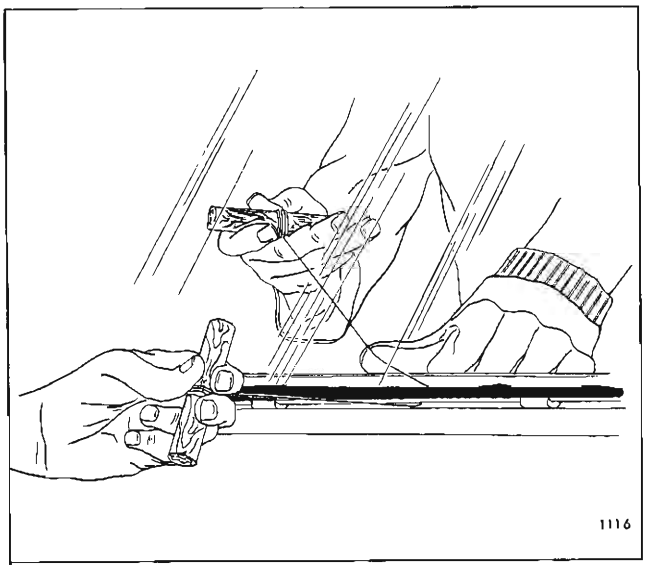


Fig. 1F2—Adhesive Caulked Glass Removal

2. Place protective coverings over rear compartment front panel, rear shelf feature strip and all adjacent painted surfaces.

NOTE: All styles use a painted feature strip except 38000, 48000, & 68000 Series "57" & "39" styles and 60869 styles which are equipped with a back window lower garnish molding.

3. Secure one end of steel music wire to a piece of wood (for handle). Insert other end of wire through caulking material at lower corner of back window and secure end to another piece of wood (handle).

4. With the aid of a helper, cut (pull steel wire) through caulking material, up side of back window, across top, down opposite side and across bottom (see Fig. 1F2).

5. Remove back window from body opening. If original glass is to be reinstalled, place it on a protected surface or glass holding fixture and remove major portion of caulking material from glass with a sharp chisel or razor blade. Remove all remaining traces with a toluene or thinner dampened rag.

NOTE: DO NOT use an oil base solvent! Any trace of oil on glass will prevent adhesion of new caulking material to glass.

6. Using a small stick or screwdriver, remove the neutral colored sealer from the lower pinchweld flange.

7. Using a sharp scraper or wood chisel, remove the major portion of adhesive caulking compound from the pinchweld flange completely around the opening.

NOTE: It is not necessary to clean off all of the old caulking material from the pinchweld flange; however, there should not be any loose pieces remaining.

Installation

NOTE: If a new back window is being installed because the original window shattered, perform steps 1, 2, 3 and 7 of back window removal procedure before proceeding with the installation.

1. Check all reveal molding retaining clips. If upper end of clip is bent away from body excessively, preventing proper installation of reveal molding, replace clip.

NOTE: Check all clip attaching screws and tighten as required. In production, a rubber dam

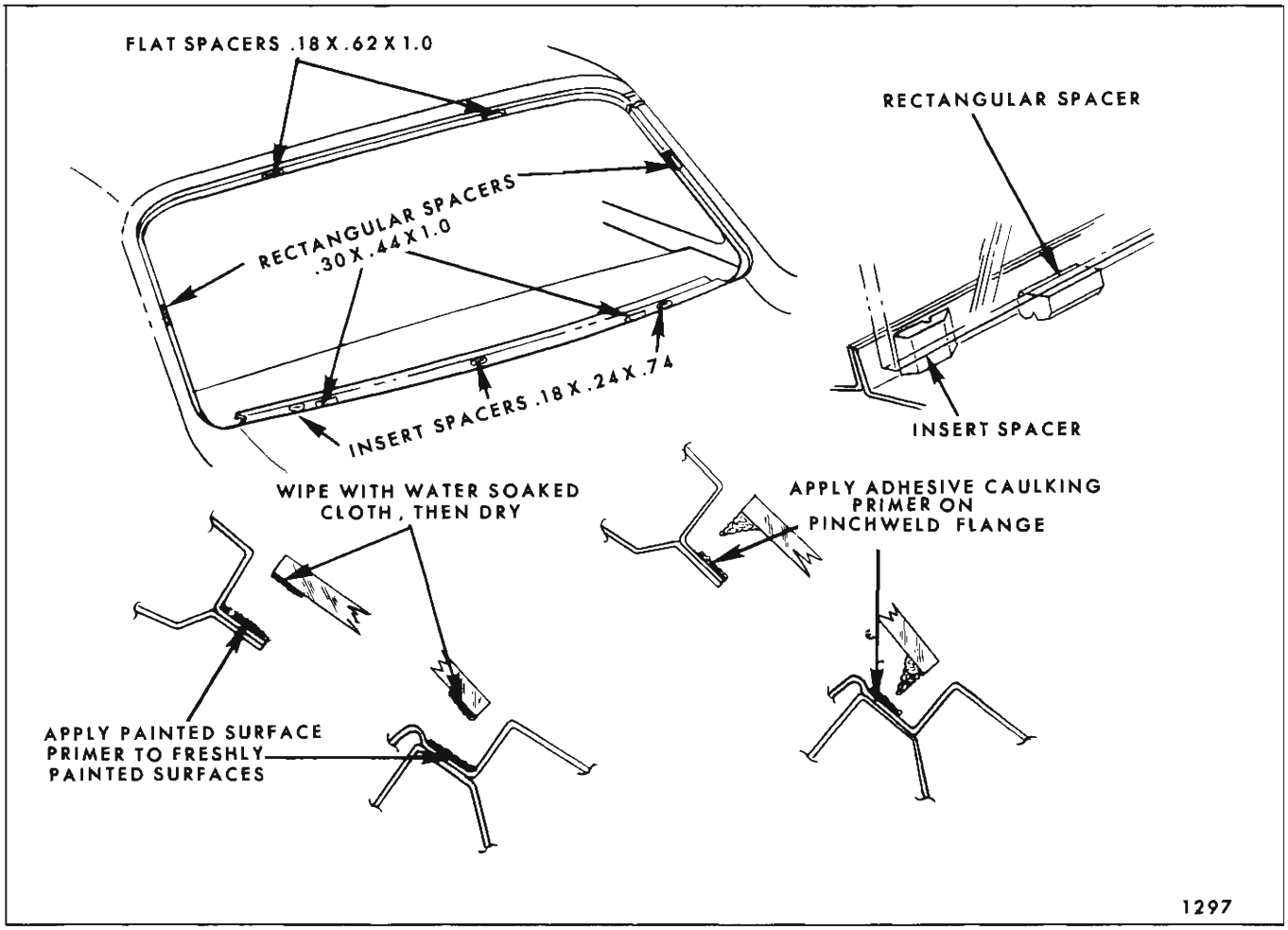


Fig. 1F3—Adhesive Caulked Back Window Spacer Installation

is used in lieu of rubber spacers. This rubber dam, however, is not recommended for service.

2. On all styles, cement (with black weatherstrip adhesive) two (2) flat spacers (.18 x .62 x 1.0 - Part No. 4421823 or equivalent) to pinchweld flange at top, approximately fifteen inches each side of center line of opening (see Fig. 1F3).

3. On all styles, cement (with black weatherstrip adhesive) four (4) rectangular spacers (.30 x .44 x 1.0 - Part No. 4404196 or equivalent) to back window opening rabbet - one in center of each side and two at bottom, approximately twenty inches from center line of opening (see Fig. 1F3).

4. On 38000, 48000 & 68000 Series "39" & "57" styles and 68069 styles, cement (with black weatherstrip adhesive) three flat spacers (the same part number or equivalent as listed in step 2 of this procedure) at bottom, one in center and one each approximately 22 inches from center line (see Fig. 1F4). On all other styles, install three insert spacers (.18 x .24 x .74 -- Part No. 4410043 or equivalent) at bottom, one in center and one each approximately 22 inches from center line (see Fig. 1F3).

5. Attach glass handling suction cups to outside surface of glass to enable lifting of glass into opening after application of adhesive caulking compound.

6. Position glass in back window opening. Carefully check relationship of glass to body pinchweld flange completely around opening. The overlap of glass to body pinchweld and retaining flanges should be equal with an minimum overlap. Where necessary, use waterproof shims under rubber spacers to obtain the required overlap (3/16"). Apply a piece of masking tape over each side of glass and roof extension. Slit tape vertically at edge of glass so that when glass is installed, tape on glass can be aligned with tape on body. Remove glass from opening and place it on a protected surface or glass holding fixture. (Lay glass down with inside surface up).

7. Apply one inch masking tape to inner surface of glass 1/4" inboard from outer edge completely

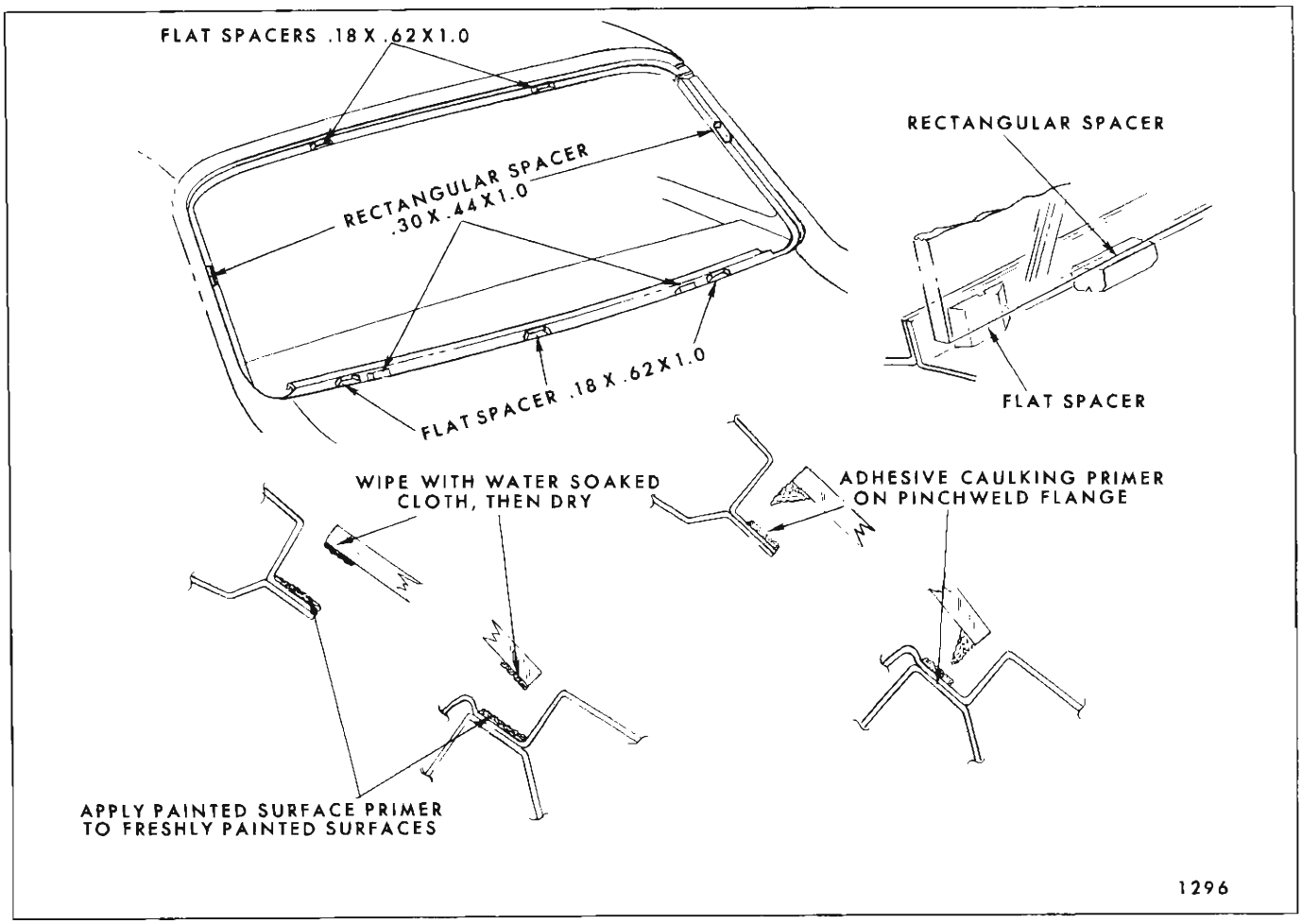


Fig. 1F4—Adhesive Caulked Back Window Spacer Installation

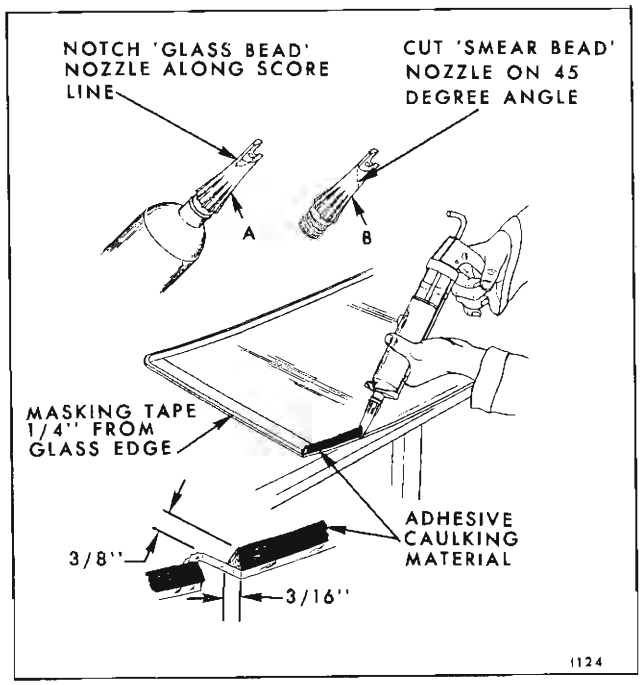


Fig. 1F5—Application of Adhesive Caulked Material

around periphery of glass (see Fig. 1F5) to aid in clean-up after installation and to give a clean edge to adhesive material.

8. Using a clean, lint-free cloth, liberally dampened with adhesive caulking primer, briskly rub primer over and into original adhesive caulking material that remains on pinchweld flange. Perform the following steps while allowing primer to dry for a minimum of five to ten minutes. If the pinchweld flange has been repainted, prime flange with Painted Surface Primer, or equivalent.

9. Enlarge dispensing end of one nozzle by cutting out notch along score line indicated at "A" in Fig. 1F5. This nozzle will be used to apply the bead of adhesive material to glass. Cut nozzle from the second kit at a 45 degree angle as indicated at "B" in Fig. 1F5. This latter nozzle will be used to apply a smear bead to pinchweld flange of back window opening.

10. Wipe surface of glass to which bead of adhesive caulking material will be applied (between masking tape and edge of glass) with a clean, water-dampened rag. Dry glass thoroughly with a clean dry rag.

11. Remove cap and protective cover from one tube of adhesive caulking material and insert "glass bead" nozzle (on cut on score line).

12. Insert tube in a standard household type caulking gun, reworked as follows:

a. Widen end-slot of caulking gun with a file sufficiently to accept dispensing end of tube.

b. Grind down disc on plunger rod so that disc will fit into large end of tube.

13. With caulking gun and nozzle positioned as illustrated in Figure 1F5, carefully apply a smooth continuous bead of caulking material 3/8" high by 3/16" wide at base completely around inside edge of glass.

NOTE: When material in first tube is dispensed, quickly insert second tube and continue application of bead. This material begins to cure after fifteen (15) minutes exposure to air, therefore, perform the following steps immediately and install glass in the opening as quickly as possible.

14. Remove "glass bead" nozzle and insert "smear bead" nozzle (nozzle cut at 45 degree angle in step No. 8). Holding caulking gun at an angle so that opening of nozzle rests flat on pinchweld flange, apply a thin (1/4" wide x 1/16" high) "smear bead" of adhesive caulking material completely around pinchweld flange.

15. With the aid of a helper, grasp suction cups (previously applied) and carefully install glass in body opening. Make certain that glass sets properly on spacers and does not have to be shifted after material contacts pinchweld flange. Align tape on glass with tape on body to guide window into opening.

NOTE: When setting glass into opening, it should be in same plane as opening so that all edges of glass contact pinchweld flange at approximately the same time.

16. Press glass (lightly) to adhere caulking material to pinchweld flange and install back window reveal moldings.

17. From inside of body, run a flat-bladed stick around edge of pinchweld flange to force excess caulking compound back into opening between glass and pinchweld flange.

18. Watertest back window immediately using a cold water spray. If any waterleaks are encountered, use a flat-bladed tool or stick to work caulking material into leak point. This can best be done from inside the body. After watertest, remove tape from inside surface of glass.

19. Install all previously removed parts and remove protective coverings.

NOTE: Unused adhesive caulking material remaining in tube can be stored for later use. To store, remove nozzle and insert end cap previously removed. Do not remove material from nozzle until it has cured. Once cured, material can be removed from nozzle in one piece with a pair of pliers.

MINOR WATERLEAK CORRECTIONS (WITH ADHESIVE CAULKING MATERIAL IN A CURED STATE)

Adhesive caulked glass installation waterleaks can be corrected in the following manner without removing and reinstalling the glass.

NOTE: The following procedure is applicable only with the use of adhesive caulking material

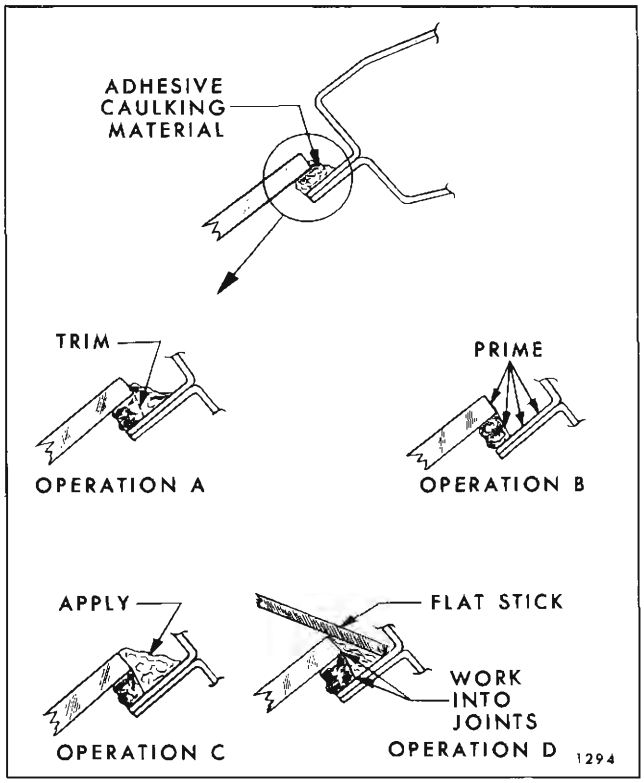


Fig. 1F6—Correction of Adhesive Caulked Glass Installation Waterleaks

A. Trim off adhesive caulking material along edge of glass.
B. Prime areas indicated using a small brush.
C. Apply adhesive caulking material (use Kit #4226000 or equivalent).
D. Using a flat stick, work adhesive caulking material well into joints of orignal material, painted body flange and glass.

and primer furnished in GM Kit Part No. 4226000 or equivalent.

1. Remove reveal moldings in area of leak.

2. Mark location of leak(s).

NOTE: If leak is between adhesive caulking material and body or between material and glass, carefully push outward on glass in area of leak to determine extent of leak. This operation should be performed while water is being applied to leak area. Mark extent of leak area.

3. From outside of body, clean any dirt or foreign material from leak area with water and then dry cleaned area with an air hose.

4. Using a sharp knife, trim off uneven edge of adhesive caulking material (see Operation "A" in Fig. 1F6) at leak point and three to four inches on both sides of leak point or beyond limits of leak area.

5. Using a small brush, apply adhesive caulking material primer over trimmed edge of adhesive caulking material and over adjacent painted surface (see Operation "B" in Fig. 1F6).

6. Apply adhesive caulking material, as shown in Operation "C" in Figure 1F6), at leak point and three to four inches on both sides of leak point or beyond limit of leak area.

7. Immediately after performing Step No. 6, use a flat stick, or other suitable flat-bladed tool, to work adhesive caulking material well into leak point and into joint of original material and body to effect a watertight seal along entire length of material application (see Operation "D" in Fig. 1F6).

8. Spray watertest to assure that leak has been corrected. DO NOT run a heavy stream of water directly on freshly applied adhesive caulking material.

REAR COMPARTMENT
ALL STYLES

The rear compartment lid employs two torque rods that are mounted between the hinge assemblies to act as a counterbalance and hold-open for the lid. Notches at the stationary end of the rods allow for adjustment of the rods to increase operating effort of the rods to increase or decrease operating effort of the lid.

The rear compartment lid lock employs a side-action snapbolt mechanism that has provisions at the attaching locations for lateral adjustment. Up and down adjustment is available at the striker attaching locations.

All Styles use a single section cement-on type weatherstrip which is cemented to the rear compartment gutter completely around the lid opening.

REAR COMPARTMENT LID
ALL STYLES

Removal and Installation

1. Open lid and place protective covering along edges of rear compartment opening to prevent damage to painted surfaces.

2. Where necessary, disengage wire harness from clips on hinge and rear compartment lid inner panel and remove wire harness.

3. On 35000, 36000, 38000, 45000, 46000 and 48000 Series equipped with rear compartment lid lock vacuum release option, disconnect vacuum hose from vacuum release unit and remove hose from lid.

4. Mark location of hinge straps on rear compartment lid inner panel.

5. With the aid of a helper, remove lid attaching bolts and remove lid (see Fig. 1F7).

6. To install, align lid within scribe marks and reverse removal procedure.

Adjustments

Forward, rearward and side to side adjustments of lid are provided at hinge strap attaching points. The lid can be raised or lowered at hinges by the use of shims installed between inner panel and hinge strap.

REAR COMPARTMENT LID HINGE STRAP
ALL STYLES

Removal

1. Place protective covering over upper portion of rear compartment opening and provide support for lid on side from which hinge strap is to be removed.

2. Disengage any wire harness or vacuum hose that may interfere with hinge strap removal.

3. Mark location of hinge strap on lid inner panel and remove bolts securing hinge strap to lid.

4. With a suitable tool disengage torque rod from notched retainer on inboard face of opposite hinge box.

NOTE: Mark retainer notch before removing torque rod to insure that rod is installed in same position.

5. Disengage opposite end of torque rod from movable portion of hinge strap and remove rod.

6. Bend up hinge pin retaining tab and drive out pin. Remove hinge strap from body (see Fig. 1F7).

Installation

1. Position hinge strap in hinge box and install hinge pin. Bend over retaining tab to secure hinge pin.

2. Position hinge strap within scribe marks on lid inner panel and install attaching bolts.

3. Install "U" shaped end of torque rod to hinge box making certain outer end of rod is engaged in hole in outboard face of hinge box.

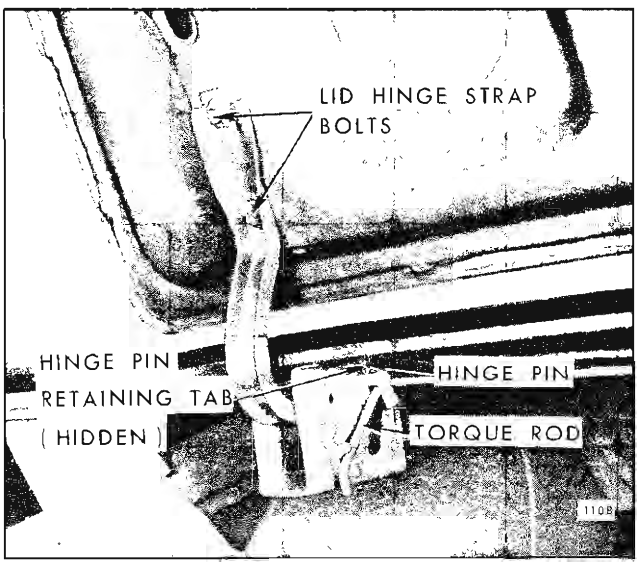


Fig. 1F7—Rear Compartment Lid Attachment

4. Engage torque rod into notch of operating link and engage other end of rod to correct retaining notch of the torque rod support on the inboard face of opposite hinge box.

5. Check alignment of rear compartment lid and make any necessary adjustments.

6. Replace any wire harness or vacuum components that may have been disconnected.

REAR COMPARTMENT TORQUE ROD ADJUSTMENT ALL STYLES

The amount of effort required to open and close the rear compartment lid is determined by the position of the torque rod in the notches on the inboard face of the hinge boxes. If the torque rod is located in the lowest notch, the amount of effort required to open the lid is the greatest and the amount of effort required to close the lid is the least. If the torque rod is located in the top notch, the amount of effort to open the lid is the least and the amount of effort to close the lid is the greatest (see Fig. 1F7).

NOTE: It is not necessary to adjust the left and right hand torque rods at the same time or to the same final position (notch).

REAR COMPARTMENT LID LOCK CYLINDER ALL 15000 AND 16000 SERIES

Removal and Installation

1. Open rear compartment lid. Remove lock cylinder retainer attaching screws located on lid inner panel below lock cylinder and adjacent to lid hemming flange (see Fig. 1F8).

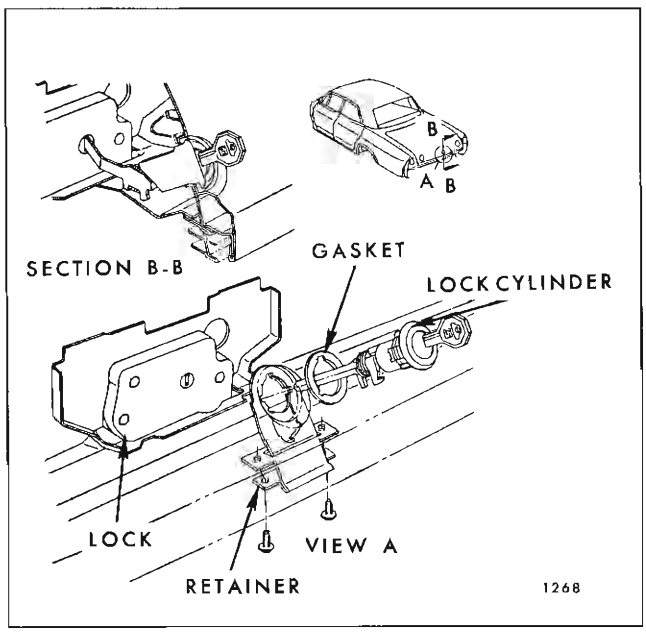


Fig. 1F8—Rear Compartment Lid Lock Cylinder

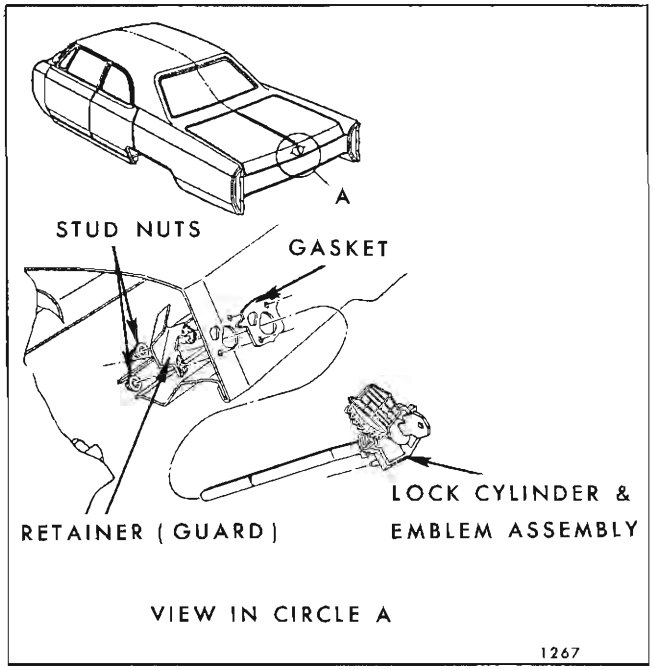


Fig. 1F9—Rear Compartment Lid Lock and Emblem Assembly

2. Pull downward on retainer to disengage from lock cylinder and remove retainer from lid. Lock cylinder is now free and can be removed from compartment lid outer panel.

3. To install, reverse removal procedure. Make certain lock cylinder shaft engages with lock and that gasket mates properly with compartment lid outer panel to form a watertight seal. Check lock for proper operation (see section B-B in Fig. 1F8).

REAR COMPARTMENT LID EMBLEM AND LOCK CYLINDER ASSEMBLY ALL 68000 SERIES

Removal and Installation

1. Open rear compartment lid. Remove access hole cover screws at lower rear of lid inner panel and remove cover.

2. Working through access hole, remove stud nuts securing compartment lid emblem and lock cylinder assembly, and lock cylinder guard.

3. Remove guard through access hole and compartment lid emblem and lock cylinder assembly from lid outer panel (see Fig. 1F9).

4. To remove lock cylinder from emblem, remove lock cylinder shaft and spring and rotate cylinder counter-clockwise.

5. To install, reverse removal procedure. Make certain that emblem gasket mates properly with lid outer panel and that emblem stud holes are sealed to protect against waterleaks.

REAR COMPARTMENT LOCK CYLINDER ALL 25000 AND 26000 SERIES

Removal and Installation

1. Open rear compartment lid and remove screw securing retainer.

2. Slide retainer out of engagement with lock cylinder and remove cylinder and sealing gasket from rear end panel.

3. To install, reverse removal procedure.

REAR COMPARTMENT LOCK CYLINDER ALL 35000 AND 36000 SERIES

Removal and Installation

1. Open rear compartment lid and remove two screws securing retainer to lid (see Fig. 1F10).

2. Slide retainer out of engagement with lock cylinder and remove cylinder, sealing gasket and shaft from rear compartment lid.

3. To install, reverse removal procedure.

REAR COMPARTMENT LID LOCK CYLINDER AND EMBLEM ASSEMBLY — ALL 38000 SERIES

Removal and Installation

1. Raise rear compartment lid and remove nut securing guard to emblem (see Fig. 1F11).

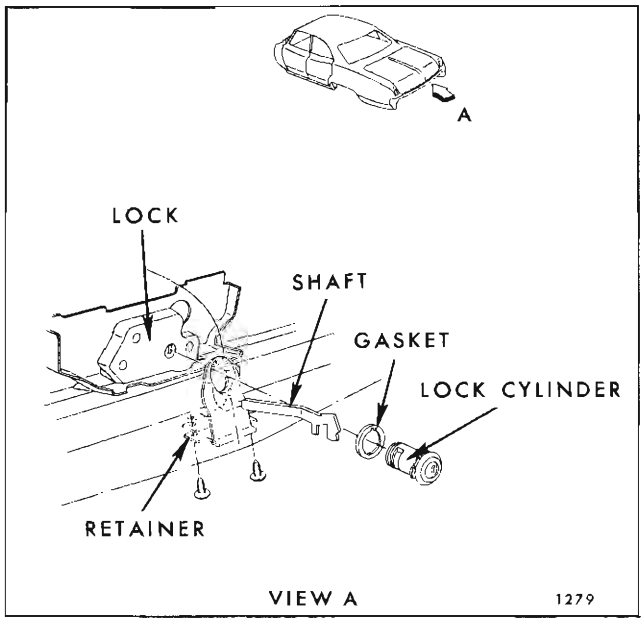


Fig. 1F10—Rear Compartment Lid Lock Cylinder Assembly

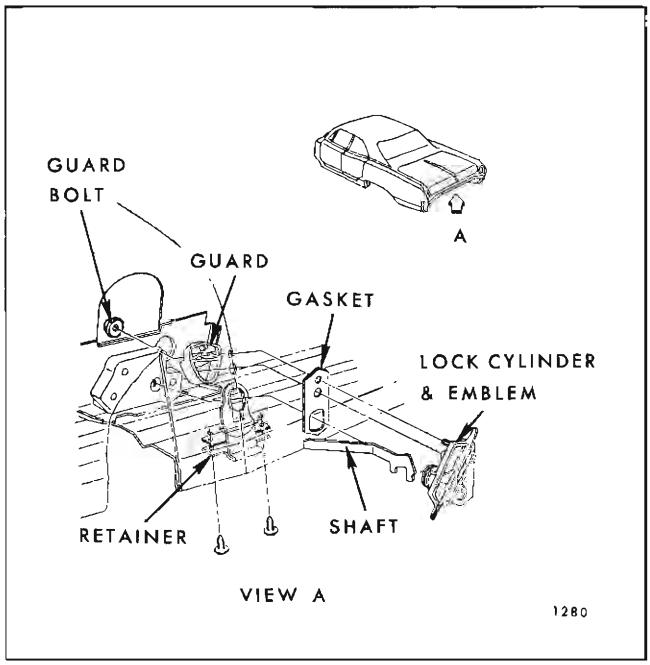


Fig. 1F11—Rear Compartment Lid Lock Cylinder and Emblem Assembly

2. Remove screws (2) securing retainer to rear compartment lid and disengage retainer from lock cylinder and emblem assembly and remove unit (see Fig. 1F11).

3. To install, reverse removal procedure.

REAR COMPARTMENT LID LOCK CYLINDER ALL 45000-46000 AND 48000 SERIES

Removal and Installation

1. Remove rear compartment lid lower molding as explained in the "Molding" section of the Body Service Manual.

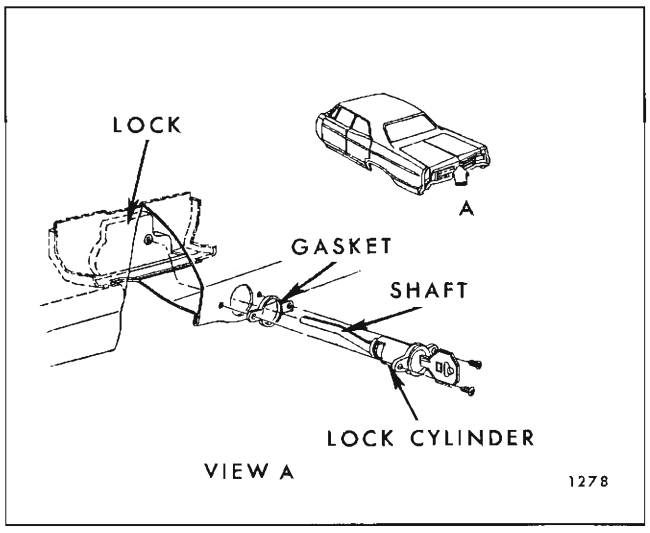


Fig. 1F12—Rear Compartment Lid Lock Cylinder Assembly

2. Remove the two exposed screws securing rear compartment lid lock cylinder to lid and remove cylinder (see Fig. 1F12).

3. To install, reverse removal procedure.

REAR COMPARTMENT LID LOCK ALL STYLES EXCEPT 25000 AND 26000 SERIES

1. Remove rear compartment lid lock cylinder assembly.

2. Remove rear compartment lid lock attaching bolts and remove lock assembly (see Fig. 1F13).

3. To install, reverse removal procedure. Check lock engagement with striker and make any necessary lateral adjustments before tightening bolts.

REAR COMPARTMENT LID LOCK STRIKER ALL STYLES EXCEPT 25000 AND 26000 SERIES

Removal and Installation

1. Open rear compartment lid. Mark vertical position of striker by scribing a line on striker at top of striker support.

2. Remove striker attaching screws (Fig. 1F13) and remove striker.

3. To install, reverse removal procedure. Close lid to check lock to striker engagement and make necessary vertical adjustments before tightening striker attaching screws.

REAR COMPARTMENT LID LOCK ALL 25000 AND 26000 SERIES

Removal and Installation

1. Remove rear compartment lid lock cylinder as previously described.

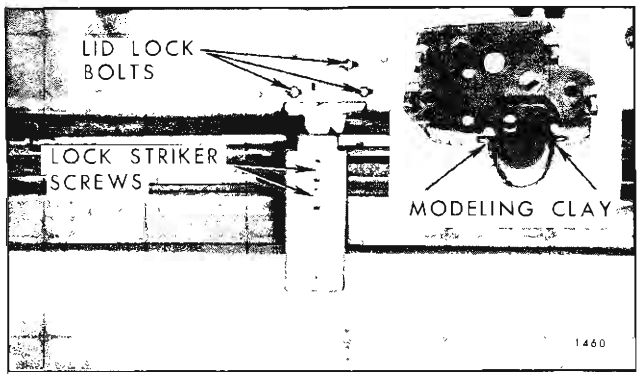


Fig. 1F13—Rear Compartment Lid Lock and Striker

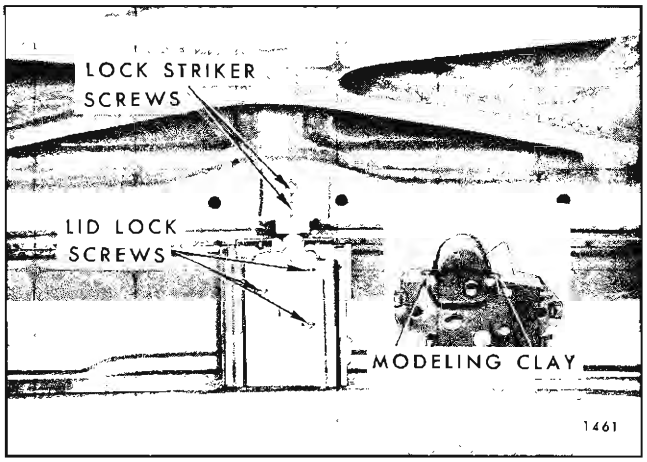


Fig. 1F14—Rear Compartment Lid Lock and Striker

2. On styles equipped with rear compartment lid lock vacuum release option, remove vacuum release unit.

3. Remove lock attaching screws (Fig. 1F14) and remove lock from body.

4. To install, reverse removal procedure. Before tightening screws, check for proper engagement with lock striker and make any necessary lateral adjustments.

REAR COMPARTMENT LID LOCK STRIKER ALL 25000 AND 26000 SERIES

Removal and Installation

1. Open rear compartment lid. Mark vertical position of striker by scribing a line on striker at bottom of lid inner panel.

2. Remove striker attaching screws (Fig. 1F14) and remove striker from compartment lid.

3. To install, align scribe mark on striker with lower edge of compartment lid inner panel and install attaching screws.

REAR COMPARTMENT LID VACUUM RELEASE UNIT ALL 25000-26000-35000-36000-38000-45000-46000 AND 48000 SERIES

Removal and Installation

1. Remove rear compartment lid lock cylinder.

2. Disconnect vacuum hose from vacuum release unit, remove vacuum unit attaching bolts and remove unit from rear compartment (see Fig. 1F15 for 25000 and 26000 Series, and Fig. 1F16 for 35000, 36000, 38000, 45000, 46000 and 48000 Series).

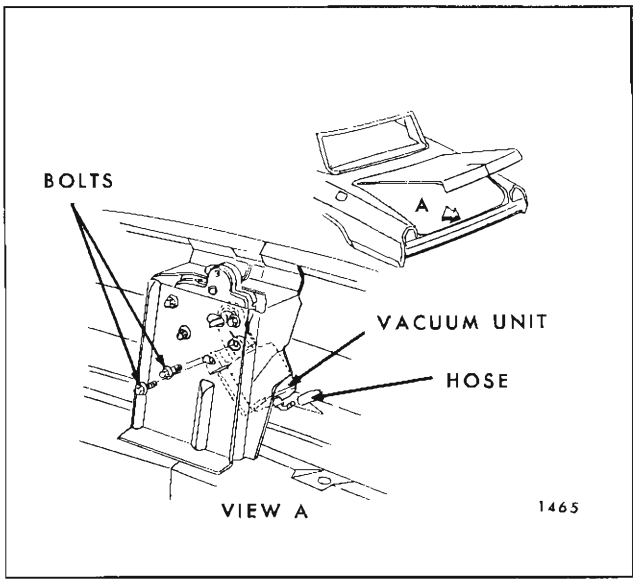


Fig. 1F15—Rear Compartment Vacuum Release Unit

3. To install, reverse removal procedure. Check unit for proper alignment and operation.

REAR COMPARTMENT LID LOCK STRIKER ENGAGEMENT ALL STYLES EXCEPT STYLES EQUIPPED WITH MECHANICAL CLOSING UNIT.

IMPORTANT: Since the rear compartment lock frame acts as a guide when entering the striker, make sure rear compartment lid is properly positioned in body opening before performing striker engagement check. To check for proper engagement of rear compartment lid lock bolt with striker, use the following procedure:

1. Insert a small quantity of modeling clay on frame of lock at both sides of the lock bolt (Figs. 1F13 - 1F14). Close lid with moderate force.

2. Open lid and check amount of engagement of striker with lock frame as indicated by the compression of the clay. The striker bar impressions

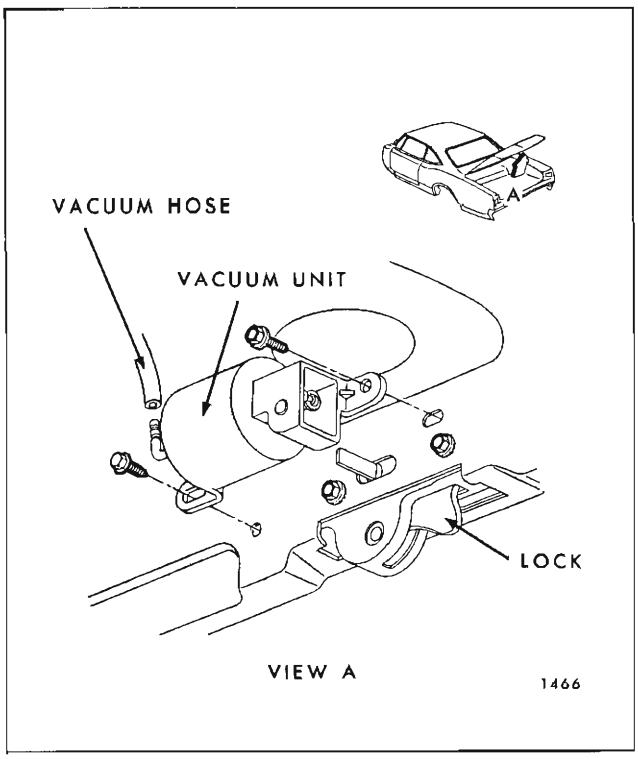


Fig. 1F16—Rear Compartment Vacuum Release Unit

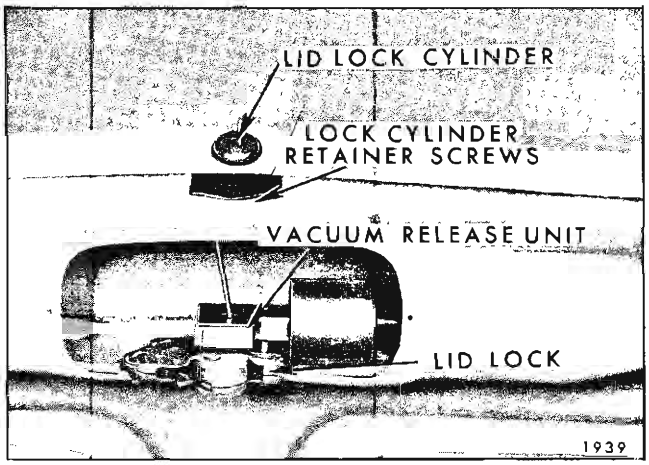


Fig. 1F17—Rear Compartment Vacuum Release Unit

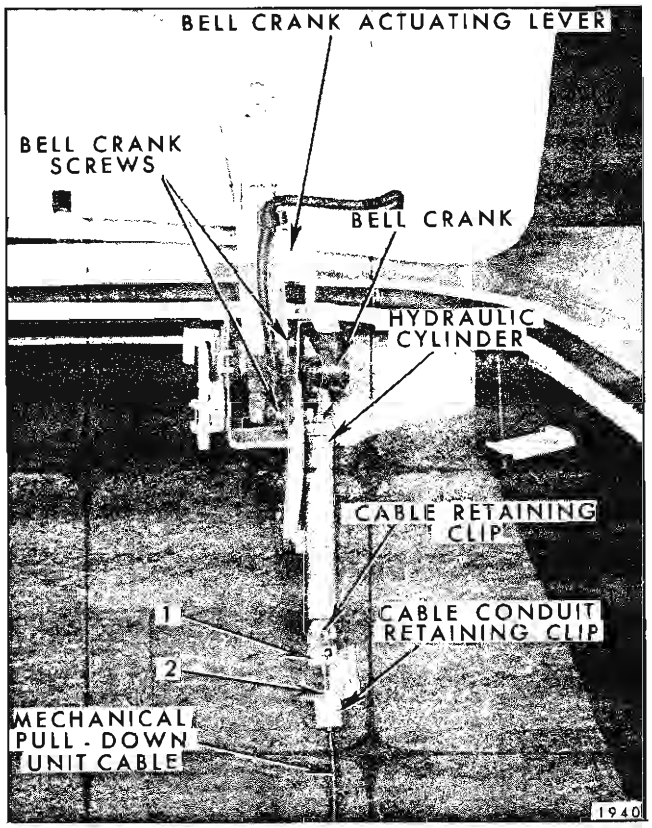


Fig. 1F18—Mechanical Pull Down Unit Hydraulic Cylinder

in the clay should be even on both sides of the lock frame. Where required, loosen striker or lock attaching screws; adjust lock sideways or striker up or down to obtain proper engagement; then, tighten screws.

REAR COMPARTMENT LID VACUUM LOCKING SYSTEM ALL 68000 SERIES

The rear compartment lid vacuum lock system is a side-action snap-bolt type lock with a vacuum release unit attached that unlocks the lock upon the introduction of vacuum in the unit. The vacuum is stored in a storage tank located on the shroud panel. It is controlled by a switch located in the instrument panel compartment box. By actuating the switch, vacuum is introduced into the line extending from the storage tank to the vacuum release unit, thereby, unlocking the lid lock. As this is only an unlocking feature, the rear compartment lid must be closed manually.

REAR COMPARTMENT LID VACUUM RELEASE UNIT

Removal and Installation

1. Open rear compartment lid. Remove lid lock cover panel and lid lock cylinder assembly.

2. Remove vacuum release unit screws (see Fig. 1F18). Disconnect unit from vacuum line and remove unit from rear compartment lid.

3. To install, reverse removal procedure.

REAR COMPARTMENT LID MECHANICAL PULL-DOWN UNIT ALL 68000 SERIES

The rear compartment lid mechanical pull-down unit is used in conjunction with the opening and closing unit. When the rear compartment lid is lowered to a point that the lid lock engages with striker, the mechanical closing unit pulls the lid

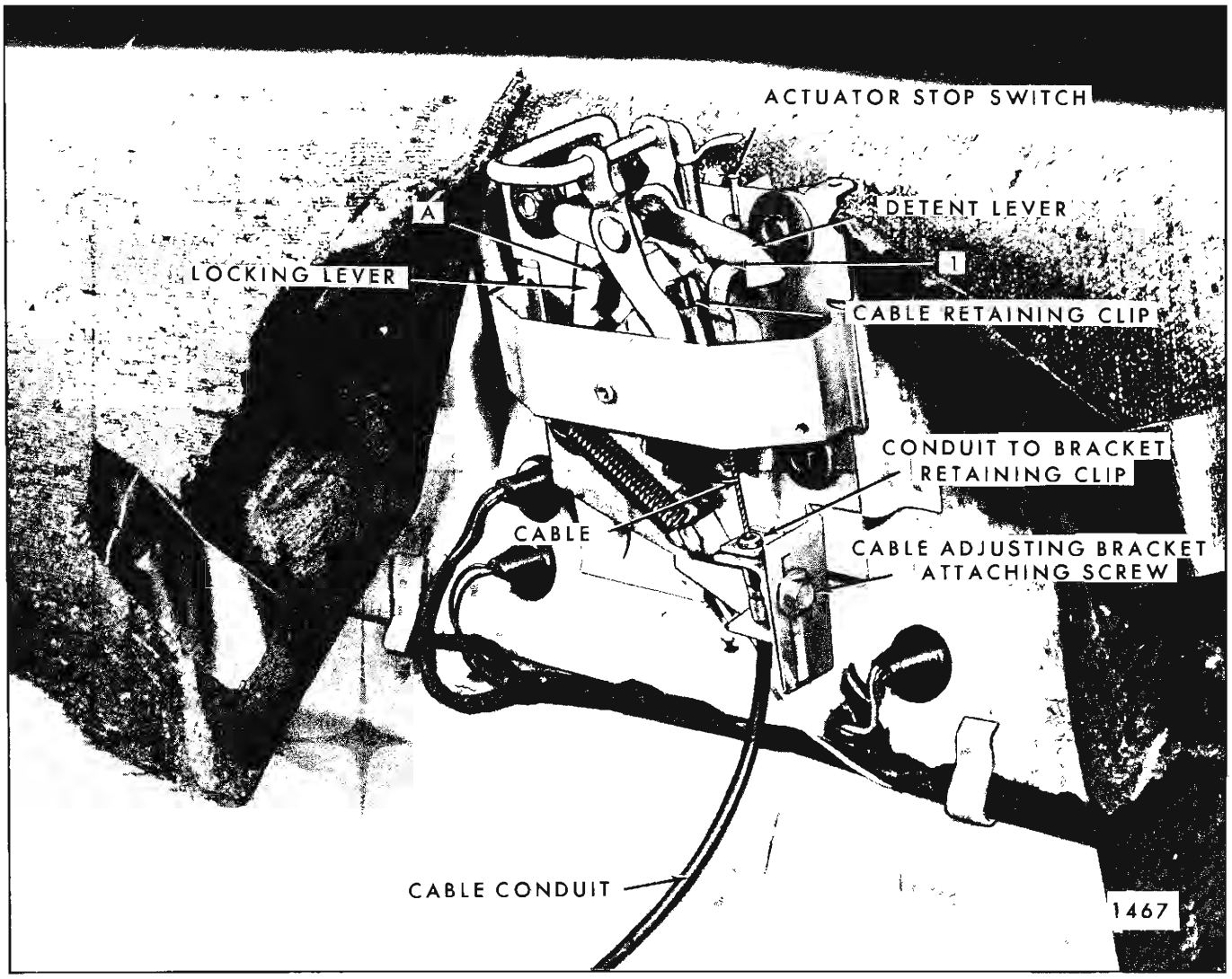


Fig. 1F19—Rear Compartment Lid Mechanical Pull-Down Unit

the remaining distance (7/8") to the fully closed position.

To act as a safety feature and slow the action of the closing unit, a hydraulic cylinder is incorporated in the closing unit. The cylinder is attached to a bell crank at the right rear compartment lid hinge and to the closing unit by a cable. As the lid is lowered and the lock latches to the striker, but before the mechanical closing feature is tripped, the piston extends to a "full-out" position. Then, as the lid is lowered to actuate the mechanical closing feature, the piston compresses the fluid in the cylinder retarding the closing action of the spring in the hydraulic cylinder.

Removal and Installation

1. Open rear compartment lid. Remove mechanical pull-down unit cover panel. Depress striker slightly to relieve tension from cable and disengage clip securing cable to pull-down unit control arm (see Fig. 1F19).

2. Disengage clip securing cable conduit to cable adjusting bracket and disengage cable and cable conduit from pull-down unit (see Fig. 1F19).

3. Scribe (mark) position of pull-down unit on rear end panel and supports to facilitate reinstalling unit in same position. Remove pull-down unit attaching bolts and remove unit from body (see Fig. 1F20).

4. To install, reverse removal procedure.

REAR COMPARTMENT LID MECHANICAL PULL-DOWN UNIT CABLE ALL 68000 SERIES

Removal and Installation

1. On lower end of hydraulic cylinder pull clip away from hooked end of pull-down unit cable. Disengage cable from slot in cylinder. Disengage cable conduit retaining clip from support on wheelhouse and remove cable and conduit from support (see Fig. 1F18).

2. Repeat this procedure at other end of cable disengaging clips securing cable to pull-down unit and cable conduit to adjusting bracket (Fig. 1F19) and remove cable from body.

3. To install, reverse removal procedure.

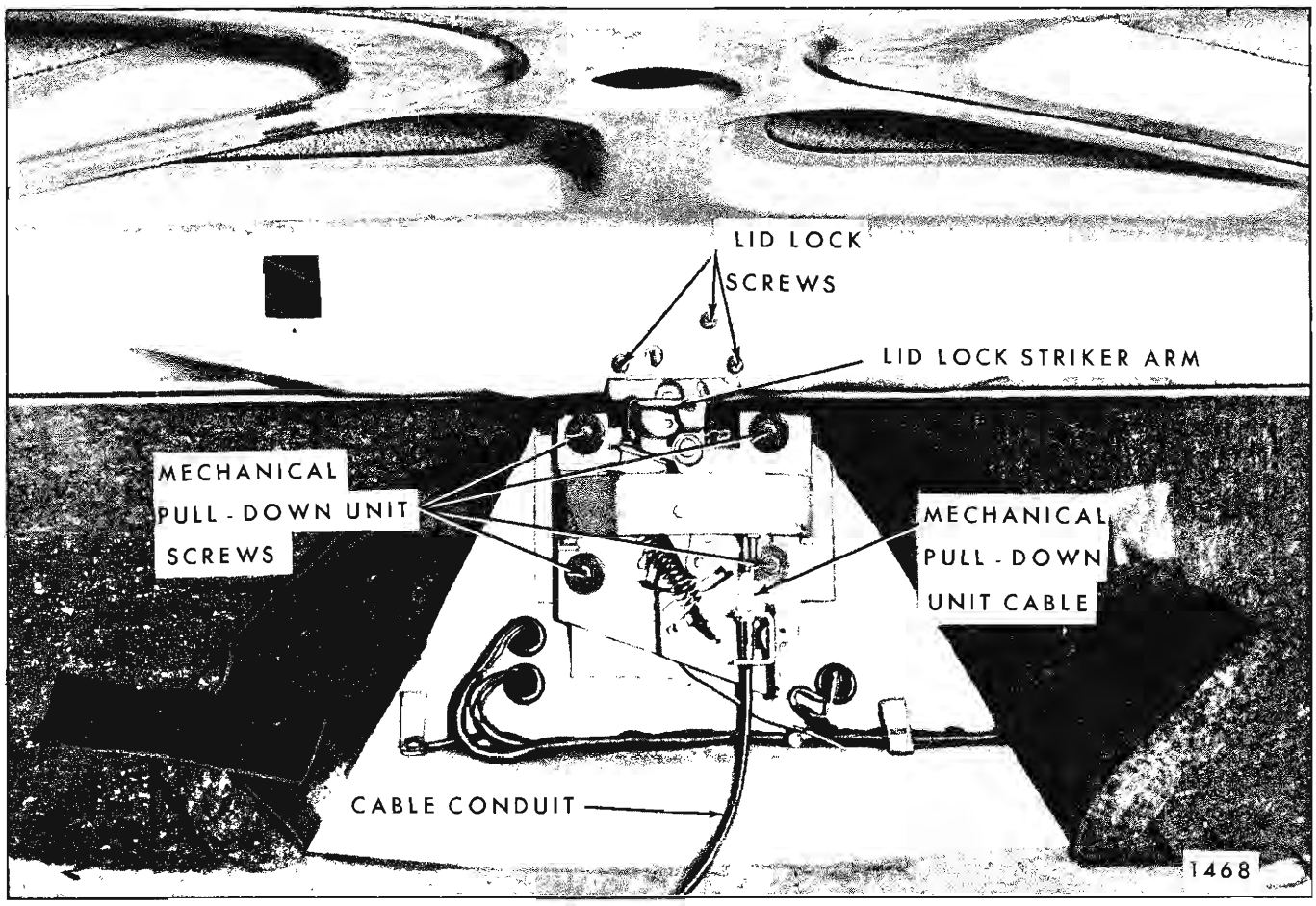


Fig. 1F20—Rear Compartment Lid Lock and Mechanical Pull-Down Unit

REAR COMPARTMENT LID MECHANICAL PULL-DOWN UNIT HYDRAULIC CYLINDER ALL 68000 SERIES

Removal and Installation

1. Disengage cable from lower end of hydraulic cylinder as described under "Rear Compartment Lid Mechanical Pull-Down Unit Cable - Removal".

2. Lift cylinder to disengage upper end from shoulder of shaft on link assembly and remove cylinder.

3. To install, reverse removal procedure.

REAR COMPARTMENT LID MECHANICAL PULL-DOWN UNIT ADJUSTMENTS ALL 68000 SERIES

To actuate the mechanical pull-down unit the rear compartment lid lock must properly engage the striker arm and depress the detent lever of the pull-down unit. This engagement can be checked by lowering the lid and visually checking lock and striker alignment. If adjustment is necessary, obtain lateral adjustment at lock attaching screw locations and "up or down" adjustment at pull-down unit attaching screw locations.

For proper operation of the pull-down unit, the pull-down unit cable must be adjusted to the proper tension. If the cable has too much tension it will not allow the pull-down unit to return to its full up position and "cock". This is apparent when as the lid begins to lower, so does the pull-down unit.

Too little tension in the cable results in a lessening of pull-down effort in the unit and, consequently, a misaligned (high) rear compartment lid.

To increase cable tension, position hydraulic cylinder end of cable in the upper slot on the lower end of the cylinder ("1" in Fig. 1F18). If more tension, or finer adjustment, is required, loosen cable adjusting bracket attaching screw (Fig. 1F19). Adjust bracket downward (to increase cable travel) and tighten attaching screw.

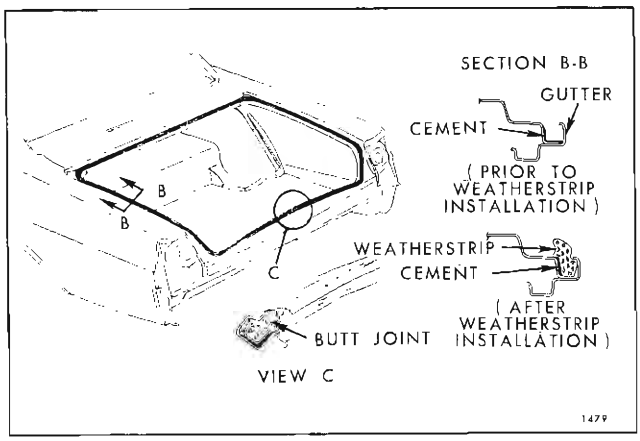


Fig. 1F21—Rear Compartment Weatherstrip Assembly

To decrease cable tension, position hydraulic cylinder end of cable in lower slot on hydraulic cylinder ("2" in Fig. 1F20). For finer adjustment, or to lessen tension still more, loosen cable adjusting bracket attaching screw (Fig. 1F19). Adjust bracket upward to desired position and tighten attaching screw.

IMPORTANT: The lack of lubrication between the toggle and the detent lever ("1", Fig. 1F19) can greatly increase the effort required to trip (unlock) the pull-down unit. Therefore, make certain point of contact between these two levers is lubricated with Lubriplate or its equivalent.

REAR COMPARTMENT WEATHERSTRIP ALL STYLES

Removal

1. Separate "butt" ends of weatherstrip at rear compartment opening (see Fig. 1F21).

2. Using a flat-bladed tool, carefully disengage weatherstrip from its cemented foundation in gutter completely around opening and remove weatherstrip from body.

Installation

1. Clean out gutter around entire rear compartment opening to provide a clean cementing surface.

2. Apply (brush) a continuous coat of weatherstrip adhesive to surfaces of the rear compartment gutter.

3. Using a flat-bladed tool, such as a putty knife, insert weatherstrip into gutter starting with one end of weatherstrip at rear center of gutter and working completely around gutter.

4. If a new weatherstrip is being installed, trim end to form a butt joint at rear center of opening. Brush weatherstrip adhesive (black) on both ends of weatherstrip and secure ends together to form a butt joint.

5. Using a pressure type applicator, apply weatherstrip adhesive (neoprene type) between weatherstrip and outer surface of gutter completely around opening to assure a watertight seal.

6. Roll or press weatherstrip to aid in obtaining a good cement bond. Allow sufficient time for cement to set before closing rear compartment lid.

TAIL GATE

TAIL GATE INNER PANEL WATER DEFLECTOR ALL STATION WAGON STYLES

On all station wagon styles a waterproof paper tail gate inner panel water deflector is sealed to the tail gate inner panel and deflects water into the bottom of the tail gate where it can drain out the bottom drain holes. The bottom of the water deflector is sealed to the inner panel in a manner that will deflect water towards designated drain holes where the water can readily enter into the bottom of the tail gate.

IT IS IMPORTANT THAT WHENEVER ANY WORK IS PERFORMED ON THE TAIL GATE WHERE THE WATER DEFLECTOR HAS BEEN DISTURBED, THE DEFLECTOR MUST BE PROPERLY SEALED TO THE TAIL GATE INNER PANEL.

Removal and Installation

1. Remove tail gate inner cover panel lower retainer and inner cover panel.

2. Using a sharp scraper, or other suitable tool, carefully lift up edge of deflector and detach sealer and water deflector as required.

NOTE: DO NOT TEAR WATER DEFLECTOR.

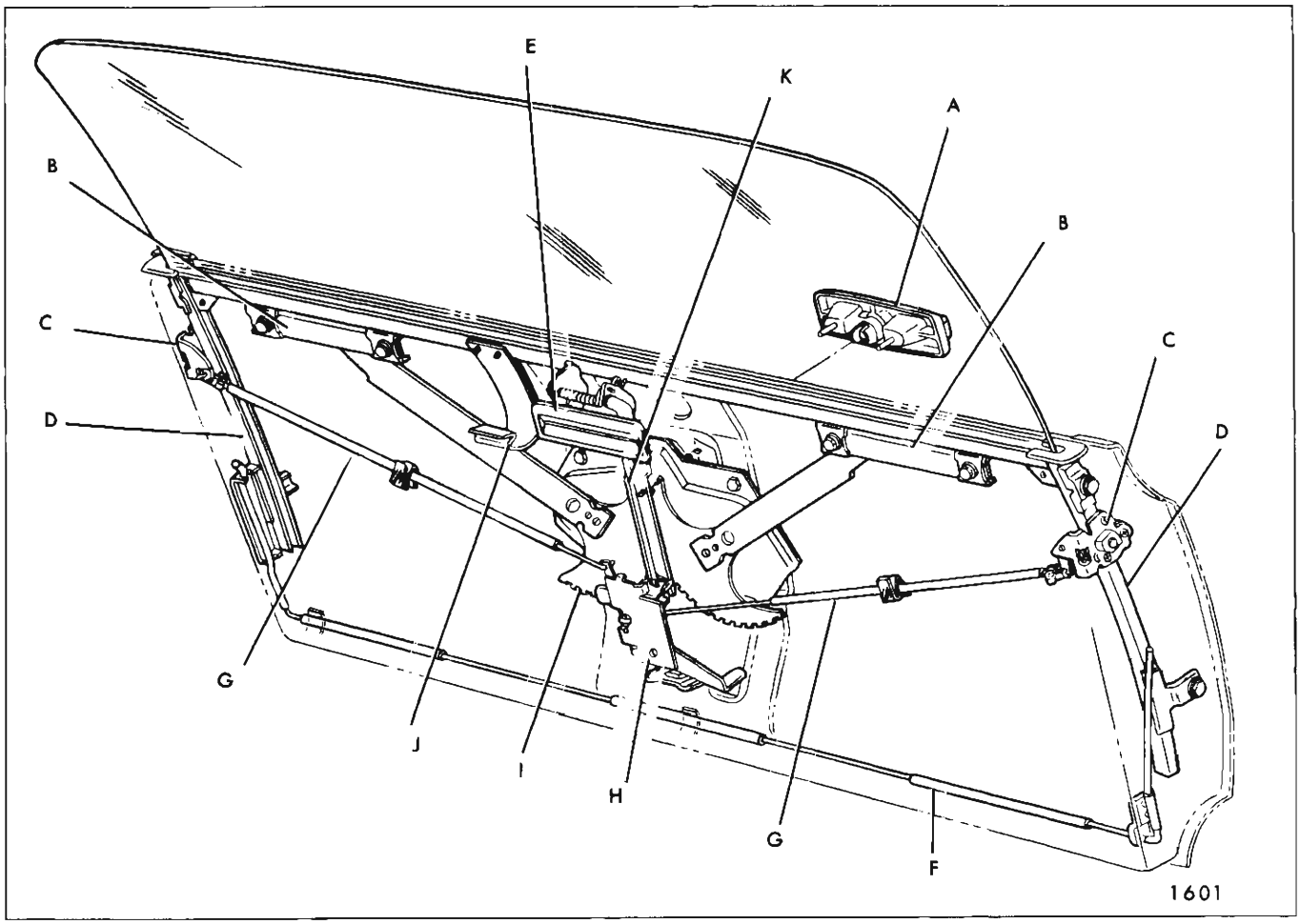


Fig. 1F22—Tailgate Hardware

A. Outside Handle (Manual) Escutcheon Assembly (Electric)
B. Sash Channel Cams
C. Locks
D. Lower Glass Run Channels
E. Inside Handle
F. Torque Rod
G. Remote Control Connecting Rods
H. Remote Control
I. Regulator
J. Anti-Rattle Clip
K. Inside Handle Push Rod

Installation or Resealing Procedure

1. If installing old deflector or resealing partially detached deflector, first inspect water deflector for any tears or holes and, where necessary, repair any tears or holes with waterproof body tape applied to both sides of deflector.

2. If installing new deflector, use old deflector or tail gate inner panel cover to trim new deflector to proper size.

3. Apply a bead of body caulking compound (approximately 3/16" diameter) to tail gate inner panel.

NOTE: Be sure to cover inner panel cover screw holes at bottom of inner panel with compound to seal screws.

4. Position water deflector to tail gate inner panel with polyethylene coated side of deflector against inner panel. Firmly press or roll sealed areas to obtain a good bond between deflector and tail gate inner panel.

5. Clean off all excess caulking compound; then, install previously removed tail gate inner cover panel.

TAIL GATE ASSEMBLY ALL STATION WAGON STYLES

DESCRIPTION

All tail gates incorporate either a manually operated or electrically operated tail gate window which can be lowered into the tail gate or raised into the upper portion of the back body opening. The manually operated tail gate window is operated by means of a window regulator control handle (folding type) located on the tail gate outer panel. The electrically operated tail gate window can be operated from any one of two control switches: (1) control switch located on instrument panel; (2) lock cylinder control switch (key operated) located in tail gate outer panel. In addition, on 16000 and 18000 Series nine passenger station wagon styles, the window can be operated by a control switch located in the upper portion of the left rear quarter trim assembly. This latter switch, however, will operate tail gate window down only. On all styles, a switch located at the left tail gate lock prevents the operation of the electrically operated tail gate window when the tail gate is not completely closed.

Figure 1F22 is a phantom view of the tail gate hardware that identifies the major components and their relationship to each other (see Fig. 1F22).

TAIL GATE ASSEMBLY ALL STATION WAGON STYLES

Removal and Installation

1. Open tail gate and remove inner cover panel, inner panel water deflector and access hole covers.

2. On styles with electrically operated tail gate windows, disconnect wire harness connector at regulator motor and at jamb switch and remove harness from tail gate (at bottom).

3. With a pencil, mark position of tail gate hinges on tail gate.

4. Raise tail gate to approximately a vertical position to relieve torque from torque rod. Remove torque rod mounting plate attaching screws from left body pillar and remove plate (see Fig. 1F23).

5. With proper support for tail gate, remove tail gate support attaching screws from both sides of gate and fold supports against body (see Fig. 1F24).

6. With the aid of a helper, remove tail gate hinge to tail gate attaching bolts on both sides and remove tail gate from body (see Fig. 1F24).

NOTE: The tail gate hinges can be removed at this point by removing hinge to rear quarter panel attaching bolts and removing hinge (see Fig. 1F25).

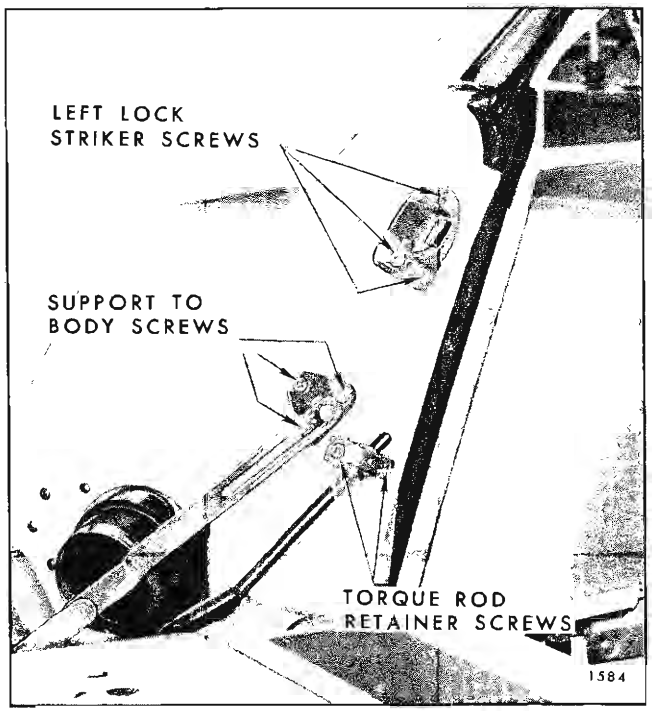


Fig. 1F23—Rear Body Pillar - Left Side

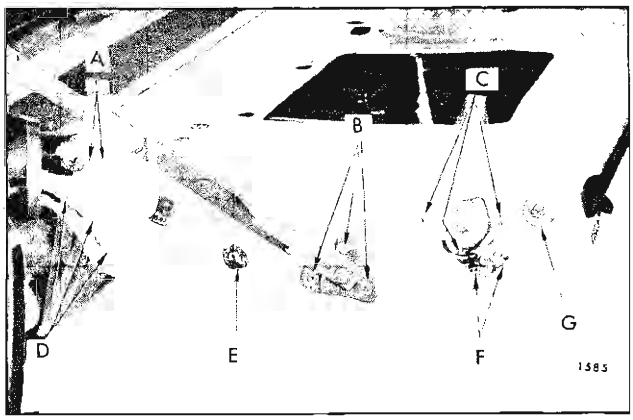


Fig. 1F24—Tail Gate Hardware - Left Side

A. Torque Rod Bearing Plate Screws
B. Support to Tail Gate Bolts
C. Tail Gate Lock Screws
D. Hinge to Tail Gate Bolts
E. Glass Run Channel Lower Bolt
F. Jamb Switch Screws
G. Glass Run Channel Upper Bolt

7. To install, reverse removal procedure. Prior to installation, apply a coat of heavy bodied sealer to surface of hinge straps that contact tail gate.

Adjustments

Up or down and fore and aft adjustment is provided at hinge to gate attaching bolts. Sideways adjustment is provided at hinge to quarter panel attaching bolts with shims.

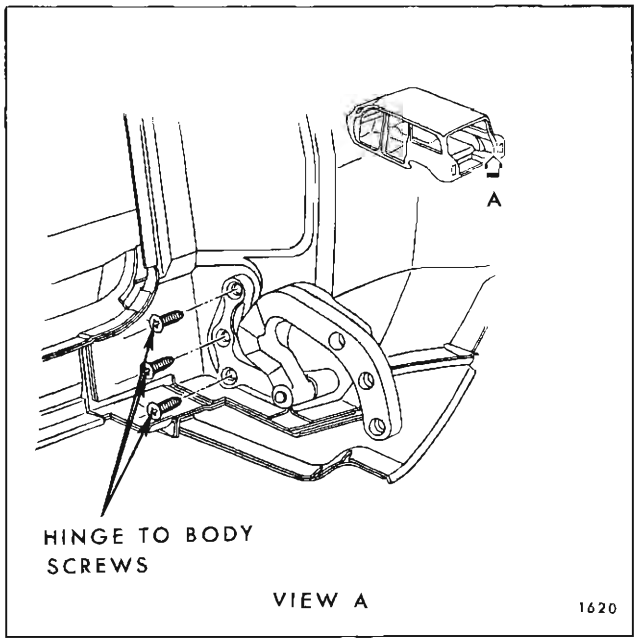


Fig. 1F25—Tail Gate Hinge Assembly

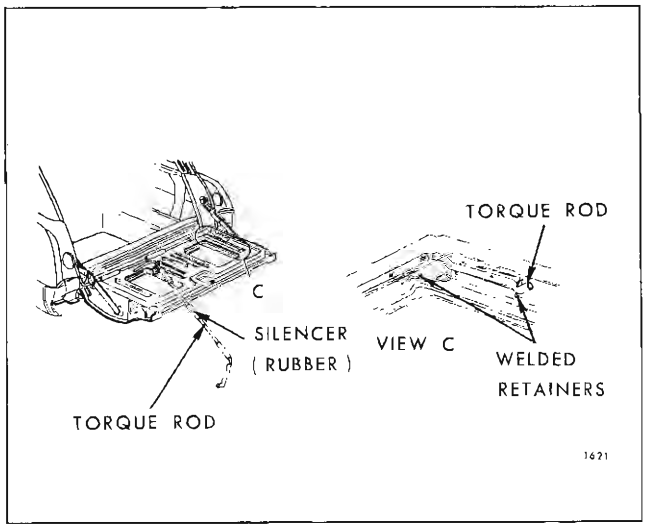


Fig. 1F26—Tail Gate Torque Rod

NOTE: Following any adjustments of the tail gate, check engagement of locks to strikers as described in "Tail Gate Lock Striker Adjustment".

TAIL GATE TORQUE ROD ALL STATION WAGON STYLES

Removal and Installation

1. Remove tail gate window assembly.

2. Raise tail gate to approximately a vertical position to relieve torque from torque rod. Remove torque rod retainer attaching screws from left body pillar and remove plate (see Fig. 1F23).

3. Lower tail gate to the fully opened position and remove screws securing torque rod bearing plate to tail gate (see Fig. 1F24).

4. Disengage torque rod from welded retainer in right side of tail gate (see View "C" in Fig. 1F26).

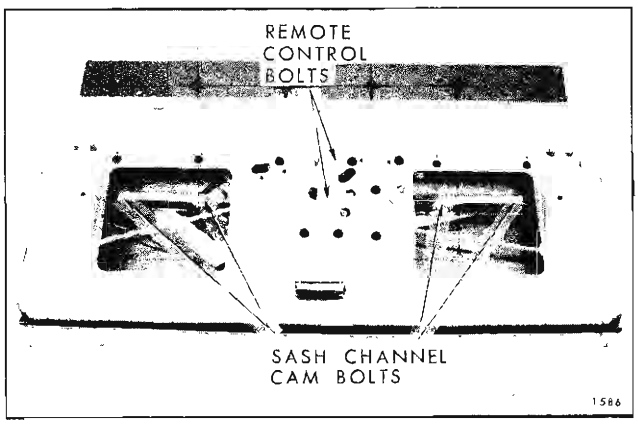


Fig. 1F27—Tail Gate Hardware

5. Remove torque rod silencer (rubber) from left side of torque rod (exposed).

6. Work torque rod out of opening on left side and remove rod through top of tail gate (see Fig. 1F26).

7. To install, reverse removal procedure.

TAIL GATE WINDOW ASSEMBLY (MANUAL AND ELECTRIC) ALL STATION WAGON STYLES

Removal and Installation

1. Remove tail gate inner panel cover, inner panel water deflector and access hole covers.

2. Operate tail gate window to a point that sash channel cam attaching bolts are accessible as depicted in Figure 1F27.

3. Remove right and left cam attaching bolts (Fig. 1F27). Slide cams sideways to disengage cam from regulator lift arms (rollers) and remove cams from tail gate.

4. Pull window straight out and remove assembly from tail gate.

5. To install, reverse removal procedure.

NOTE: To operate tail gate window with tail gate in an open position (electrical styles), depress jamb switch (Fig. 1F24) and operate control switch (instrument panel).

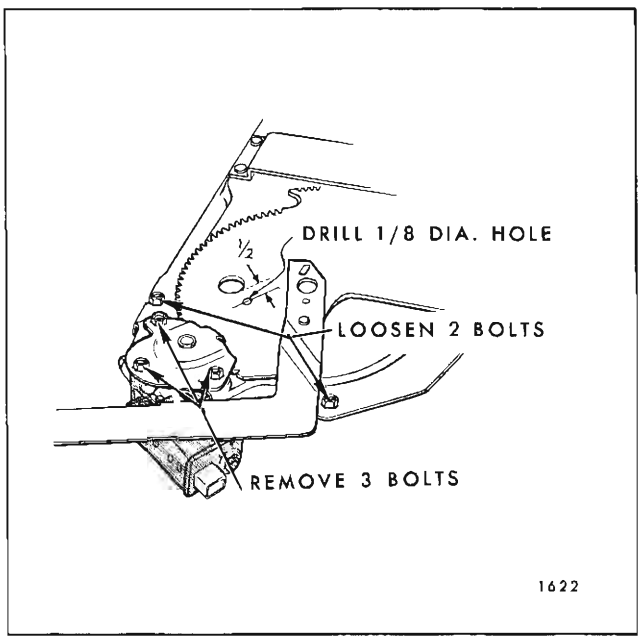


Fig. 1F28—Tail Gate Regulator Motor Assembly

Adjustments

The tail gate glass run channels can be adjusted to relieve a binding glass. To correct a rotated or "cocked" glass condition, loosen window regulator attaching screws and rotate regulator clockwise or counter clockwise as required.

TAIL GATE WINDOW REGULATOR (MANUAL OR ELECTRIC) ALL STATION WAGON STYLES

Removal and Installation

1. Remove tail gate window assembly.

2. On styles equipped with an electrically operated tail gate window, disconnect tail gate harness connector from regulator motor.

CAUTION: DO NOT operate regulator motor after window assembly is disengaged from regulator or after regulator is removed from tail gate. Operation of motor with load removed may damage unit.

3. Remove bolts (4) securing regulator to support and remove regulator (with motor attached) from tail gate.

4. To install, reverse removal procedure.

IMPORTANT: The following operation must be performed if the window is removed or disengaged from the regulator lift arms. The regulator lift arms which are under tension from the counterbalance spring can cause serious injury if the motor is removed without locking the sector gears in position.

Drill a 1/8" hole through regulator sector and back plate (see Fig. 1F28) - DO NOT drill hole closer than 1/2" to edge of sector or backplate or holes in sector or backplate. Install a pan head sheet metal tapping screw (#10-12 x 5/8) in previously drilled 1/8" hole to lock regulator sector gears and retain counterbalance spring tension.

Loosen regulator right upper attaching screw. Remove three regulator motor attaching screws and remove motor assembly from regulator and tail gate (see Fig. 1F28).

TAIL GATE WINDOW REGULATOR OUTSIDE HANDLE—MANUAL AND ELECTRIC ALL STATION WAGON STYLES

Removal and Installation

1. Remove tail gate window regulator assembly.

2. Remove nuts securing handle to tail gate and remove handle and gasket (see Fig. 1F29).

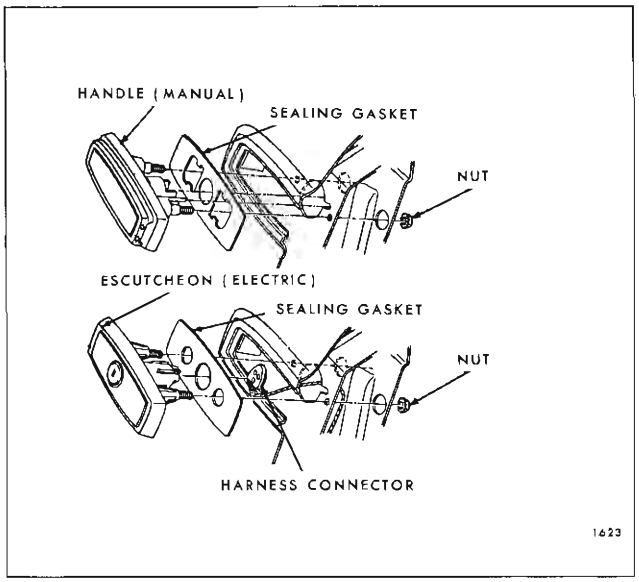


Fig. 1F29—Tail Gate Outside Handle Assemblies

NOTE: On electrical styles, disconnect wire harness from connector on escutcheon (see Fig. 1F29).

3. To install, reverse removal procedure.

TAIL GATE SUPPORT ASSEMBLY ALL STATION WAGON STYLES

Removal and Installation

1. Lower tail gate and support it in that position.

2. Remove screws securing support to tail gate and to body pillar and remove support (see Figs. 1F23 and 1F24).

3. To install, reverse removal procedure.

NOTE: Objectionable slack in either support can be corrected by rotating support plate(s) at body pillar.

TAIL GATE WINDOW LOWER GLASS RUN CHANNEL (RIGHT OR LEFT SIDE) ALL STATION WAGON STYLES

Removal and Installation

1. Remove tail gate window assembly.

2. Remove bolts securing run channel(s) to tail gate (see Fig. 1F24).

3. Force top of run channel (rubber) down into tail gate and remove run channel(s) from tail gate through access hole.

4. To install, reverse removal procedure.

TAIL GATE LOCK ASSEMBLY (RIGHT OR LEFT SIDE) ALL STATION WAGON STYLES

Removal and Installation

1. Remove tail gate window assembly.

2. Remove tail gate window lower glass run channel on side from which lock is to be removed.

3. Remove screws (3) securing lock to tail gate (see Fig. 1F24).

4. Move lock assembly to tail gate access hole, disengage remote rod anti-rattle clip and remove lock assembly.

5. To install, reverse removal procedure.

TAIL GATE LOCK STRIKER ALL STATION WAGON STYLES

Removal and Installation

1. Open tail gate and with pencil, mark position of striker on body pillar.

2. Remove lock striker attaching screws and remove striker and adjusting plates from body pillar.

3. To install tail gate lock striker, place striker and adjusting plates within marks on body pillar and install striker attaching screws (see Fig. 1F30).

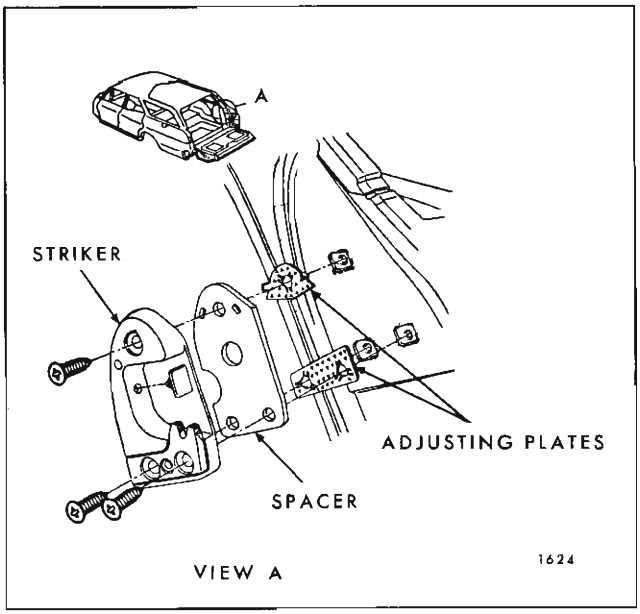


Fig. 1F30—Tail Gate Lock Striker Assembly

TAIL GATE LOCK STRIKER ADJUSTMENTS ALL STATION WAGON STYLES

1. To adjust the tail gate lock striker up or down or forward or rearward, loosen striker attaching screws, shift striker and adjusting plates to desired position, then tighten striker attaching screws.

2. DIMENSIONAL SPECIFICATIONS FOR USE OF DOOR LOCK STRIKER EMERGENCY SPACERS.

a. Tail gate should be properly aligned before checking spacer requirements.

b. To determine if tail gate lock striker emergency spacers are required, apply modeling clay or body caulking compound in the lock striker notch where the lock extension engages and then close the tail gate to form a measureable impression in the clay or caulking compound, as shown in Figure 1F31.

When dimension "A" from inside face of striker teeth to center of lock extension is less than 3/16" install emergency spacers and proper length striker attaching screws as directed.

Dimension "A"	Spacers Required	Thickness	Striker Attaching Screws*
3/16" to 1/8"	1	1/16"	Original Screw
1/8" to 1/16"	1	1/8"	Emergency Screw (1/8" Longer)
1/16" to 0	1 (1/8" Spacer) 1 (1/16" Spacer)	3/16" (Total)	Emergency Screw (1/4" Longer)
0 to 1/16" Interference	2 (1/8" Spacer)	1/4" (Total)	Emergency Screw (1/4" Longer)

*Zinc or cadmium-plated flat-head cross-recess screw with countersunk washer.

NOTE: Dimension "B" from center of lock extension to inside face of striker should never be less than 1/16".

TAIL GATE LOCK REMOTE CONTROL HANDLE ASSEMBLY ALL STATION WAGON STYLES

Removal and Installation

1. Raise inside handle and disengage remote push rod from spring clip (see Fig. 1F32).

2. Remove screws securing handle to inner panel and remove handle.

3. To install, reverse removal procedure.

NOTE: It may be necessary to reach into the tail gate inner panel to snap push rod back into spring clip.

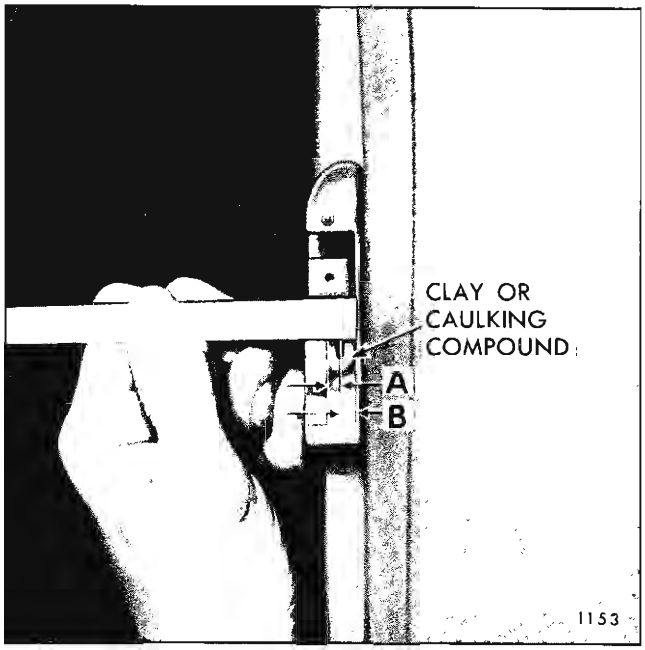


Fig. 1F31—Tail Gate Lock to Striker Engagement Check

TAIL GATE LOCK REMOTE CONTROL ASSEMBLY ALL STATION WAGON STYLES

Removal and Installation

1. Remove tail gate window assembly.

2. Disengage spring clips securing lock connecting rods to remote control and detach rods (see Fig. 1F33).

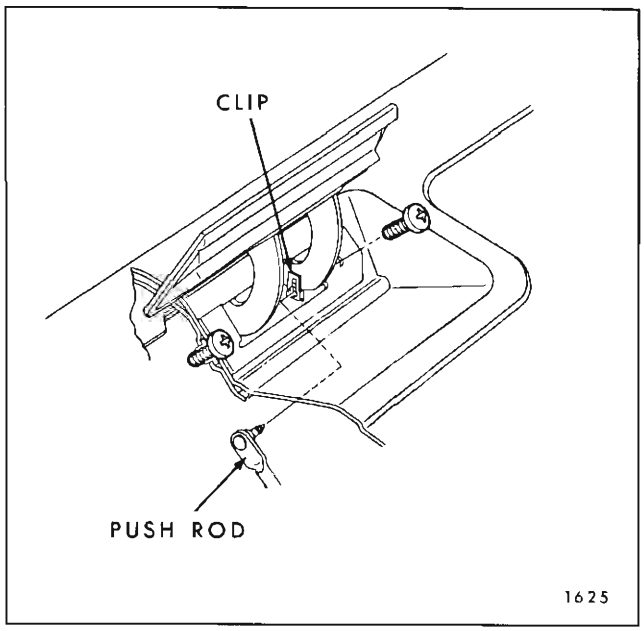


Fig. 1F32—Tail Gate Inside Handle Attachment

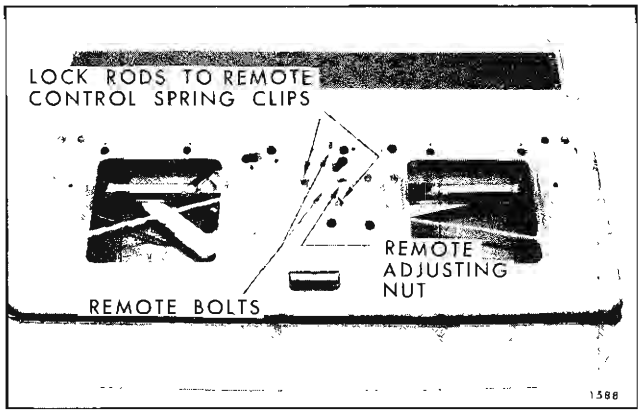


Fig. 1F33—Tail Gate Hardware

3. Remove remote control attaching bolts (2), disengage remote from inside handle push rod and remove remote control from tail gate.

4. To install, reverse removal procedure.

NOTE: The remote adjusting nut (Fig. 1F33) can be adjusted to increase or decrease remote operating effort.

TAIL GATE JAMB SWITCH—(ELECTRIC STYLES) ALL STATION WAGON STYLES

The electric jamb switch is used to prevent operation of the tail gate window with the tail gate in an open position.

Removal and Installation

1. Remove screws (2) securing jamb switch to tail gate and remove switch (see Fig. 1F34).

2. To install, reverse removal procedure.

TAIL GATE WEATHERSTRIP ALL STATION WAGON STYLES

Removal and Installation

1. Remove screws securing lower weatherstrip retainer to body cross bar (see Fig. 1F35).

2. Remove snap fasteners securing weatherstrip to right and left body pillar (at belt).

3. With a flat-bladed tool, carefully remove weatherstrip from retainer all along tail gate opening.

4. To install, run a bead of black weatherstrip cement into retainer along entire opening and reverse removal procedure.

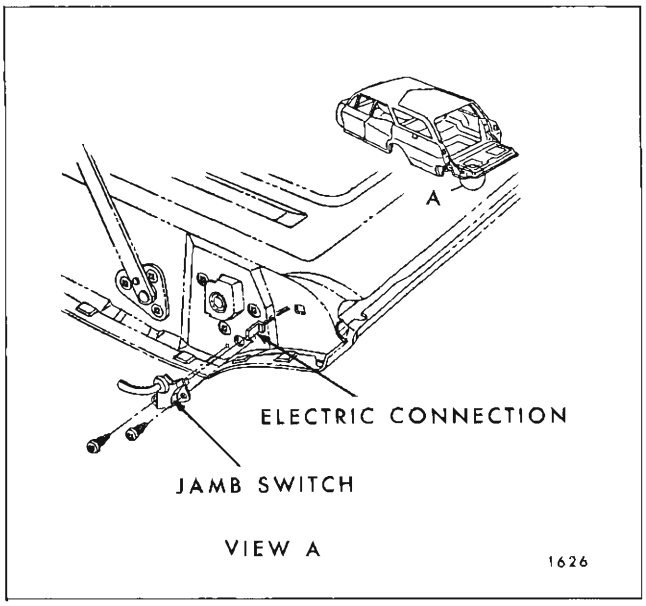


Fig. 1F34—Tail Gate Jamb Switch

TAIL GATE BOTTOM DRAIN HOLE SEALING STRIPS ALL STATION WAGON STYLES

Removal and Installation

1. With a flat-bladed tool carefully pry out snap-on fastener at each end of strip and remove sealing strip from tail gate.

2. To install sealing strips, reverse removal procedure. To prevent strip from adhering to the tail gate panel and blocking the drain holes, apply a sparing amount of silicone rubber lubricant on the center section of the sealing strip. (See illustration under "Front and Rear Door Bottom Drain Hole Sealing Strips").

TAIL GATE WINDOW UPPER GLASS RUN CHANNEL ALL STATION WAGON STYLES

The upper glass run channel is a single piece secured by an adjustable retainer.

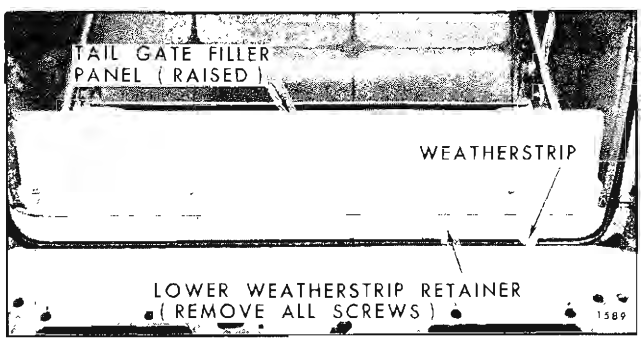


Fig. 1F35—Tail Gate Weatherstrip Retention

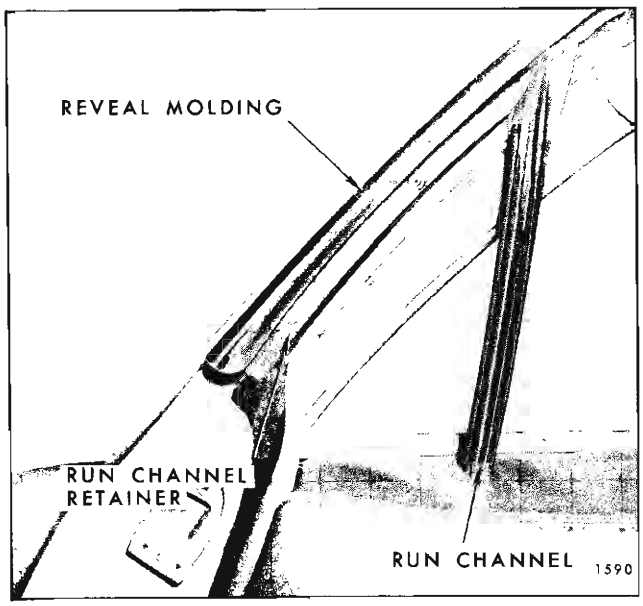


Fig. 1F36—Tail Gate Upper Glass Run Channel Retention

Removal and Installation

1. With fingers only, slightly squeeze run channel at one end and pull channel out of opening.

2. Once run channel has been removed, the retainer can be adjusted by loosening attaching screws, shifting retainer to desired position and tightening screws (see Fig. 1F36).

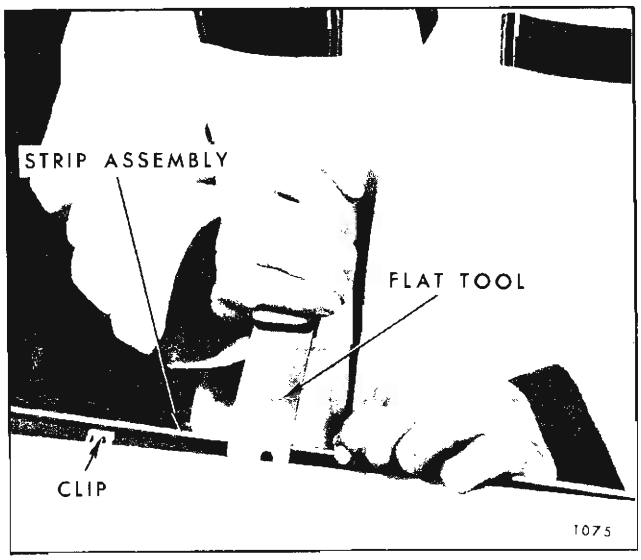


Fig. 1F37—Tail Gate Strip Assembly Removal

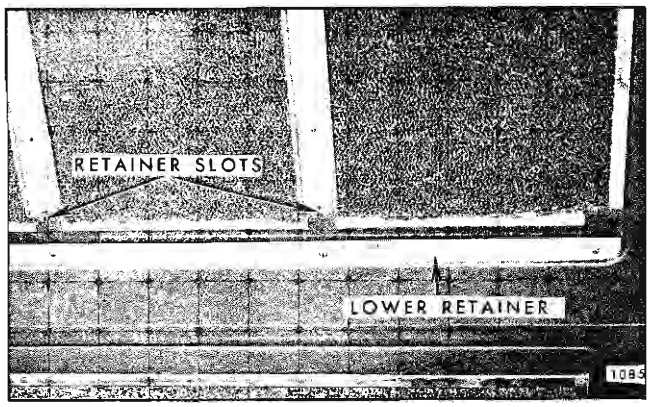


Fig. 1F38—Inner Panel Cover Removal

3. To install, reverse removal procedure.

TAIL GATE GLASS RUN CHANNEL INNER AND OUTER STRIP ASSEMBLIES ALL STATION WAGON STYLES

Removal and Installation

Both strip assemblies (inner and outer) are retained by clips in either the inner or outer panel of tail gate. The outer strip is additionally retained by two screws, one at each extreme end. To remove either strip, first remove screws, where present; then, using a flat tool, shown in Figure 1F37, remove strip assemblies. To install, reverse removal procedure.

If the tail gate cannot be opened due to the electrically operated tail gate window motor failing (with window in the up position), proceed as follows:

1. Remove the side and center screws of the tail gate inner panel cover. Slide cover up and remove from tail gate.

NOTE: The bottom retainer screws need not be removed as these screws secure retainer only. The tail gate inner cover panel is held in the bottom retainer by slots in side and center section metal strips (see Fig. 1F38).

2. Remove inner panel access hole covers; remove window sash channel cam attaching bolts and lower tail gate window sufficiently to allow tail gate to be opened.

HEADLINING

VINYL COATED FABRIC HEADLINING

ALL STYLES EXCEPT STATION WAGONS AND STYLES WITH POLYURETHANE FOAM HEADLININGS

DESCRIPTION

The headlining assembly is formed to the contour of the roof panel by concealed listing wires. Both ends of the listing wires are located in holes in the side roof rails.

The headlining is secured at the windshield by cement, tacks or staples and along the side roof rails by cement or a pronged retainer.

The headlining on 15-16-25-35-45-46000 series, "11 and 69" styles is secured to the rear quarter and back window by cement. (View "H" Fig. 1G1). On all other styles, the headlining is secured at the back window by cement, tacks or staples. (View "H" Fig. 1G2). On all styles except 15-16-25-35-45-46000 series, "11" and "69" styles, the headlining is attached at the rear quarter by tacks or staples to a tacking strip (View "H" Fig. 1G2).

Finishing lace and garnish moldings assist in holding the headlining in place. The side roof rail garnish moldings are secured to the pinchweld flange by clips that are located inside the moldings. To remove the side roof rail moldings, first remove the windshield side moldings, working rearward remove side roof rail moldings.

NOTE: It may be necessary to use a rubber mallet to assist in removing the side roof rail moldings.

CAUTION: Do not damage moldings by excessive hammering.

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

Removal:

1. Place protective coverings over seat cushions and backs.

2. Prior to removing headlining, remove following hardware and trim assemblies if present.

a. Windshield side and upper garnish moldings.

b. Rear view mirror support.

c. Sunshade supports.

d. Dome or rear quarter courtesy lamps.

e. Coat hooks.

f. Side roof rail moldings.

g. Back window garnish moldings.

h. Center pillar finishing moldings.

i. Rear quarter trim, where necessary.

j. Back window finishing lace where necessary.

3. Carefully remove tacks or staples securing headlining at windshield and back window or back body opening.

4. On styles using pronged retainers, use headlining inserting tool, J-2772 or similar wide-bladed tool and carefully disengage headlining from pronged retainer on side roof rails and over door openings (View "C", Fig. 1G1).

5. Carefully detach cemented edge of headlining around entire perimeter.

6. Starting at front of body, carefully disengage No. 1 and No. 2 listing wires from holes in side roof inner rails and supporting tabs on longitudinal (front to rear) bow (Views "D" and "E" Fig. 1G2 and Fig. 1G1). In like manner, working from rear of body, disengage listing wires from side roof rails and supporting tabs on longitudinal bow (Views "D" and "E" Fig. 1G2 and Fig. 1G1). Exercise care to keep headlining material clean by gathering or folding headlining with listing wires on outside.

7. At No. 3 listing wire, bend down tab securing listing wire (View "G" Fig. 1G1 and 1G2) and remove headlining assembly from body.

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

8. If replacing headlining remove listing wires from pockets of headlining.

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 corresponding pockets of new headlining assembly.

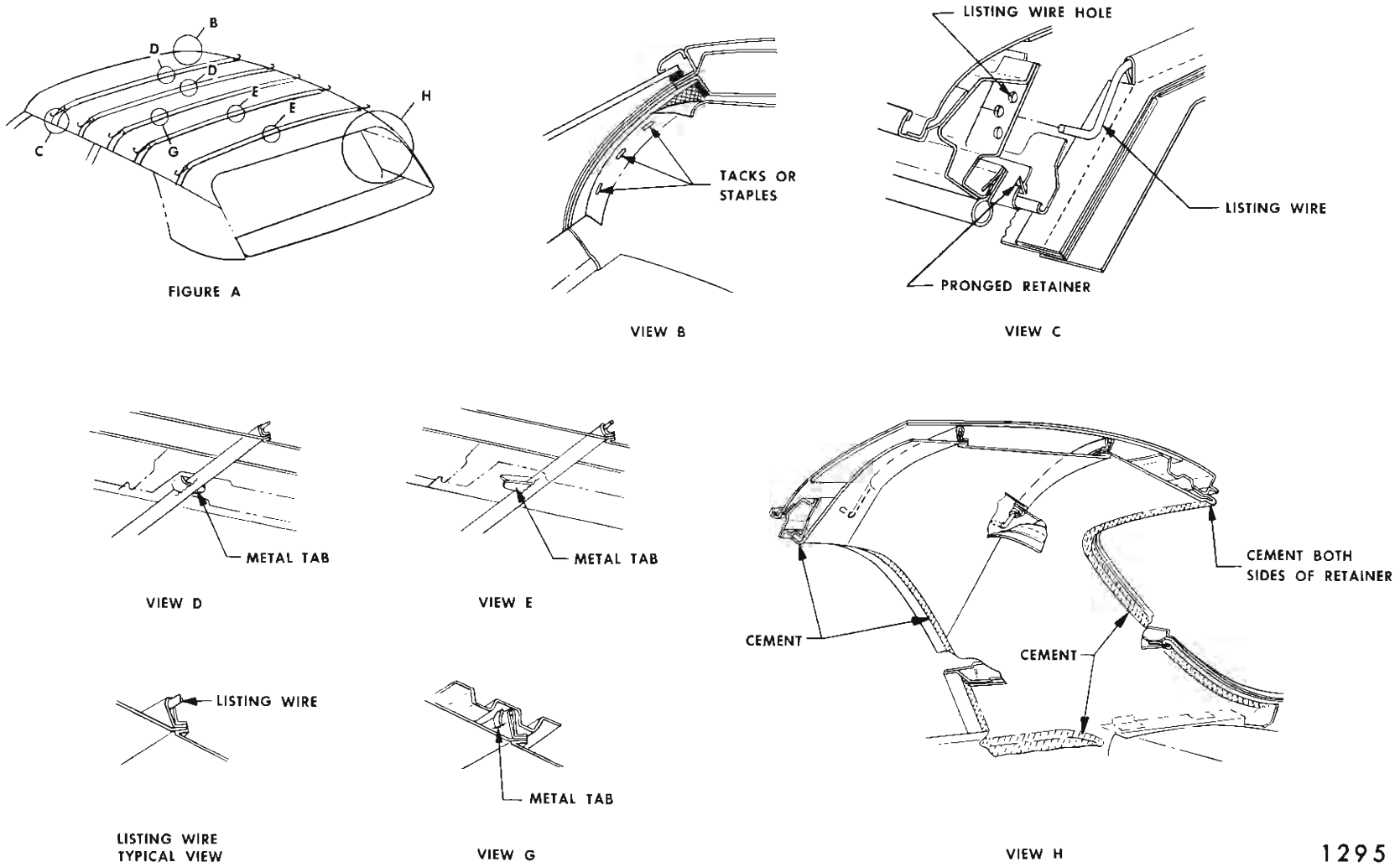


Fig. 1G1—Headlining - 15-16-25-35-45-46000 Series "11" and "69" Styles

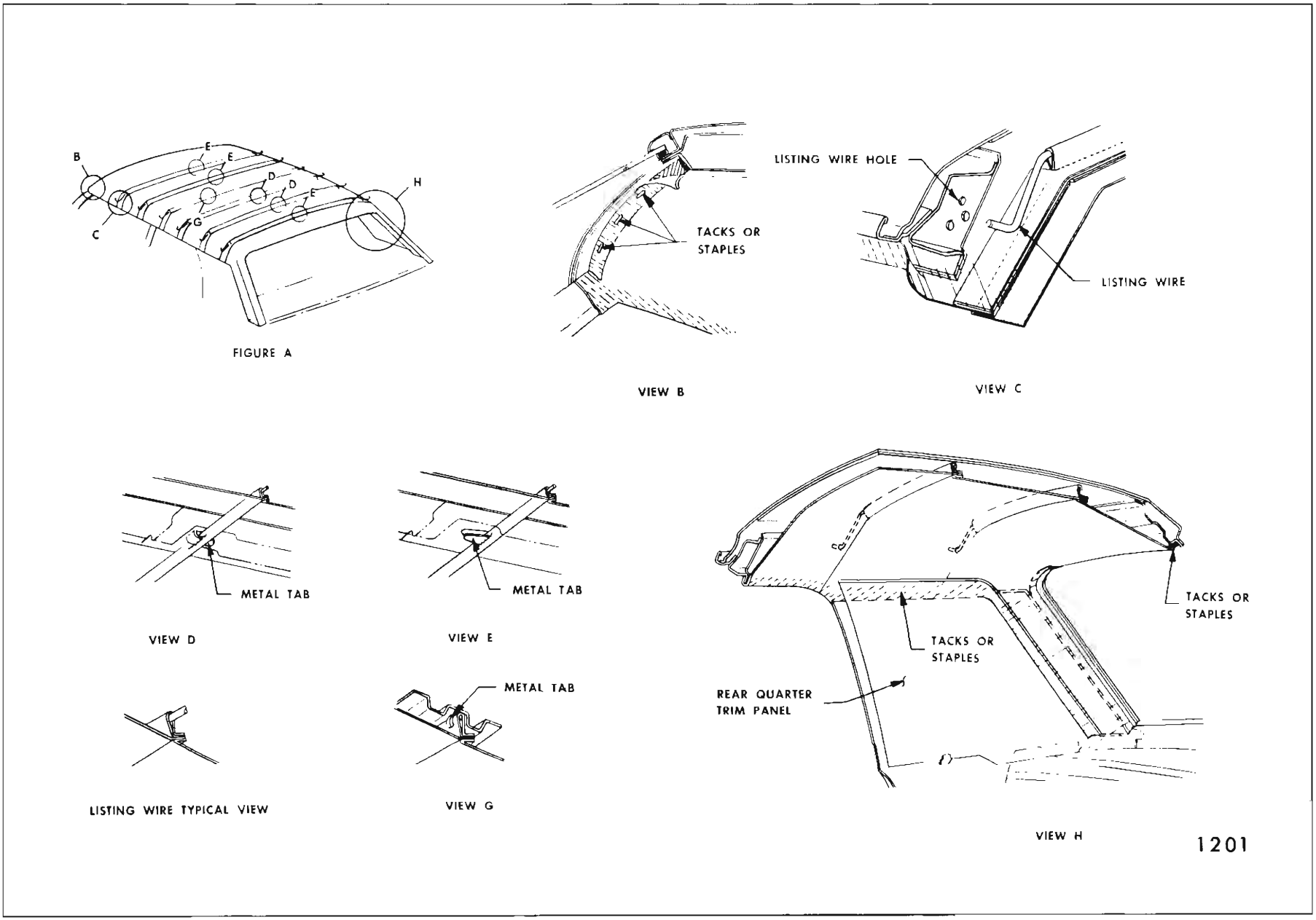


Fig. 1G2—Headlining - All Styles except Station Wagons and 15-16-25-35-45-46000 Series "11" and "69" Styles

2. Apply approved trim cement to headlining attaching surface at windshield, side roof rail and back window opening. On 15-16-25-35-45-46000 series, "11" and "69" styles, be certain cement is applied to both sides of retainer at back window (View "H", Fig. 1G1).

3. Lift headlining assembly into body and install No. 3 listing wire and listing wire pocket over metal tab at roof bow (View "G" Fig. 1G1 and 1G2). Bend up tab to secure listing wire to bow. Make certain headlining is centered in body.

4. If new headlining is being installed, slit listing wire pockets at each tab location on longitudinal bow (approximately 1 1/2" in length). (Views "D" and "E" Fig. 1G1 and 1G2). Working rearward from No. 3 listing wire, install listing wires into holes in side roof rails and over tabs on longitudinal bow. In like manner, working forward, install No. 2 and No. 1 listing wires.

NOTE: Listing wires may be adjusted up or down by placing them in appropriate holes in side roof rails. Listing wires should rest tight against roof panel after installation.

5. Stretch and secure headlining at windshield and back window. Stretch and secure headlining at rear quarters and side roof rails. Permanently attach material removing draws and wrinkles and replace all previously removed inside hardware and trim assemblies.

POLYURETHANE FOAM HEADLINING

46437, 46639, 48437, 48439 AND 48469 STYLES.

DESCRIPTION

The headlining assembly consists of polyurethane foam sections cemented to foundation boards. Five sections of the headlining are used.

The headlining sections are secured in place by retainers formed to the contour of the roof panel. Plastic moldings are snapped over the retainers and cover the retainers and edges of the headlining sections. Windshield, back window and side roof rail garnish moldings, also assist in holding the headlining in place.

When necessary, the headlining sections may be individually removed and replaced.

Removal (One or More Sections):

1. Place protective coverings over seat cushions and backs.

2. Remove side roof rail moldings. If removing front section of headlining, remove windshield upper and side garnish moldings, sunshade support assemblies and rear view mirror support. If removing rear section, remove back window garnish moldings, side roof rail garnish moldings and rear quarter trim assembly to gain access to headlining at side roof rail area. If center sections are removed, where required, remove dome lamps, coat hooks, and coat hook spacers if present.

3. With flat-bladed tool, carefully pry one end of plastic molding from retainer and remove (View "C", Fig. 1G3). Remove plastic moldings from both retainers securing section of headlining being removed.

4. When removing individual sections, use flat-bladed tool and carefully pry one edge of headlining section from retainer and remove from body.

5. If removing headlining section at back window, remove tacks or staples securing section at back window opening.

6. When retainers are required to be removed, remove screws securing retainer to roof. (View "D", Fig. 1G3). Retainer spacers are installed between the metal retainers and roof. (View "D", Fig. 1G3).

Installation:

1. If retainers were removed, make certain that retainer spacer shown in View "D" of Figure 1G3 is installed prior to installing retainers.

NOTE: Retainers should be tight against roof panel after installation.

2. Install headlining sections by positioning one edge in retainer and centering section in relation to other sections and side roof rails; then carefully snap remaining edge in other retainer. Snap plastic molding over retainers. (View "C", Fig. 1G3).

3. If installing rear section of headlining assembly, position forward edge of section in retainer. Center and align section in relation to side roof rails and back window opening and stay tack section in place. Recheck alignment; then starting at center of back window area, permanently tack section to tacking strips at back window opening (View "F", Fig. 1G3).

4. If installing front section of headlining assembly, position appropriate edge in retainer. Center headlining section in relation to other sections, side

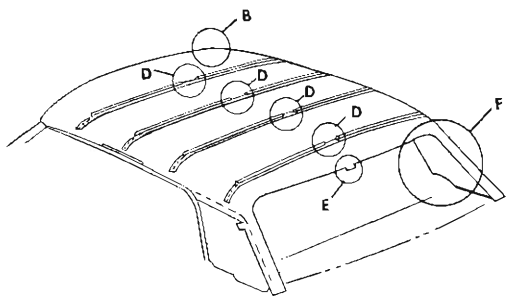
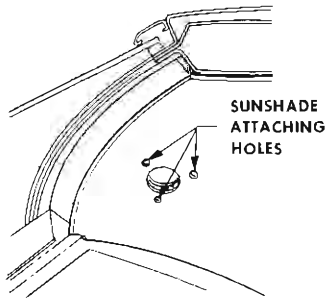
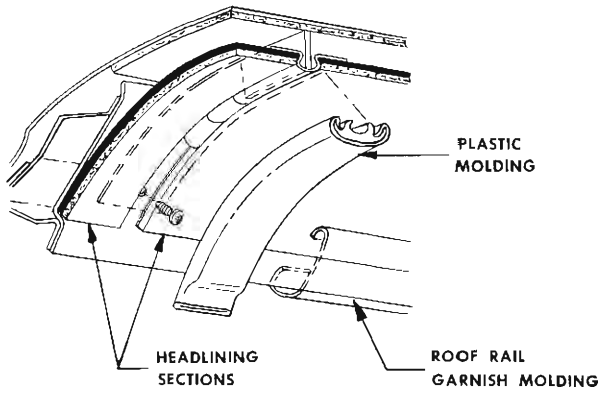


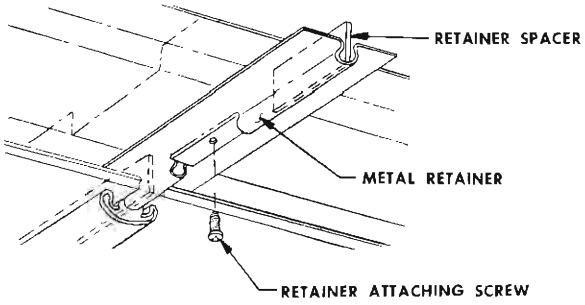
FIGURE A



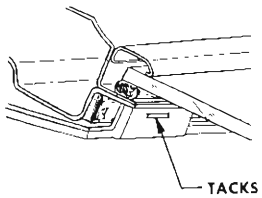
VIEW B



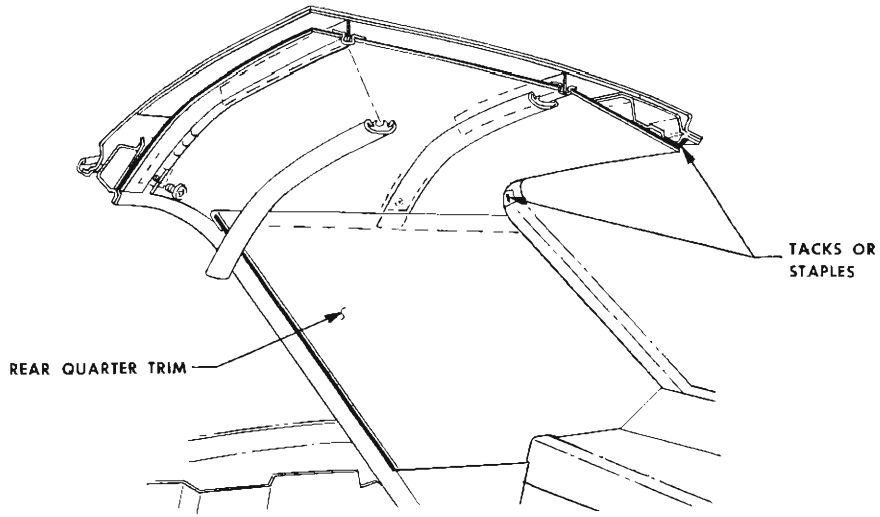
VIEW C



VIEW D



VIEW E



VIEW F

1400

Fig. 1G3—Polyurethane Foam Headlining - 46-48000 Series Styles

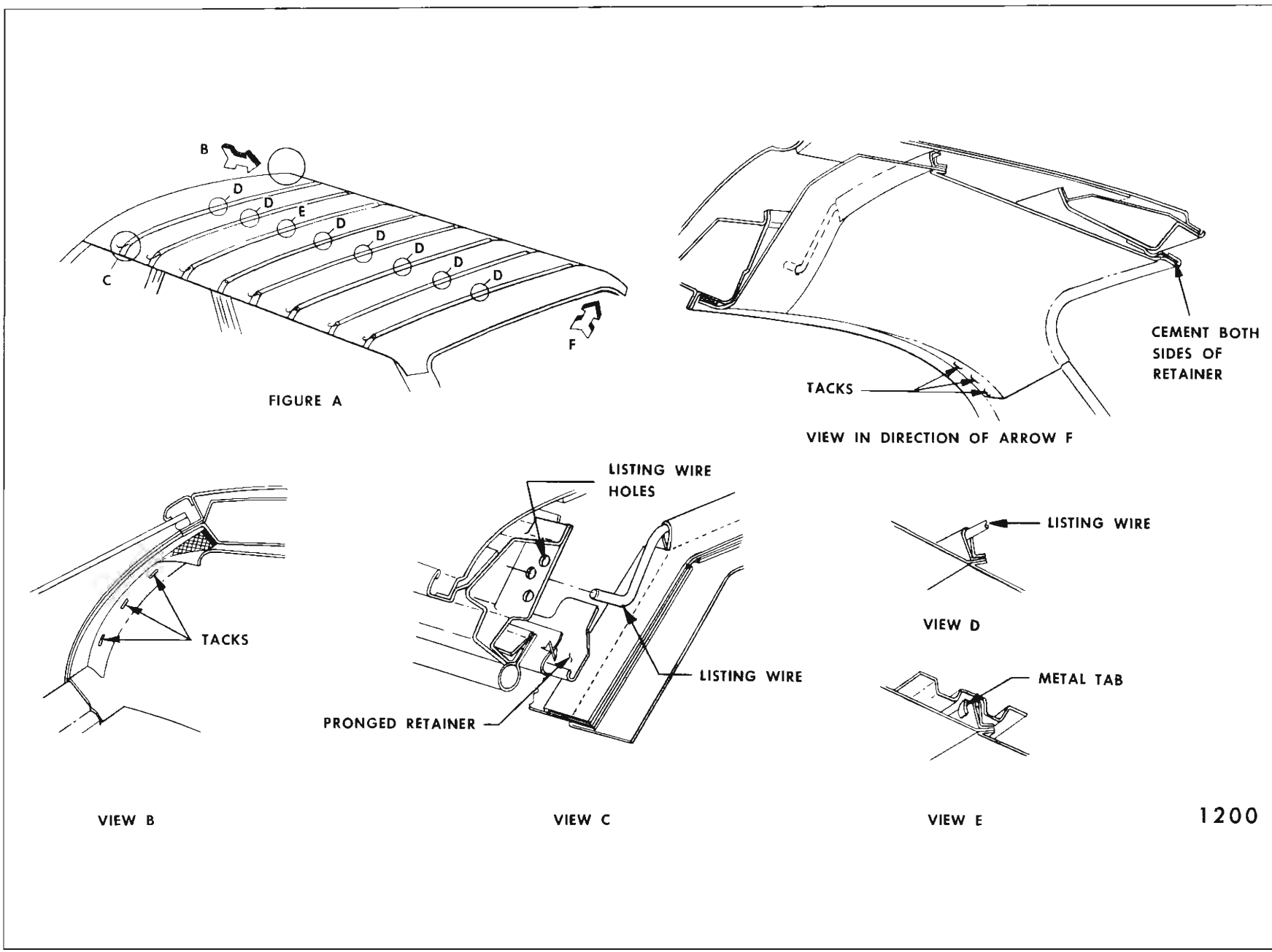


Fig. 1G4—Headlining - Station Wagon Styles

roof rails, and sunshade support attaching holes (View "B", Fig. 1G3). Install sunshade supports.

NOTE: Forward edge of front section and rearward edge of rear section are also secured in place by windshield or back window garnish moldings.

5. Install all previously removed hardware and remove protective coverings.

NOTE: When installing side roof rail moldings, make certain edge of headlining section is covered by side roof rail moldings.

HEADLINING ON STATION WAGON STYLES

DESCRIPTION

The headlining assembly is formed to the contour of the roof panel by concealed listing wires. Both ends of the listing wires are located in holes in the side roof rails.

The headlining is secured at the windshield opening and rear quarter areas by tacks or staples. (Views B & F Fig. 1G4). The headlining is secured to the side roof rails by a pronged retainer (View C Fig. 1G4). The headlining is secured at the back body opening metal retainer by cement (View F Fig. 1G4). Number 3 listing wire is also attached to the roof bow by metal tabs (View E Fig. 1G4).

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

Removal:

1. Place protective covering over seat cushions and backs.

2. Prior to removing headlining, remove following hardware and trim assemblies.

A. Windshield garnish moldings

B. Rear view mirror support

C. Sunshade supports

D. Dome lamp

E. Coat hooks

F. Rear quarter window garnish moldings

G. Back body opening moldings

H. Center pillar finishing moldings or plates

3. Carefully remove tacks or staples securing headlining at windshield and rear quarters.

4. Detach cemented material at back body opening.

5. Using headlining inserting tool J-2772 or equivalent wide-bladed tool, carefully disengage headlining from pronged retainer on side roof rails (View C Fig. 1G4).

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

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

7. At No. 3 listing wire bend down tab securing listing wire to bow (View "E" Fig. 1G4), remove remaining listing wires and remove headlining assembly from body.

8. If replacing headlining, remove listing wires from pockets of headlining.

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 corresponding pockets of new headlining assembly.

2. Apply approved trim cement to headlining attaching surfaces at windshield and back body openings.

3. Lift entire headlining assembly into body and install listing wires into holes in side roof rails.

NOTE: Each listing wire should rest against roof panel deadener after installation.

NOTE: Listing wires may be adjusted up or down by placing them in appropriate holes in side roof inner rails.

4. At No. 3 listing wire, install listing wire pocket over metal tabs, center headlining and bend up tabs to secure listing wire. (View E Fig. 1G4)

5. Working forward from No. 3 listing wire, stretch and secure headlining to windshield opening (View B Fig. 1G4).

6. At back body opening stretch and secure headlining (View F Fig. 1G4).

7. Using headlining inserting tool (J-2772) or suitable wide-bladed tool, install headlining under pronged retainer along both side roof rails (View C Fig. 1G4).

8. Stretch and secure headlining at rear quarter areas, working out all wrinkles and draws.

9. Permanently secure headlining, and replace all previously removed inside hardware and trim assemblies.

SEATS

FULL WIDTH FRONT SEATS

MANUAL FULL-WIDTH

Removal and Installation

1. Turn back floor carpeting sufficiently to expose seat adjuster-to-floor pan attaching bolts. Remove both driver and passenger inboard seat belt floor pan attaching bolt.

2. Operate seat assembly to full forward position.

3. At rear of adjusters, remove adjuster-to-floor pan attaching bolts.

4. Operate seat assembly to rearward position.

5. At front of adjusters, remove adjuster-to-floor pan attaching bolts.

6. With aid of helper, remove seat assembly from body.

7. To install, reverse removal procedure. Where seat adjuster floor pan spacers were present on 20000 series, make sure spacers are reinstalled. Align slots in seat adjuster pedestals with holes in floor pan, as shown in Figure 1H1.

NOTE: If it is desired to lower seat on 20000 series incorporating adjuster floor pan spacers, remove spacers.

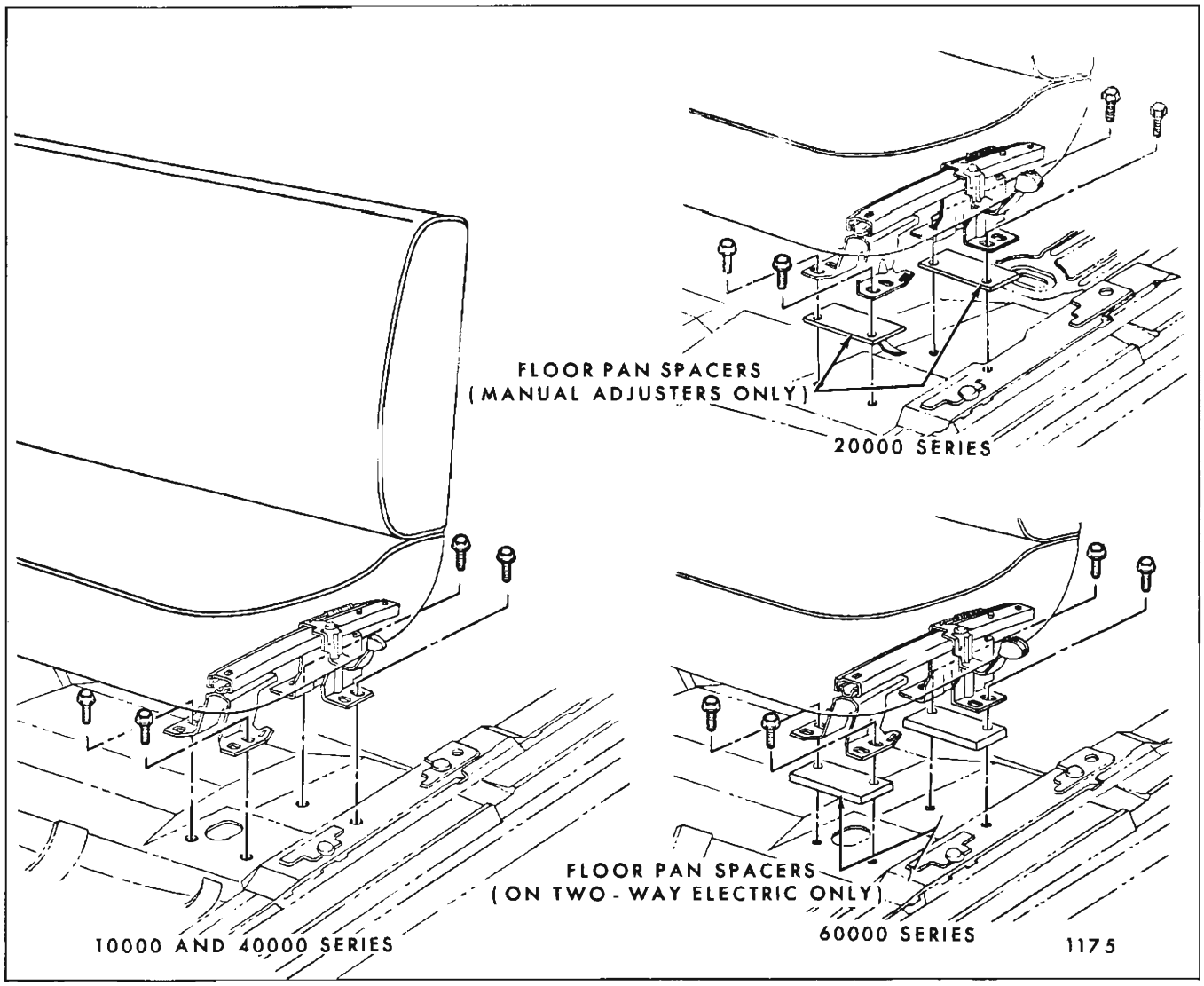


Fig. 1H1—Front Seat Adjuster Floor Pan Attachment

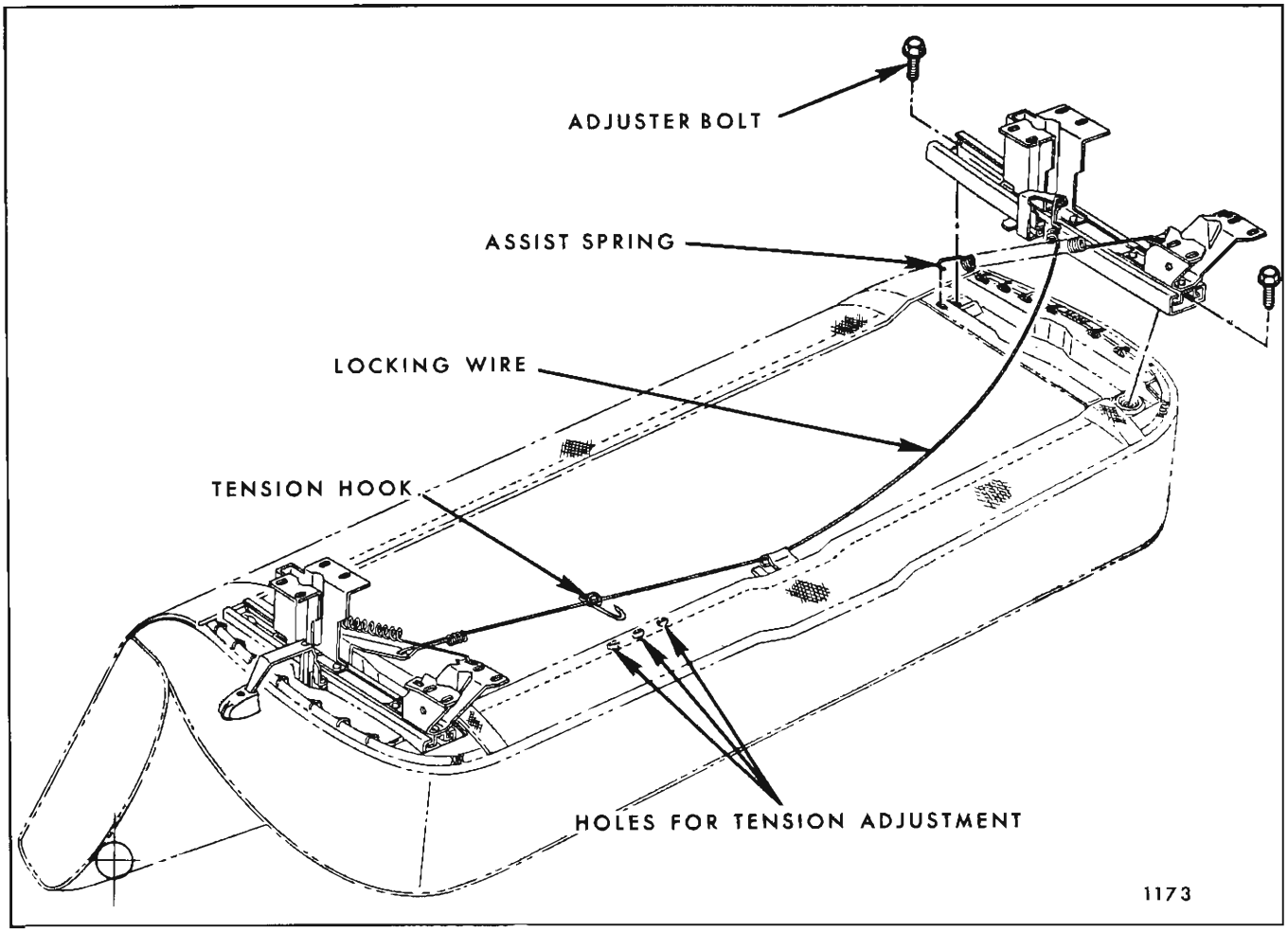


Fig. 1H2—Manual Seat Adjuster Installation

FRONT SEAT ADJUSTERS (MANUAL FULL-WIDTH)

1. Remove front seat assembly with attached adjusters and place upside down on a clean protected surface.

2. Remove seat adjuster assist spring from adjuster to be removed (Fig. 1H2).

3. Squeeze hooked end of seat adjuster locking wire together and slide retaining spring back over hump in locking wire, remove wire from retainer on seat bottom frame and disengage locking wire from seat adjuster.

4. Remove adjuster-to-seat bottom frame front and rear attaching bolts and remove seat adjuster from seat assembly (Fig. 1H2).

5. To install, reverse removal procedure.

6. Check operation of seat assembly. If right adjuster does not lock or unlock satisfactorily when control handle on left adjuster is operated, remove locking wire retainer from hole in seat bottom frame and adjust retainer by selecting another hole to obtain proper tension in locking wire.

FRONT SEAT ASSEMBLY (TWO-WAY ELECTRIC FULL-WIDTH)

GENERAL DESCRIPTION:

The electrically operated two-way front seat assembly can be moved forward or rearward by means of a manually operated seat control switch.

Removal and Installation

1. Turn back floor covering sufficiently to expose seat adjuster-to-floor pan attaching bolts. Remove both driver and passenger inboard seat belt floor pan attaching bolt.

2. Remove seat adjuster-to-floor pan rear attaching bolts. Then remove front attaching bolts. This will disconnect ground wire at rear of left adjuster.

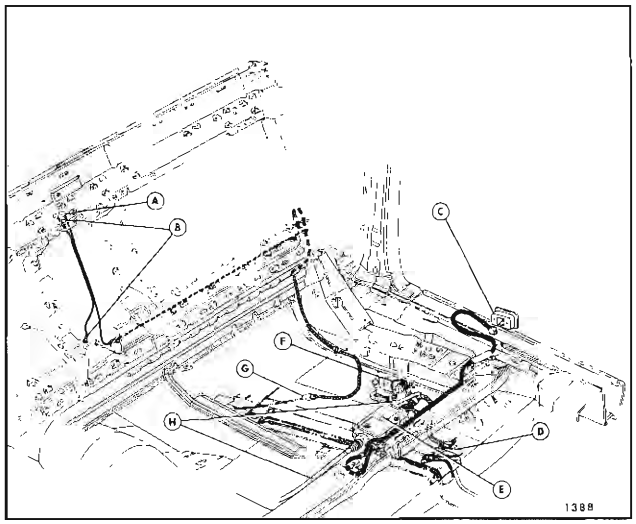


Fig. 1H3—Two-Way Electric Seat Wiring

A. Front Seat Back Switch Feed - White
B. Front Seat Back Switch Ground - Black
C. Control Switch
D. Harness Feed Connector
E. Motor
F. Ground Wire
G. Front Seat Back Courtesy Lamp Feed Connector (Cadillac Only)
H. Horizontal Control Cable

3. Under front of seat, disconnect seat harness feed connector and detach seat harness from clip on floor pan. On 35-36-38-68000 series, disconnect seat back vanity light, courtesy lamp or cigar lighter feed wire connector(s), where present (Fig. 1H3).

4. With aid of a helper, remove seat assembly with attached adjusters from body.

5. To install, reverse removal procedure. Where seat adjuster floor pan spacers were present on 68000 series make sure spacers are reinstalled.

NOTE: If it is desired to lower the seat on 68000 series incorporating adjuster floor pan spacers, remove spacers.

Align slots in seat adjuster pedestals with holes in floor pan, as shown in Figure 1H1. Make sure ground wire is securely attached under left rear seat adjuster-to-floor pan attaching bolt.

IMPORTANT: When installing seat assembly in body, seat adjusters should be parallel and "in phase" with each other. In the event the adjusters are "out of phase" (that is one adjuster reaches its full forward or rearward travel before the other adjuster), proceed as follows:

Operate seat control switch until one adjuster reaches full forward position. Detach horizontal drive cable from seat motor on side which has reached full forward position. Operate seat forward until other adjuster reaches full forward position; then, connect horizontal drive cable and check horizontal travel of seat.

FRONT SEAT ADJUSTERS (TWO-WAY ELECTRIC FULL-WIDTH)

Removal and Installation

1. Remove front seat assembly with attached adjusters and place upside down on a clean protected surface.

2. Detach power drive cable from gearnut of adjuster to be removed (Fig. 1H4).

3. Remove seat adjuster-to-seat bottom frame front and rear attaching bolts; then, remove adjuster from seat assembly (Fig. 1H4).

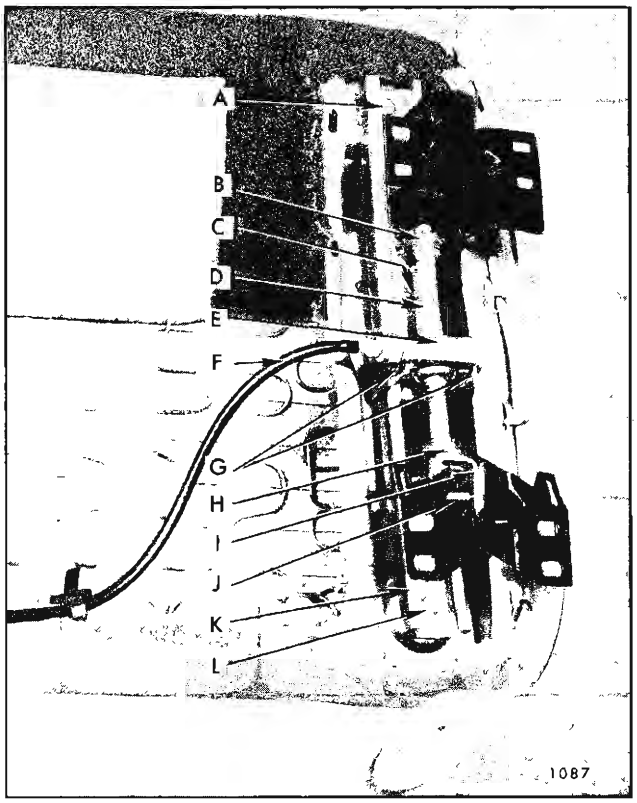


Fig. 1H4—Horizontal Power Adjuster

A. Adjuster Attaching Bolt
B. Rear Stop
C. Adjuster Lower Channel
D. Jackscrew
E. Gearnut
F. Drive Cable
G. Shoulder Bolts
H. Front Stop
I. Stop Bracket
J. Cross Pin
K. Adjuster Upper Channel
L. Adjuster Attaching Bolt

4. To install, reverse removal procedure. Prior to installing seat assembly in body, be sure adjusters are "in phase". See step 4 under "Front Seat Assembly - Removal and Installation".

FRONT SEAT ADJUSTER JACKSCREW ASSEMBLY (TWO-WAY ELECTRIC FULL-WIDTH)

Removal and Installation

1. Remove front seat assembly with attached adjusters and place upside down on a clean, protected surface.

2. Detach power drive cable from gearnut and jackscrew assembly to be removed.

3. Using a suitable tool (preferably a "clutch" type screwdriver) remove two shoulder bolts securing gearnut to upper slide portion of seat adjuster assembly (Fig. 1H4).

4. Remove retainer that secures stop bracket crosspin to adjuster front pedestal and remove crosspin (Fig. 1H4).

5. Remove jackscrew assembly from seat adjuster.

6. To install, reverse removal procedure.

NOTE: When replacing jackscrew assembly with new part, remove nut, washers, rubber bumper and stop bracket with inserted rubber grommet from front end of jackscrew, as well as gearnut and washers, rubber bumper and cotter pin from rear end of jackscrew and transfer to new jackscrew assembly.

FRONT SEAT ADJUSTER GEARNUT ASSEMBLY (TWO-WAY ELECTRIC FULL-WIDTH)

Removal and Installation

1. Remove front seat assembly with attached adjusters and place upside down on a clean, protected surface.

2. Detach power drive cable from gearnut to be removed.

3. Using a "clutch" type screwdriver or other suitable tool, remove two shoulder bolts securing gearnut to upper slide portion of seat adjuster (Fig. 1H4).

4. Rotate jackscrew assembly upward sufficiently to gain access to cotter pin at rear of jackscrew assembly.

5. Remove cotter pin, washer and rubber bumper from rear end of jackscrew; then, remove gearnut from jackscrew.

6. To install, reverse removal procedure. Prior to installing seat assembly in body, be sure adjusters are "in phase". See step 4 under "Front Seat Assembly - Removal and Installation".

FRONT SEAT ADJUSTER PLASTIC SLIDES (TWO-WAY ELECTRIC FULL WIDTH)

Removal and Installation

1. Remove front seat adjuster to be serviced from front seat assembly. (See: Front Seat Adjuster - Two-Way Electric - Removal and Installation procedures).

2. Using a suitable tool (preferably a "clutch" type screwdriver), remove two shoulder bolts securing gearnut to upper channel of seat adjuster assembly (Fig. 1H4).

3. Slide lower track and support base portion of seat adjuster, with attached jackscrew and gearnut, forward until it disengages from upper channel assembly. The four plastic slides may now be disengaged from positioning slots on lower track.

4. To install, reverse removal procedure making sure that groove in plastic slide slips onto lower track with thinner section of slide protruding above surface of track.

FRONT SEAT ADJUSTER ACTUATOR MOTOR (TWO-WAY ELECTRIC FULL-WIDTH)

Removal and Installation

1. Remove front seat assembly as previously described and place upside down on a clean protected surface.

2. Disconnect both power drive cables from actuator motor.

3. Remove screws that secure actuator motor support bracket to weld nuts at front of seat bottom frame and remove actuator motor with attached support bracket from seat assembly.

4. Disconnect feed wire harness from actuator motor (Fig. 1H3).

5. Remove screws securing motor to motor support bracket.

6. To install, reverse removal procedure. Check seat operation to extreme limit of fore and aft travel.

(FULL-WIDTH ELECTRIC FOUR-WAY TILT)

DESCRIPTION

The seat adjusters are actuated by a 12 volt, reversible, shunt wound motor with a built-in circuit breaker. The motor is installed at the left side of the seat assembly. (See Fig. 1H6). The seat motor is energized by a toggle-type control switch installed in the left seat side panel.

The seat adjuster operating mechanism incorporates a transmission assembly which includes two solenoids and four drive cables leading to the seat adjusters. One solenoid controls the vertical movement of the seat while the other solenoid controls the horizontal movement of the seat. When the control switch is actuated, the motor and one of the solenoids are energized simultaneously. Then the solenoid plunger engages with the driving gear dog. The driving gear rotates the drive cables and operates both adjusters. When the adjusters reach their limit of travel, the drive cables stop their rotating action and torque is absorbed by the rubber coupler connecting the motor and transmission. When the switch contacts are opened, a return spring returns the solenoid plunger to its original position disengaging it from the driving gear dog.

FRONT SEAT ASSEMBLY (FULL-WIDTH ELECTRIC FOUR-WAY TILT)

Removal and Installation

1. Operate seat to fully raised and midway position.

2. Remove both driver and passenger inboard seat belt floor pan attaching bolt. Remove both seat adjuster track covers; then turn back floor carpeting sufficiently to expose adjuster-to-floor pan attaching bolts. (See Fig. 1H10).

3. Remove rear then front adjuster-to-floor pan attaching bolts.

4. Under front of seat, disconnect seat harness feed connector and detach seat harness from clip on floor pan (Fig. 1H5).

On 30000 series detach cigar lighter, courtesy light or vanity compartment light wire harness, where present, from feed wire.

5. With aid of a helper, carefully remove seat assembly with attached adjusters, motor and transmission from body.

6. To install seat assembly, reverse removal procedure. On 30000 series check that seat adjuster floor pan spacers are installed under adjuster front pedestals. (See Fig. 1H10).

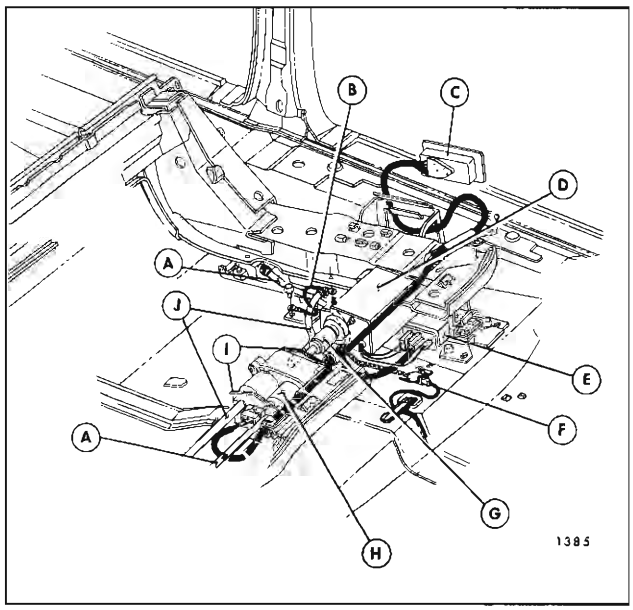


Fig. 1H5—Four-Way Full-Width Seat Electric Wiring

A. Vertical Control Cable (Yellow)
B. Ground Wire
C. Control Switch
D. Motor
E. Motor Control Relay
F. Harness Feed Connector
G. Rubber Coupler
H. Transmission Assembly
I. Transmission End Plate
J. Horizontal Control Cable (Black)

NOTE: If it is desired to lower the seat on 30000 or 60000 series remove seat adjuster floor pan spacers.

Make sure ground wire is securely attached under left seat adjuster-to-floor pan rear attaching bolt (Fig. 1H5).

IMPORTANT: When installing seat assembly in body, seat adjusters should be parallel and "in phase" with each other. In the event the adjusters are "out of phase" (or one adjuster reaches its maximum horizontal or vertical travel in a given direction before the other adjuster) proceed as follows:

a. Horizontal Travel - Operate seat control switch until one adjuster reaches full forward position. Detach horizontal drive cable from adjuster which has reached full forward position.

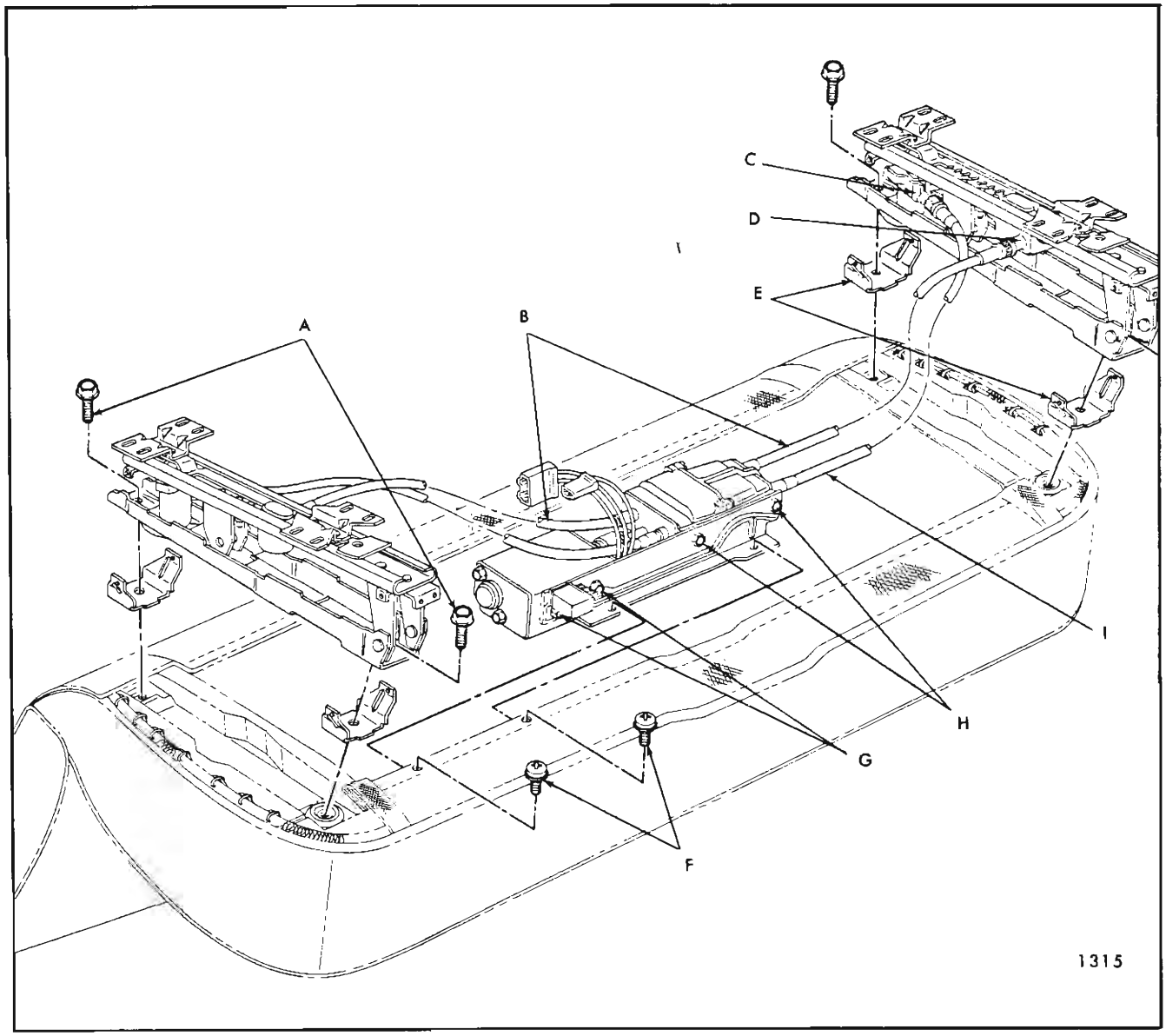


Fig. 1H6—Front Seat Assembly - Four Way Tilt

A. Adjuster-to-Seat Attaching Bolts
B. Horizontal Cables - Black
C. Vertical Gearnut
D. Horizontal Actuator
E. Track Cover Supports
F. Motor and Transmission Support Attaching Screws
G. Motor Attaching Screws
H. Transmission Attaching Screws
I. Rear Vertical Cables - Blue

Operate seat forward until other adjuster reaches full forward position; then, connect horizontal drive cable and check horizontal travel of seat.

b. Vertical Travel - Operate seat control switch until one adjuster reaches fully raised position. Disconnect vertical drive cable from adjuster which has reached fully raised position. Operate seat upward until other adjuster has reached fully raised position; then, connect vertical drive cable and check vertical travel of seat.

FRONT SEAT ADJUSTER ASSEMBLY (FULL-WIDTH ELECTRIC FOUR-WAY TILT)

Removal and Installation

1. Operate seat assembly to fully raised and midway position.

2. Remove front seat assembly from body, as previously described, and place upside down on a clean protected surface (Fig. 1H6).

3. Detach horizontal and vertical drive cables from adjuster to be removed.

4. Remove adjuster-to-seat bottom frame front and rear attaching bolts and remove adjuster from seat assembly (Fig. 1H6).

5. To install seat adjuster assembly, reverse removal procedure. Make sure adjuster track cover supports are installed between adjuster and seat frame. Black drive cable attaches to horizontal actuator (Fig. 1H6).

NOTE: Check operation of seat adjusters and make sure adjusters are "in phase". See step #6 under "Front Seat Assembly - Removal and Installation".

FRONT SEAT ADJUSTER VERTICAL GEARNUT (FULL-WIDTH ELECTRIC FOUR-WAY TILT)

Removal and Installation

1. Operate seat to rearward position; then, remove front seat assembly and seat adjuster.

2. Remove vertical gearnut attaching nut at adjuster upper track (Fig. 1H7).

Lift rear of channel upward and remove gearnut tension spring and washer (Fig. 1H8).

3. Lay adjuster on its side and remove screws securing vertical gearnut to adjuster lower track; then, remove gearnut from adjuster (Fig. 1H7).

4. To install, reverse removal procedure.

NOTE: Check operation of seat adjusters and make sure adjusters are "in phase". See step 6 under "Front Seat Assembly - Removal and Installation".

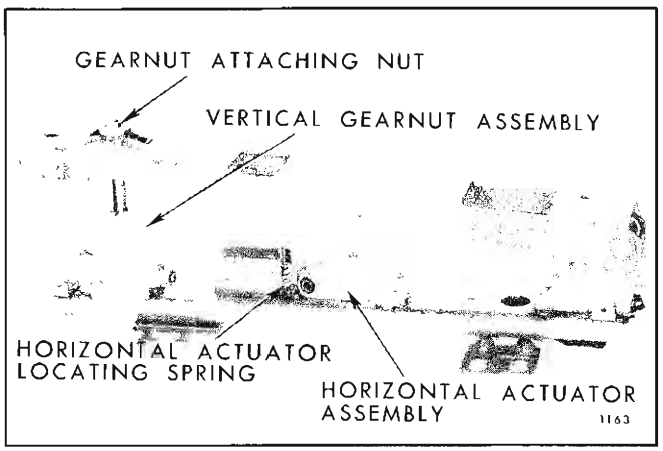


Fig. 1H7—Seat Adjuster - Four Way Tilt

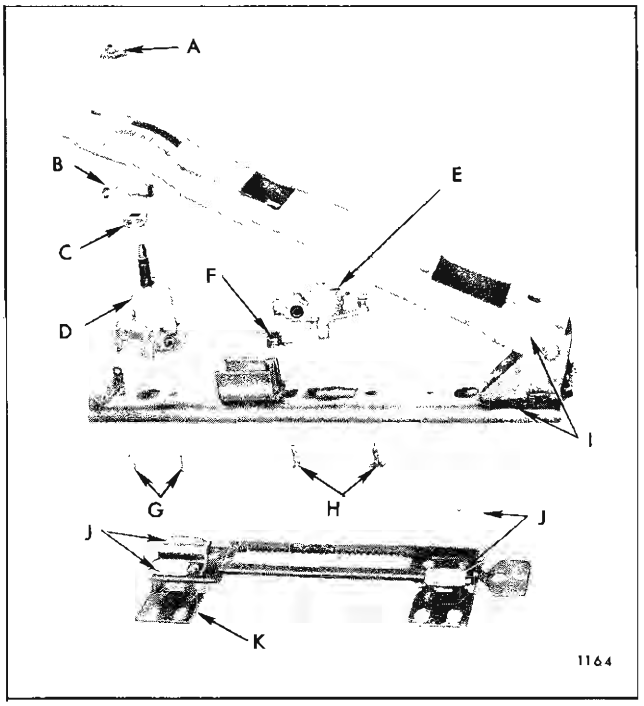


Fig. 1H8—Seat Adjuster - Four Way Tilt

A. Gearnut to Upper Attaching Nut
B. Gearnut Tension Spring
C. Gearnut Washer
D. Vertical Gearnut Assembly
E. Horizontal Actuator Assembly
F. Locating Spring
G. Vertical Gearnut Screws
H. Horizontal Actuator Screws
I. Upper Channel Assembly
J. Plastic Shoes
K. Lower Channel

FRONT SEAT ADJUSTER HORIZONTAL ACTUATOR ASSEMBLY (FULL-WIDTH ELECTRIC FOUR-WAY TILT)

Removal and Installation

1. Remove front seat assembly and place upside down on a clean protected surface.

2. Disconnect drive cable from horizontal actuator (Fig. 1H6).

3. Remove screws securing horizontal actuator assembly to adjuster lower track; then, remove actuator from adjuster assembly (Fig. 1H8).

NOTE: It may be necessary to manually actuate the horizontal actuator to gain access to attaching screws.

4. To install, reverse removal procedure. Make sure horizontal actuator locating spring is properly positioned (Fig. 1H7 and 1H8).

NOTE: Check operation of seat adjusters and make sure adjusters are "in phase". See step 6 under "Front Seat Assembly - Removal and Installation".

FRONT SEAT ADJUSTER ELECTRIC MOTOR (FULL-WIDTH ELECTRIC FOUR-WAY TILT)

Removal and Installation

1. Remove front seat assembly, and place upside down on a clean protected surface.

2. Disconnect wire harness from motor relay assembly (Fig. 1H5).

3. Remove screws securing motor and transmission support to seat bottom frame (Fig. 1H6).

4. Remove motor-to-support attaching screws and remove motor assembly from support.

5. To install, reverse removal procedure making sure rubber coupler is properly engaged at both motor and transmission ends. Check that seat harness is properly secured to seat (Fig. 1H5).

FRONT SEAT ADJUSTER HORIZONTAL AND VERTICAL CABLES (FULL-WIDTH ELECTRIC FOUR-WAY TILT)

Removal and Installation

1. Remove front seat assembly, as previously described, and place upside down on a clean protected surface.

2. Detach both horizontal and vertical cables from seat adjuster (Fig. 1H6).

3. Remove screws securing horizontal and vertical cable end plate on side of transmission from which cables are being removed and remove cables from seat assembly (Fig. 1H5).

4. Disengage cable to be replaced from end plate.

5. To install cables, reverse removal procedure.

FRONT SEAT ADJUSTER TRANSMISSION (FULL-WIDTH ELECTRIC FOUR-WAY TILT)

Removal and Installation

1. Remove front seat assembly, from body and place upside down on a clean protected surface.

2. Disconnect wire harness connector from transmission (Fig. 1H5).

3. Remove screws securing horizontal and vertical cable end plate on both sides of transmission and detach cables from transmission.

4. Remove transmission to support attaching bolts; then, disengage transmission from rubber coupler and remove transmission from seat assembly.

5. To install, reverse removal procedure.

Disassembly and Assembly of Transmissions

1. Remove front seat adjuster transmission from seat assembly.

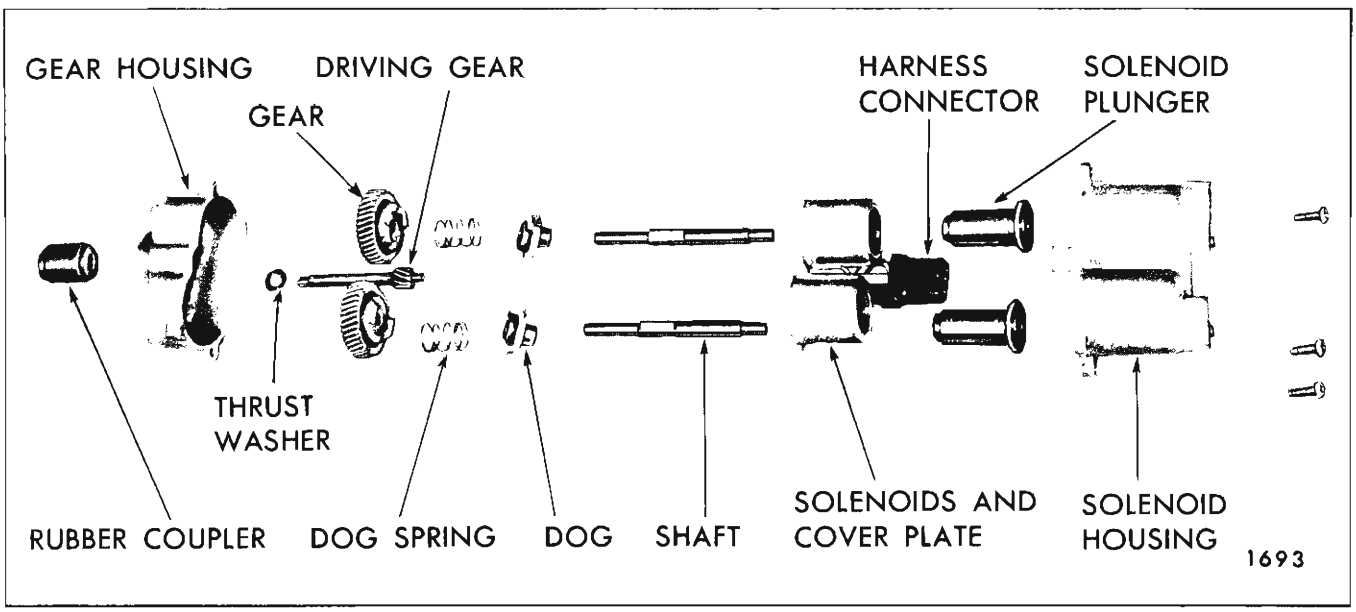


Fig. 1H9—Four-Way Seat Adjuster Transmission

2. Remove screws securing gear and solenoid housings together; then, carefully separate housings and remove component parts of transmission assembly (Fig. 1H9).

3. To assemble transmission, reverse removal procedure.

IMPORTANT: Prior to or during installation, lubricate frictional surfaces of driving gear thrust washer, gears, dog washers, shaft and solenoid plungers with "Lubriplate" (630AAW) or equivalent.

(FULL-WIDTH ELECTRIC SIX-WAY TILT)

DESCRIPTION:

The electrically-operated six-way front seat assembly can be moved forward, rearward, upward, downward or tilted by means of a manually-operated seat control switch.

The seat adjuster operating mechanism incorporates a transmission assembly which includes three solenoids and six drive cables leading to the seat adjusters.

The solenoid which operates the blue drive cable (See Fig. 1H12), controls the vertical movement of the rear edge of the seat. The solenoid which operates the black drive cable, controls the horizontal movement of the seat. The solenoid which operates the yellow drive cable, controls the vertical movement of the front edge of the seat.

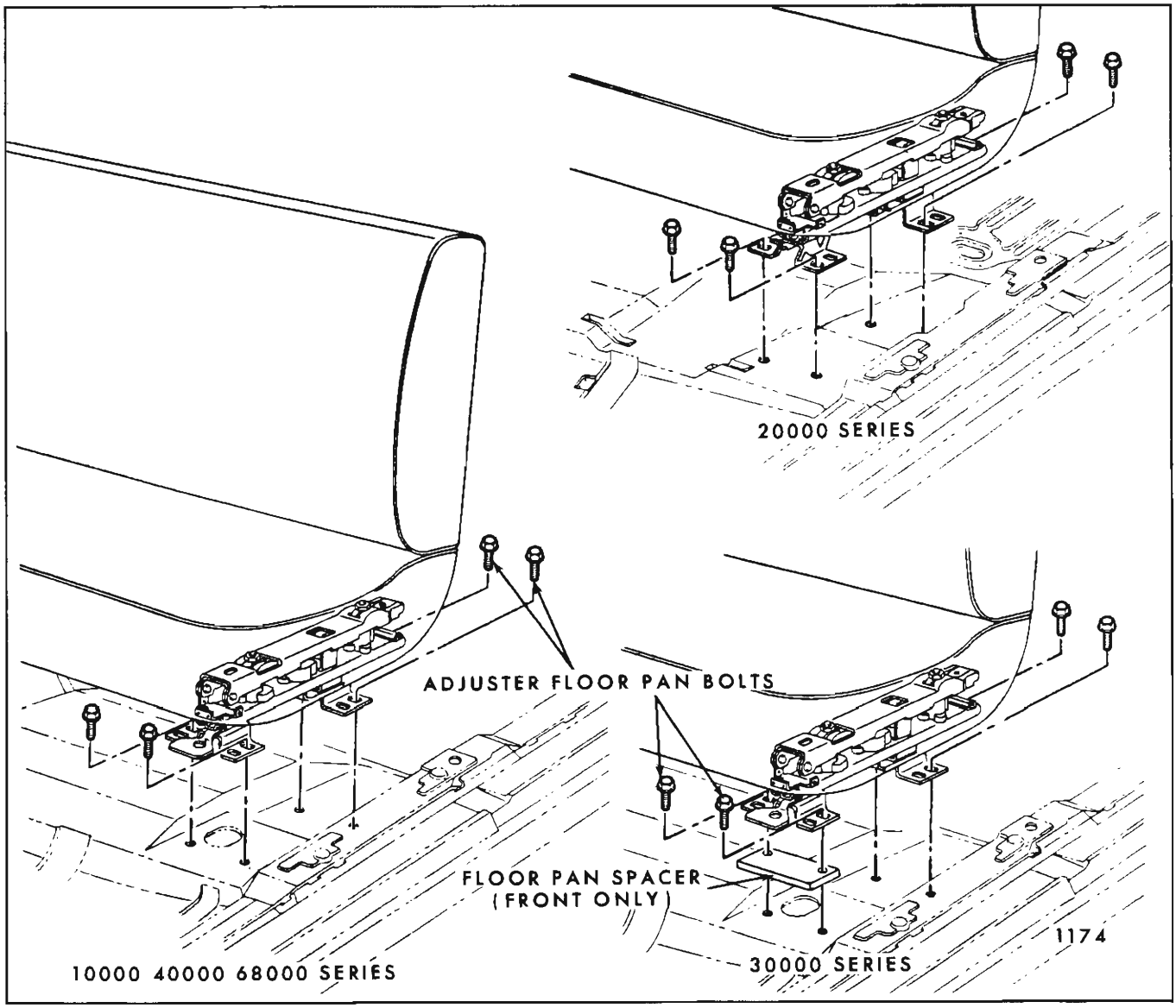


Fig. 1H10—Front Seat Adjuster Floor Pan Attachment (Four-Way and Six-Way Seats)

When one of the control switch buttons is actuated, the motor and one of the solenoids are energized simultaneously. The solenoid plunger engages the large gears with a driving gear. The driving gear rotates the large gears which rotates the drive cables and operate both adjusters. When the switch contacts are opened, a spring returns the solenoid plunger to its original position, disengaging the large gears from the driving gear.

(FULL-WIDTH ELECTRIC SIX-WAY TILT)

Removal and Installation

1. Operate seat to fully raised and midway fore and aft position.

2. Remove both driver and passenger inboard seat belt floor pan attaching bolt. Remove both seat adjuster track covers; then turn back floor carpeting sufficiently to expose adjuster-to-floor pan attaching bolts (Fig. 1H10).

3. Remove rear, then front adjuster-to-floor pan attaching bolts.

4. Under front of seat, disconnect seat harness feed connector and detach seat harness from clip on floor pan (Fig. 1H11).

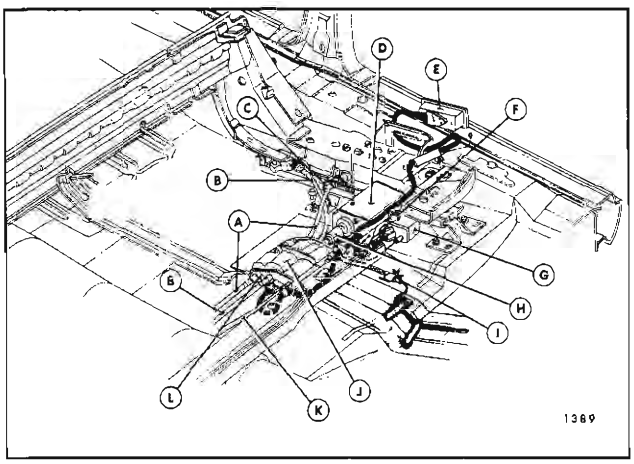


Fig. 1H11—Six-Way Full-Width Seat Electric Wiring

A. Horizontal Control Cable (Black)
B. Rear Vertical Control Cable (Blue)
C. Ground Wire
D. Motor
E. Control Switch
F. Front Vertical Control Cable (Yellow)
G. Motor Control Relay
H. Rubber Coupler
I. Harness Feed Connector
J. Transmission and Solenoid Assembly
K. Front Vertical Control Cable (Yellow)
L. Transmission End Plate

On 30000 and 60000 series detach cigar lighter, courtesy light or vanity compartment light wire harness, where present, from feed wire.

5. With aid of a helper, carefully remove seat assembly with attached adjusters, motor and transmission from body.

6. To install seat assembly, reverse removal procedure. On 30000 series check that seat adjuster floor pan spacers are installed under adjuster front pedestals (Fig. 1H10).

NOTE: If it is desired to lower the front of the seat on 30000 series remove seat adjuster floor pan spacers.

Make sure ground wire is securely attached under left seat adjuster-to-floor pan rear attaching bolt (Fig. 1H11).

IMPORTANT: When installing seat assembly in body, seat adjusters should be parallel and "in phase" with each other. In the event the adjusters are "out of phase" (that is, one adjuster reaches its maximum horizontal or vertical travel in a given direction before the other adjuster), proceed as follows:

a. Horizontal Travel - Operate seat control switch until one adjuster reaches full forward position. Detach horizontal drive cable from adjuster which has reached full forward position. Operate seat forward until other adjuster reaches full forward position; then, connect horizontal drive cable and check horizontal travel of seat.

b. Front or Rear Vertical Travel - Operate seat control switch until one adjuster has reached the fully raised position at both front and rear vertical travel limits. Disconnect both front and rear vertical drive cables from adjuster which has reached the fully raised position. Operate seat control switch until other adjuster reaches the fully raised position at both front and rear vertical travel limits; then, connect previously removed front and rear vertical drive cables. Check vertical travel by operating adjusters through one or two complete cycles. The above operation may be repeated on an "as required" basis if adjusters do not appear to be "in phase" after test cycle.

FRONT SEAT ADJUSTER ASSEMBLY (FULL-WIDTH ELECTRIC SIX-WAY TILT)

Removal and Installation

1. Remove front seat assembly from body with attached adjusters, motor and transmission, and place upside down on a clean protected surface.

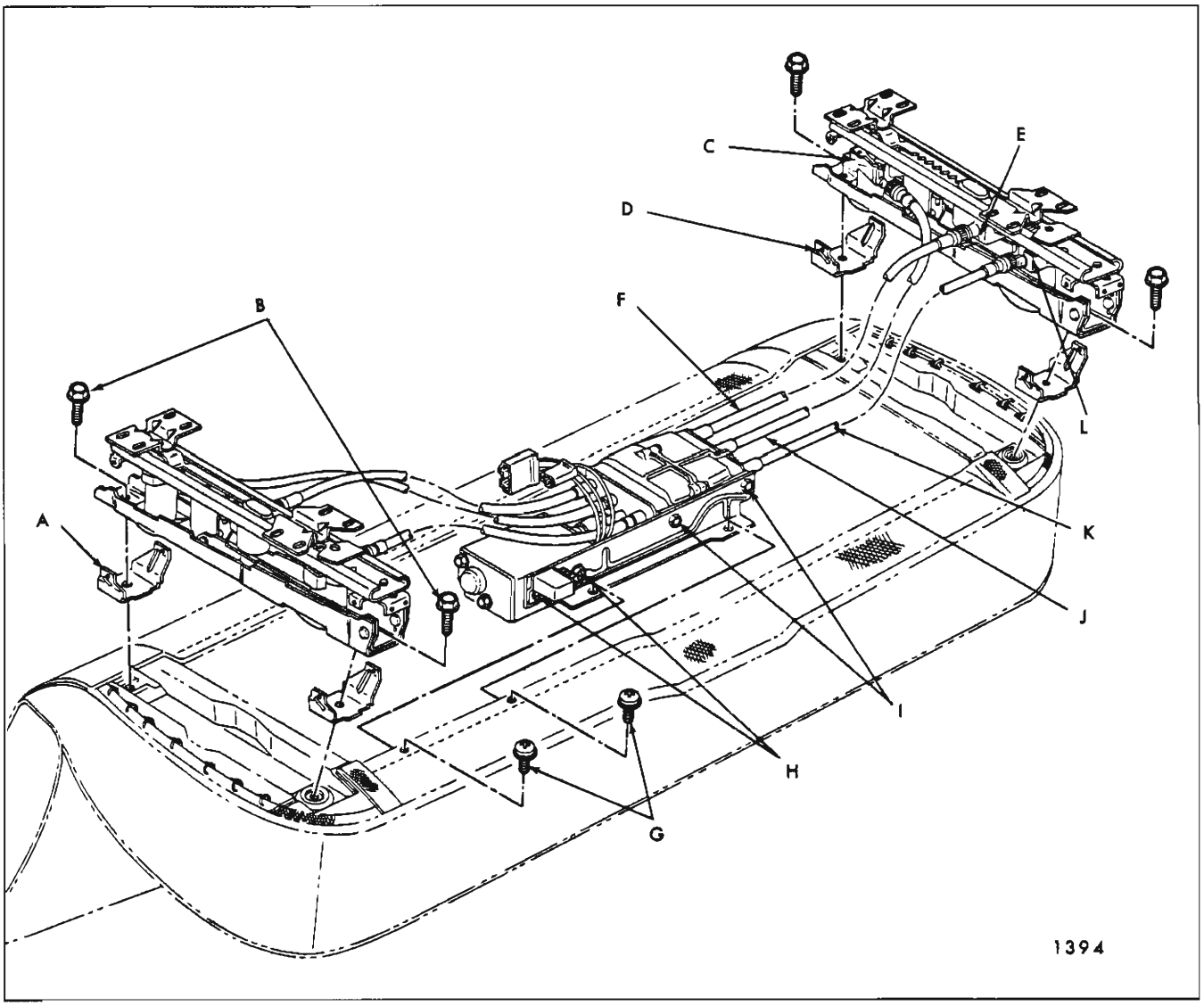


Fig. 1H12—Front Seat Assembly - Six-Way

A. Track Cover Support
B. Adjuster-to-Seat Attaching Screws
C. Rear Vertical Gearnut
D. Track Cover Support
E. Horizontal Actuator
F. Rear Vertical Cables - Blue
G. Motor and Transmission Support Attaching Screws
H. Motor Attaching Screws
I. Transmission Attaching Screws
J. Horizontal Cables - Black
K. Front Vertical Cables - Yellow
L. Front Vertical Gearnut

2. Detach three power drive cables from adjuster to be removed (Fig. 1H12).

3. Remove adjuster-to-seat bottom frame front and rear attaching bolts and remove adjuster from seat assembly.

4. To install seat adjuster assembly, reverse removal procedure. Make sure adjuster track cover supports are installed between adjuster and seat frame. Black cable attaches to horizontal actuator; yellow cable to front vertical gearnut and blue cable to rear vertical gearnut (Fig. 1H12).

Check that seat adjusters are "in phase" before installing seat assembly into body. (See step 6 under "Front Seat Assembly - Removal and Installation").

Figure 1H13 identifies the components of the six-way seat adjuster. The following service procedures include replacement of all major component parts of this adjuster.

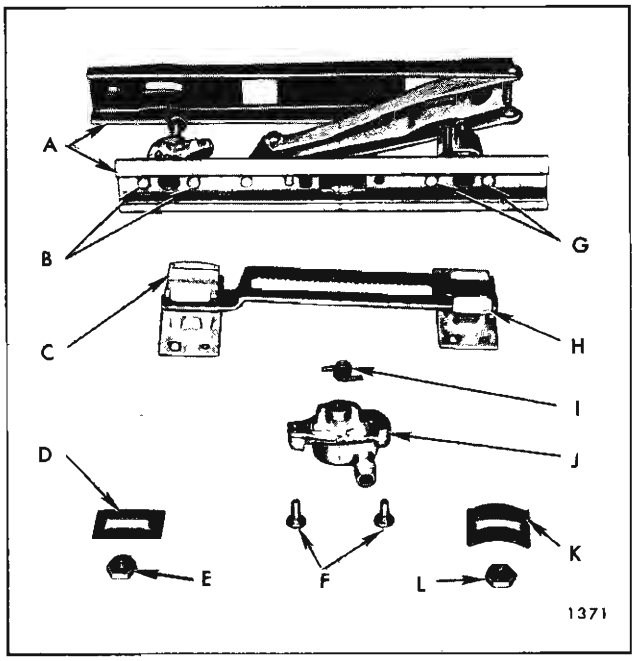


Fig. 1H13—Six-Way Seat Adjuster Components

A. Upper Channel Assembly
B. Rear Vertical Gearnut Attaching Screws
C. Lower Channel
D. Rear Spring
E. Rear Gearnut Attaching Nut
F. Actuator Attaching Screws
G. Front Vertical Gearnut Attaching Screws
H. Plastic Shoe
I. Actuator Locating Spring
J. Horizontal Actuator
K. Front Spring
L. Front Gearnut Attaching Screw

FRONT SEAT ADJUSTER HORIZONTAL ACTUATOR (FULL-WIDTH ELECTRIC SIX-WAY TILT)

Removal and Installation

1. Remove seat assembly from body as previously described and place upside down on a clean protected surface.

NOTE: Horizontal Actuator is easily accessible with seat in mid-way or approximate center position.

2. Detach three power drive cables from adjuster to be removed.

3. Remove screws securing seat adjuster to seat bottom frame and remove adjuster from seat assembly.

4. At top of adjuster, remove front and rear vertical gearnut attaching nuts (Fig. 1H14).

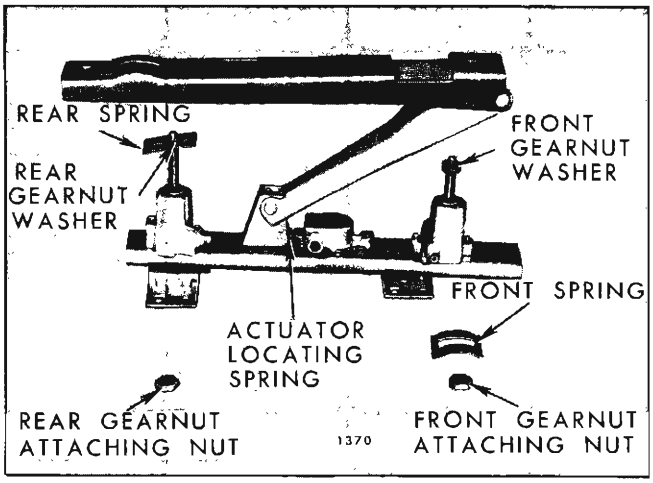


Fig. 1H14—Six-Way Adjuster Gearnuts

5. Remove front vertical gearnut spring (Fig. 1H14).

6. Lift upward on adjuster upper track; then remove rear vertical gearnut spring (Fig. 1H14).

7. Lay adjuster on its side; then remove screws securing horizontal actuator to adjuster upper channel assembly and remove actuator from adjuster.

IMPORTANT: Horizontal actuator is under tension from spring shown in Figure 1H14. When installing actuator, be sure actuator locating spring is properly engaged with actuator assembly.

8. To install, reverse removal procedure. When installing horizontal actuator, be sure actuator drive gear is full engaged with teeth on lower channel. With tension spring properly installed and actuator attaching screws tight, there should be no free motion between upper and lower adjuster channels. Re-adjust actuator "as required" until all free motion between channels has been removed. Be sure seat adjusters are "in phase", before installing seat assembly into body. (See step 6 under "Front Seat Assembly - Removal and Installation").

FRONT SEAT ADJUSTER LOWER CHANNEL (FULL-WIDTH ELECTRIC SIX-WAY TILT)

Removal and Installation

1. Remove horizontal actuator as previously described.

2. Slide seat adjuster lower channel from upper channel until lower channel is completely disengaged from upper channel.

3. If lower channel is being replaced with a new part, transfer plastic slides to new part (Fig. 1H13).

4. Apply "lubriplate" (630AAW) or equivalent to track portion of upper channel, plastic slides and teeth on lower channel.

5. To install, reverse removal procedure. Be sure adjusters are "in phase" before installing seat assembly into body. (See step 6 under "Front Seat Assembly - Removal and Installation").

SEAT ADJUSTER FRONT VERTICAL GEARNUT (FULL-WIDTH ELECTRIC SIX-WAY TILT)

Removal and Installation

1. Operate seat to either full forward or full rearward position.

2. Remove front seat assembly from body as previously described and place upside down on a clean protected surface.

3. Detach three power drive cables from adjuster to be removed.

4. Remove screws securing seat adjuster to seat bottom frame and remove adjuster from seat assembly.

5. At top of adjuster, remove front vertical gearnut attaching nut.

6. Remove front vertical gearnut spring (Fig. 1H14).

7. Lay adjuster on its side and remove front vertical gearnut attaching screws (Fig. 1H13); then remove gearnut from adjuster.

8. If front vertical gearnut is being replaced with a new part, transfer gearnut washer to new gearnut assembly (Fig. 1H14).

9. To install, reverse removal procedure. Be sure adjusters are "in phase" before installing seat assembly into body. (See step 6 under "Front Seat Assembly - Removal and Installation").

SEAT ADJUSTER REAR VERTICAL GEARNUT (FULL-WIDTH ELECTRIC SIX-WAY TILT)

Removal and Installation

1. Operate seat to full forward position.

2. Remove front seat assembly from body as previously described and place upside down on a clean protected surface.

3. Detach three power drive cables from adjuster to be removed.

4. Remove screws securing seat adjuster to seat bottom frame and remove adjuster from seat assembly.

5. At top of adjuster, remove rear vertical gearnut attaching nut (Fig. 1H14).

6. Lift rear of channel upward and remove rear vertical gearnut spring (Fig. 1H14).

7. Lay adjuster on its side and remove rear vertical gearnut attaching screws; then remove gearnut from adjuster (Fig. 1H13).

8. If rear vertical gearnut is being replaced with a new part, transfer gearnut washer to new gearnut assembly (Fig. 1H14).

9. To install, reverse removal procedure. Be sure rear gearnut spring is properly engaged under adjuster upper channel before tightening rear gearnut upper attaching nut. In addition, be sure adjusters are "in phase" prior to installing seat assembly into body. (See step 6 under "Front Seat Assembly - Removal and Installation").

FRONT SEAT ADJUSTER UPPER CHANNEL (FULL-WIDTH ELECTRIC SIX-WAY TILT)

Removal and Installation

1. Remove seat assembly from body and place upside down on a clean protected surface.

2. Detach three power drive cables from adjuster to be removed.

3. Remove screws securing seat adjuster to seat bottom frame and remove adjuster from seat assembly.

4. Remove horizontal actuator from upper channel as previously described.

5. Slide lower channel until it is completely disengaged from upper channel; then transfer lower channel to new upper channel.

NOTE: Be sure sliding surfaces of upper and lower channels are properly lubricated with "Lubriplate" (630AAW) or equivalent.

6. Transfer front and rear gearnuts to new upper channel (Fig. 1H13).

7. Install horizontal actuator and actuator locating spring to new upper channel.

8. Install adjuster to seat bottom frame; then check all operations of adjusters. Be sure adjusters are "in phase" prior to installing seat assembly into body. (See step 6 under "Front Seat Assembly - Removal and Installation").

9. Install seat assembly into body. Operate seat through several complete cycles to insure proper operation.

FRONT SEAT ADJUSTER ELECTRIC MOTOR (FULL-WIDTH ELECTRIC SIX-WAY TILT)

Removal and Installation

1. Remove front seat assembly.

2. Disconnect motor feed wires from motor control relay (Fig. 1H11).

3. Remove motor support-to-seat frame attaching bolts.

4. Remove motor-to-support attaching bolts; then move motor assembly outboard (away from transmission) sufficiently to disengage motor from rubber coupling.

5. To install, reverse removal procedure making sure rubber coupling is properly engaged at both motor and transmission. Check that seat harness is properly secured to seat (Fig. 1H11).

FRONT SEAT ADJUSTER HORIZONTAL AND VERTICLE DRIVE CABLES (FULL-WIDTH ELECTRIC SIX-WAY TILT)

Removal and Installation

1. Remove front seat assembly from body with attached adjusters, motor and transmission and place upside down on a clean protected surface.

2. Detach both horizontal and vertical cables from seat adjuster.

3. Remove screws securing horizontal and vertical cable end plate on side of transmission from which cables are being removed and remove cables from seat assembly; then disengage cables from end plate.

4. To install horizontal and vertical cables, reverse removal procedure. Make sure colored drive

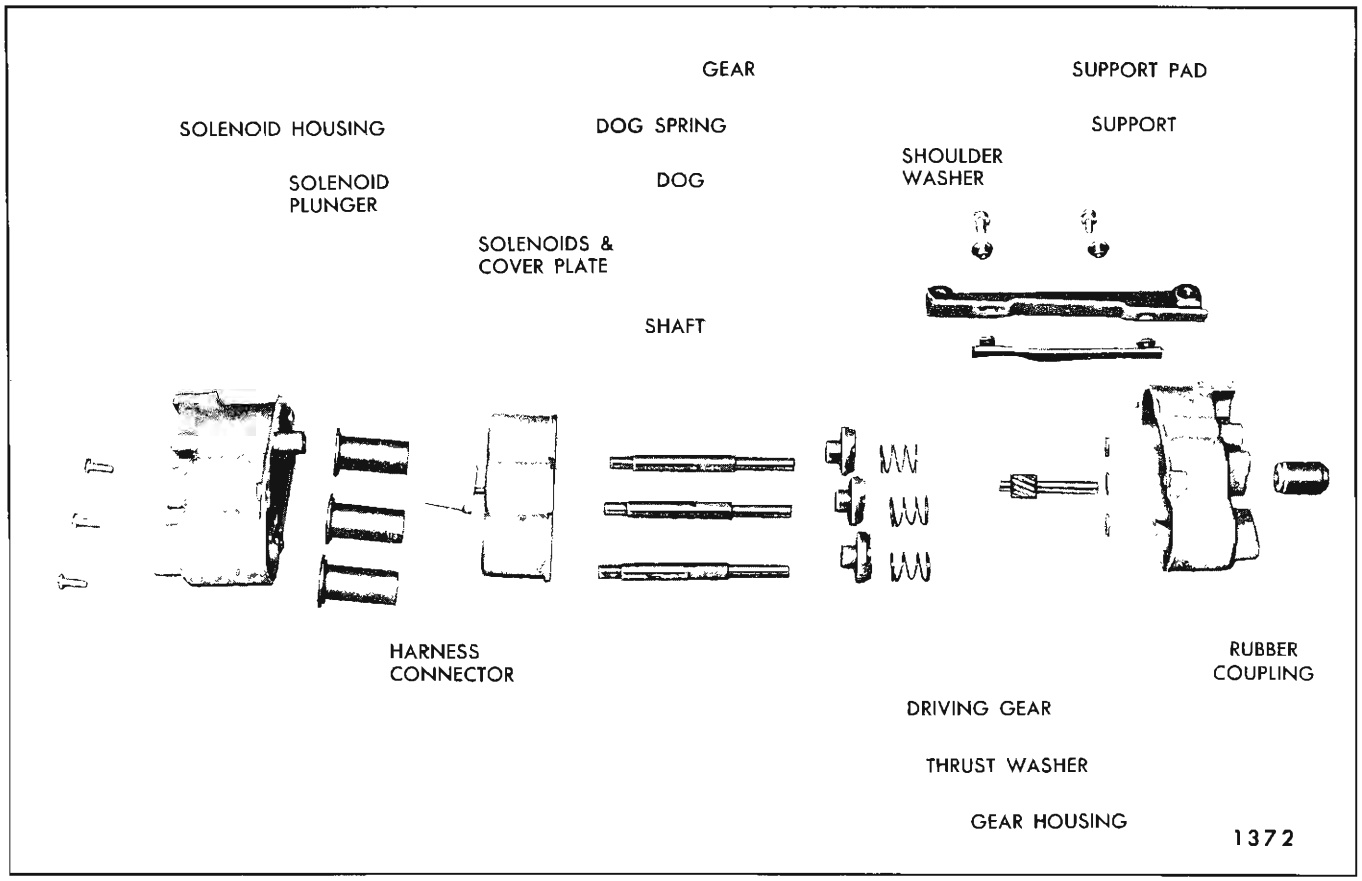


Fig. 1H15—Six-Way Seat Adjuster Transmission

cables are installed to proper gearnuts and horizontal actuator as shown in Figure 1H10.

FRONT SEAT ADJUSTER TRANSMISSION (FULL-WIDTH ELECTRIC SIX-WAY TILT)

Removal and Installation

1. Remove front seat assembly from body with attached adjusters, motor and transmission and place upside down on a clean protected surface.

2. Disconnect wire harness connector from transmission. (See Fig. 1H11).

3. Remove screws securing horizontal and vertical cable end plate on both sides of transmission and detach cables from transmission.

4. Remove transmission to support attaching bolts; then disengage transmission from motor drive coupling and remove transmission from seat assembly.

5. To install, reverse removal procedure. Make sure seat harness is properly secured to seat. (See Fig. 1H11).

Disassembly and Assembly:

1. Remove front seat adjuster transmission from seat assembly.

2. Remove screws securing gear housing to the solenoid housing; then, carefully separate housings and remove component parts of transmission assembly (Fig. 1H15).

3. To assemble transmission, reverse removal procedure.

IMPORTANT: Prior to or during installation, lubricate frictional surfaces of driving gear, thrust washer, large gears, dog washers, gear shafts and solenoid plungers with "Lubriplate" (630AAW) or equivalent.

BUCKET TYPE FRONT SEATS

BUCKET SEAT ASSEMBLY—MANUAL (DRIVER OR PASSENGER'S SIDE)

Removal and Installation

1. Operate seat assembly to forward position.

2. Turn back floor carpeting sufficiently to expose seat adjuster-to-floor pan attaching nuts (Fig. 1H16).

3. At rear of seat, remove adjuster-to-floor pan attaching nuts.

4. Operate seat assembly to rearward position.

5. At front of seat, remove adjuster-to-floor pan attaching nuts (Fig. 1H16).

6. With aid of a helper, remove seat assembly from body.

7. To install, reverse removal procedure. Check seat adjusters for proper operation.

BUCKET SEAT ASSEMBLY (TWO-WAY OR FOUR-WAY POWER OPERATED) 35-36-38-68000 SERIES

The two-way and four-way (tilt) seat adjusters are actuated by a 12 volt, reversible shunt wound motor with a built-in circuit breaker.

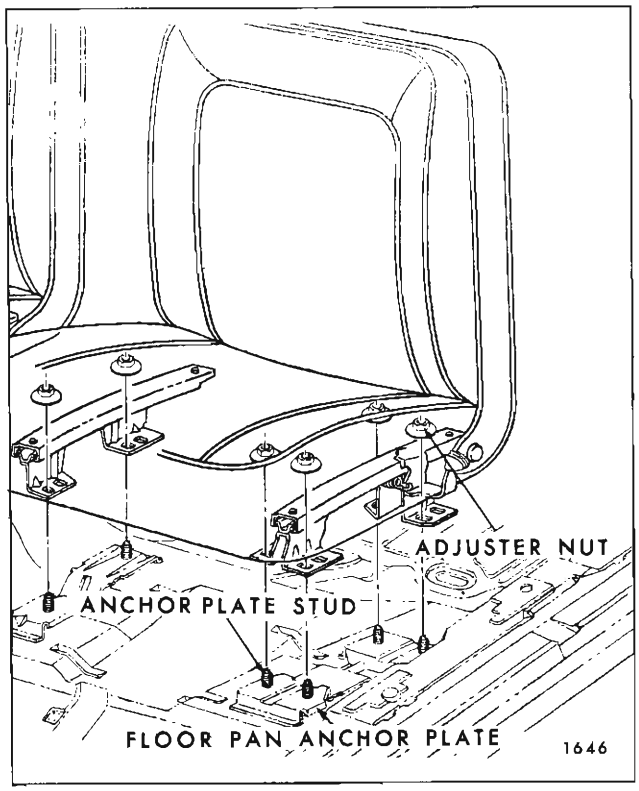


Fig. 1H16—Bucket Seat Removal

The four-way seat adjuster operating mechanism incorporates a transmission assembly which includes two solenoids and two drive cables leading to the seat adjusters. One solenoid controls the vertical movement of the seat while the other solenoid controls the horizontal movement of the seat. When the control switch is actuated, the motor and one of the solenoids are energized simultaneously. The solenoid plunger than engages with the driving gear dog. The driving gear rotates the drive cables and operates both adjusters. When the adjusters reach their limit of travel, the drive cables stop their rotating action and torque is absorbed by the rubber coupling connecting the motor and transmission. When the switch contacts are opened, a return spring returns the solenoid plunger to its original position disengaging it from the driving gear dog.

Removal and Installation

1. Operate seat assembly to forward position.

2. Turn back floor carpeting sufficiently to expose seat adjuster-to-floor pan attaching nuts (Fig. 1H16).

3. At rear of seat, remove adjuster-to-floor pan rear attaching nuts.

4. Operate seat assembly to rearward position.

5. At front of seat, remove adjuster-to-floor pan front attaching nuts.

6. At front of seat, disconnect seat harness feed connector (Fig. IH18 for two-way power operated seat) (Fig. IH17 for four-way power operated seat).

7. With aid of helper, remove seat assembly with attached adjusters, motor and transmission from body.

8. To install, reverse removal procedure. Make sure ground wire is secured under adjuster rear attaching nut. Check seat for proper operation.

BUCKET SEAT ASSEMBLY (FOUR-WAY POWER OPERATED) 25-26-45-46-48000 SERIES

Removal and Installation

1. Operate seat assembly to forward position.

2. Turn back floor carpeting sufficiently to expose seat adjuster-to-floor pan rear attaching nuts (Fig. 1H16).

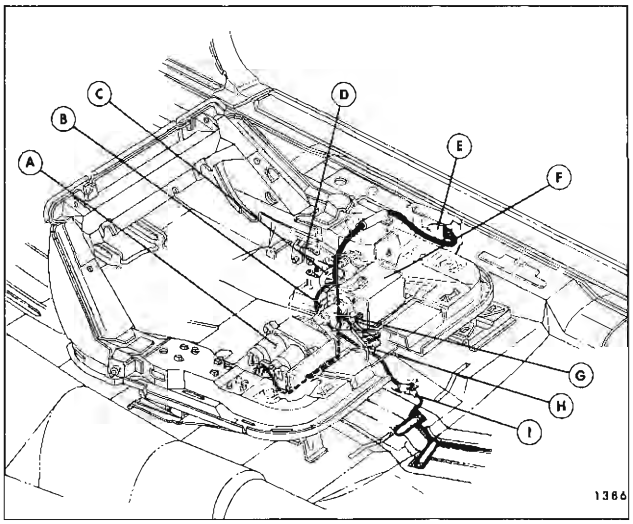


Fig. 1H17—Bucket Seat Wiring Installation Four-Way Power Adjusters

A. Transmission Assembly
B. Horizontal Control Cable (Black)
C. Vertical Control Cable (Yellow)
D. Ground Wire
E. Control Switch Block
F. Motor
G. Rubber Coupler
H. Motor Control Relay
I. Seat Harness Feed Connector

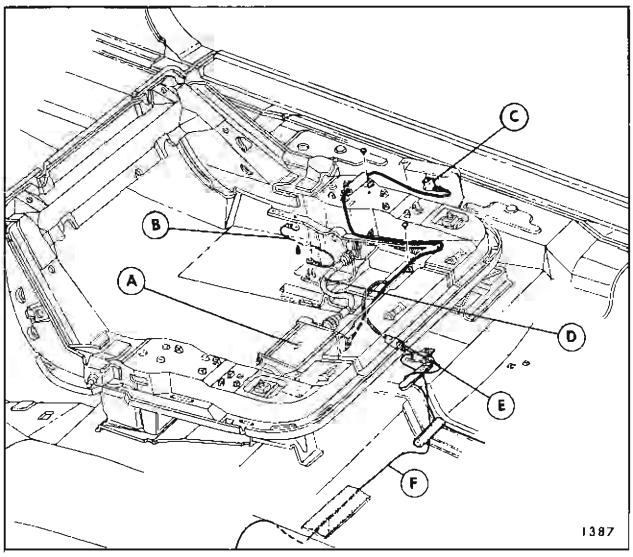


Fig. 1H18—Bucket Seat Wiring Installation - Two-Way Power Adjusters

A. Motor
B. Ground Wire
C. Control Switch Block
D. Horizontal Control Cable
E. Harness Feed Connector
F. Feed Wire to Passengers Two-Way Seat

3. At rear of seat, remove adjuster-to-floor pan rear attaching nuts.

4. Operate seat assembly to rearward position.

5. At front of seat, remove adjuster-to-floor pan front attaching nuts.

6. At front of seat, disconnect seat harness feed connector (Fig. 1H17).

7. With aid of a helper, remove seat assembly with attached adjusters, motor and transmission from body.

8. To install, reverse removal procedure. Make sure ground wire is secured under adjuster rear attaching nut (Fig. 1H17). Check seat for proper operation.

FRONT SEAT BACK ASSEMBLY ALL STYLES EXCEPT 68339 STYLE

Removal and Installation

1. Using a flat-bladed tool, carefully remove retainer from outer hinge pin (Fig. 1H19).

2. At inboard hinge arm, remove retainer from inner hinge pin.

3. Carefully disengage inner and outer seat back hinge arms from hinge pins; then, remove seat back assembly from body.

4. To install, reverse removal procedure. Prior to installation of back assembly, make sure washer

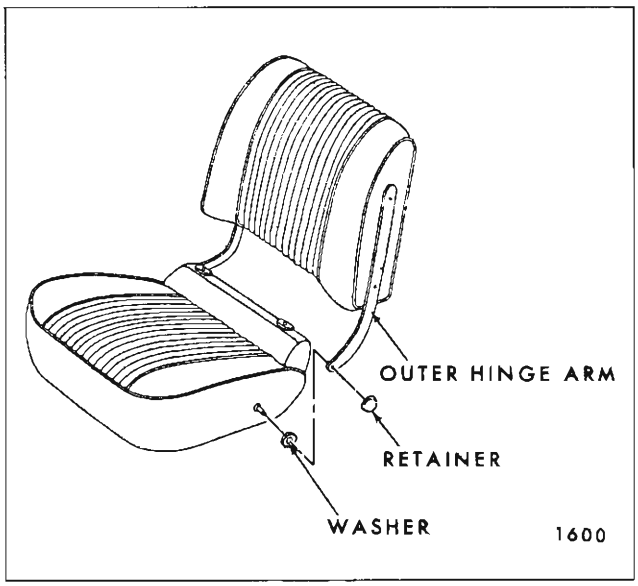


Fig. 1H19—Bucket Seat Back Removal - "A" Styles

is installed over inner and outer hinge pins (Fig. 1H19). If retainers are damaged, replace retainers using new parts.

FRONT SEAT BACK ASSEMBLY 68339 STYLE

Removal and Installation

1. Remove front seat assembly and place upside down on a clean protected surface.

2. On underside of seat cushion, remove hog rings securing seat back facing and loosen material sufficiently to expose seat back attaching bolts (Fig. 1H20).

3. Remove bolts securing seat back assembly to seat cushion frame assembly (Fig. 1H20).

4. Using a flat-bladed tool, carefully remove retainer (Fig. 1H20) securing inner and outer seat back arm to seat cushion pins.

5. Carefully disengage seat back arms from seat cushion pins and remove seat back assembly from seat cushion assembly.

6. To install, reverse removal procedure. Prior to installation of seat back arms on seat cushion pins make sure washers are installed over pins. If seat back arm retainers are damaged, install new retainers.

BUCKET SEAT ADJUSTERS—MANUAL (DRIVER OR PASSENGER SIDE) ALL SERIES EXCEPT 68000 SERIES

Removal and Installation

1. Remove front seat assembly as previously described and place upside down on a clean, protected surface.

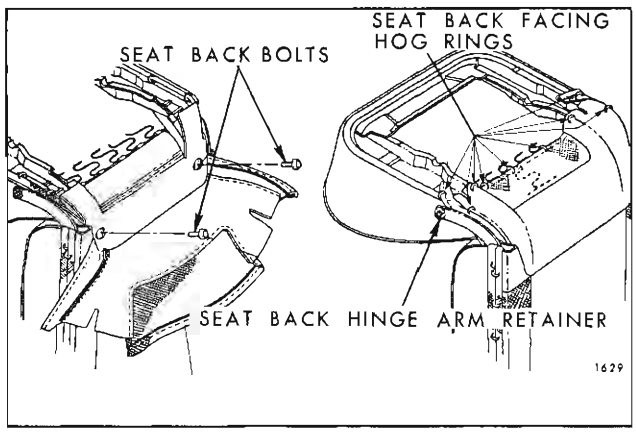


Fig. 1H20—Front Bucket Seat Back Attachment (63339 Style)

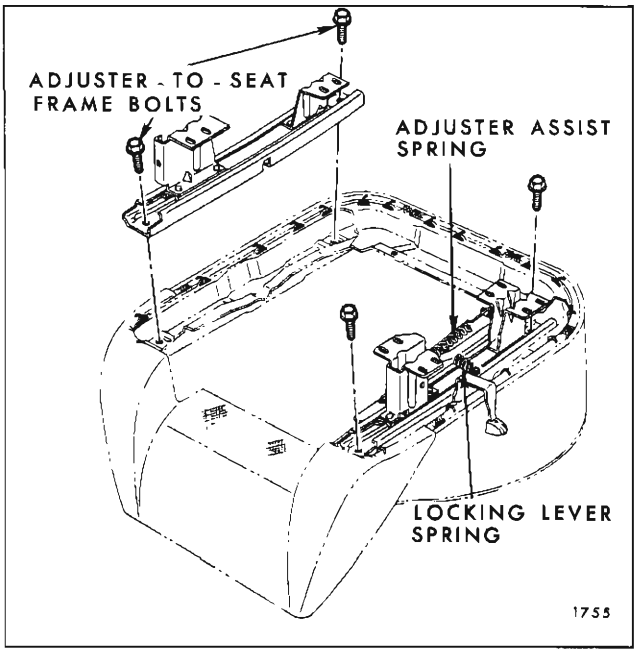


Fig. 1H21—Bucket Seat Adjuster

2. If adjuster to be replaced is equipped with an assist spring, remove spring from adjuster (Fig. 1H21).

3. Operate adjuster so that both front and rear attaching bolts are accessible (Fig. 1H21).

4. Remove adjuster-to-seat bottom frame front and rear attaching bolts and remove adjuster from seat assembly (Fig. 1H21).

5. To install, reverse removal procedure.

On 20000 and 30000 series check that 1/4" spacer is installed between adjuster and seat bottom frame at front attaching locations only.

FRONT SEAT ADJUSTERS (TWO-WAY POWER OPERATED) 35-36-38-68000 SERIES

1. Remove front seat assembly as previously described and place upside down on a clean, protected surface.

2. Operate adjuster so that both front and rear attaching bolts are accessible (Fig. 1H22).

3. Disconnect power drive cable from adjuster gearnut (Fig. 1H22).

4. Remove adjuster-to-seat bottom frame front and rear attaching bolts and remove adjuster from seat assembly (Fig. 1H22).

5. To install, reverse removal procedure.

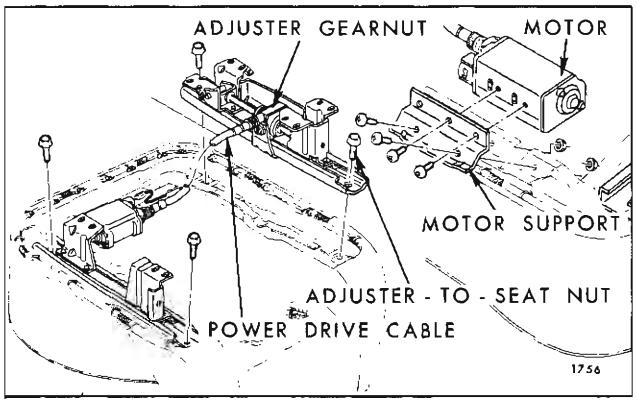


Fig. 1H22—Bucket Seat Adjuster and Motor Two-Way Power

On 30000 series check that 1/4" spacer is installed between adjuster and seat bottom frame at front attaching locations only. Make sure ground wire is secured under adjuster rear attaching nut (Fig. 1H18).

FRONT SEAT ADJUSTER ASSEMBLY-FOUR-WAY TILT (DRIVER'S SIDE ONLY) ALL SERIES EXCEPT 15-16000 SERIES

Removal and Installation

1. Operate seat assembly to fully raised and midway horizontal position.

2. Remove bucket seat assembly from body with attached adjusters, motor and transmission and place upside down on a clean protected surface.

3. If power-operated outboard adjuster is being removed, disconnect power drive cable from vertical gearnut and horizontal actuator (Fig. 1H23).

4. Remove adjuster-to-seat bottom frame front and rear attaching bolts (Fig. 1H23).

5. Remove nuts securing motor and transmission support to adjuster assembly. (See Fig. 1H24).

6. Carefully disengage adjuster from support and torque tube assembly; then remove adjuster from seat.

7. To install, reverse removal procedure. Check seat adjusters for proper operation.

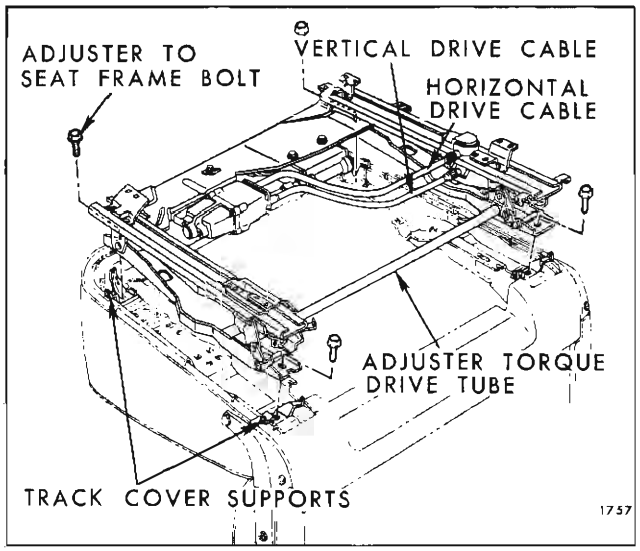


Fig. 1H23—Bucket Seat Adjuster and Motor Four-Way Tilt

FRONT SEAT ADJUSTER VERTICAL GEARNUT—FOUR-WAY TILT (DRIVER'S SIDE ONLY) ALL SERIES EXCEPT 15-1600 SERIES

Removal and Installation

1. Operate seat assembly to fully raised and midway horizontal position.

2. Remove front seat assembly from body and place upside down on a clean protected surface.

3. Using a clutch type screwdriver or other

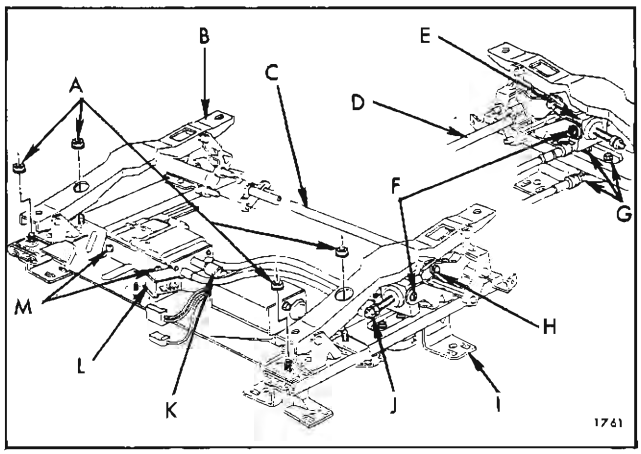


Fig. 1H24—Four-Way (Tilt) Seat Adjuster Assembly

A. Motor and Transmission Support Nuts
B. Inboard Adjuster
C. Adjuster Torque Drive Tube
D. Adjuster Torque Drive Tube
E. Vertical Gearnut
F. Vertical Gearnut Shoulder Screw
G. Horizontal Actuator and Attaching Screws
H. Jackscrew-to-Adjuster Rivet
I. Outboard Adjuster
J. Jackscrew Downstop
K. Motor-to-Transmission Rubber Coupling
L. Motor Relay
M. Motor-to-Support Screws

suitable tool, remove shoulder screws securing linkage to vertical gearnut (Fig. 1H24).

4. Remove jackscrew "down" stop from jackscrew (Fig. 1H24).

5. Using a portable power source to energize the motor, actuate vertical gearnut until gearnut is disengaged from jackscrew.

NOTE: It may be necessary to manually raise or lower upper rear portion of adjuster to gain clearance for removal of gearnut.

6. Disconnect drive cable from gearnut.

7. To install, reverse removal procedure. Check seat adjusters for proper operation.

FRONT SEAT ADJUSTER JACKSCREW— FOUR-WAY TILT (DRIVER'S SIDE ONLY) ALL SERIES EXCEPT 15-16000 SERIES

Removal and Installation

1. Remove adjuster gearnut as previously described.

2. Remove seat adjuster-to-seat bottom frame front and rear attaching bolts.

3. As a bench operation, remove jackscrew-to-adjuster linkage attaching rivet and remove jackscrew from adjuster assembly (Fig. 1H24).

NOTE: It may be necessary to manually raise or lower upper rear portion of adjuster to gain access to jackscrew attaching rivet.

4. To install, reverse removal procedure. Use new rivet to attach jackscrew-to-adjuster linkage. Check seat adjusters for proper operation.

FRONT SEAT ADJUSTER HORIZONTAL ACTUATOR ASSEMBLY FOUR-WAY TILT (DRIVER'S SIDE ONLY) ALL SERIES EXCEPT 15-16000 SERIES

Removal and Installation

1. Remove front seat assembly from body as previously described and place upside down on a clean protected surface.

2. Using a clutch type screwdriver or other suitable tool, remove shoulder screws securing linkage to vertical gearnut (Fig. 1H24).

3. Using a portable power source, actuate vertical gearnut until gearnut is against "down" stop on jackscrew assembly.

4. Disconnect drive cable from actuator assembly.

5. Remove screws securing horizontal actuator assembly to adjuster lower track; then remove actuator from adjuster assembly (Fig. 1H24).

6. To install, reverse removal procedure.

NOTE: When installing horizontal actuator, adjust actuator so that drive gear is fully engaged with teeth on lower channel. When horizontal actuator attaching screws are tightened, there should be no free motion between upper and lower channels. Re-adjust actuator "as required" until all free motion between channels has been removed. Check seat adjusters for proper operation.

FRONT SEAT ADJUSTER ELECTRIC MOTOR— FOUR-WAY TILT (DRIVER'S SIDE ONLY) ALL SERIES EXCEPT 15-16000 SERIES

Removal and Installation

1. Remove front seat assembly.

2. Disconnect wire harness from motor relay assembly (Fig. 1H24).

3. Remove motor-to-support attaching screws and remove motor assembly from support.

4. To install, reverse removal procedure making sure rubber coupling is properly engaged at both motor and transmission ends (Fig. 1H24).

FRONT SEAT ADJUSTER HORIZONTAL AND VERTICAL CABLES FOUR-WAY TILT (DRIVER'S SIDE ONLY) ALL SERIES EXCEPT 15-16000 SERIES

Removal and Installation

1. Remove front seat assembly from body with attached adjusters, motor and transmission and place upside down on a clean protected surface.

2. Detach both horizontal and vertical cables from seat adjuster.

3. Remove screws securing horizontal and vertical cable end plate on side of transmission from which cables are being removed and remove cables from seat assembly (Fig. 1H24).

4. Disengage cable to be replaced from end plate.

5. To install cables, reverse removal procedure.

FRONT SEAT ADJUSTER TRANSMISSION—FOUR-WAY TILT (DRIVER'S SIDE ONLY) ALL SERIES EXCEPT 15-16000 SERIES

Removal and Installation

1. Remove front seat assembly from body with attached adjusters, motor and transmission and place upside down on a clean protected surface.

2. Disconnect wire harness connector from transmission (Fig. 1H24).

3. Remove screws securing horizontal and vertical cable end plate on both sides of transmission and detach cables from transmission.

4. Remove transmission-to-support attaching bolts; then, disengage transmission from rubber coupler and remove transmission from seat assembly.

5. To install, reverse removal procedure.

Disassembly and Assembly of Transmission:

1. Remove front seat adjuster transmission from seat assembly.

2. Remove screws securing gear and solenoid housings together; then, carefully separate housings and remove component parts of transmission assembly (Fig. 1H25).

3. To assemble transmission, reverse removal procedure.

IMPORTANT: Prior to or during installation, lubricate frictional surfaces of driving gear thrust washer, gears, dog washers, shaft and solenoid plungers with "Lubriplate" (630AAW) or equivalent.

TORQUE TUBE ASSEMBLY—FOUR-WAY TILT (DRIVER'S SIDE ONLY) ALL SERIES EXCEPT 15-16000 SERIES

Removal and Installation

1. Remove front seat assembly from body and place upside down on a clean protected surface.

2. Remove adjuster to seat bottom frame front and rear attaching bolts.

3. Remove nuts securing motor and transmission support to inboard adjuster (Fig. 1H24).

4. Carefully disengage adjuster from support and torque tube assembly; then, remove adjuster from seat.

5. Disengage torque tube from opposite adjuster and remove tube from seat assembly.

6. To install, reverse removal procedure. Check seat adjuster for proper operation.

MOTOR AND TRANSMISSION SUPPORT—FOUR-WAY TILT (DRIVER'S SIDE ONLY) ALL SERIES EXCEPT 15-16000 SERIES

Removal and Installation

1. Remove front seat assembly from body and place upside down on a clean protected surface.

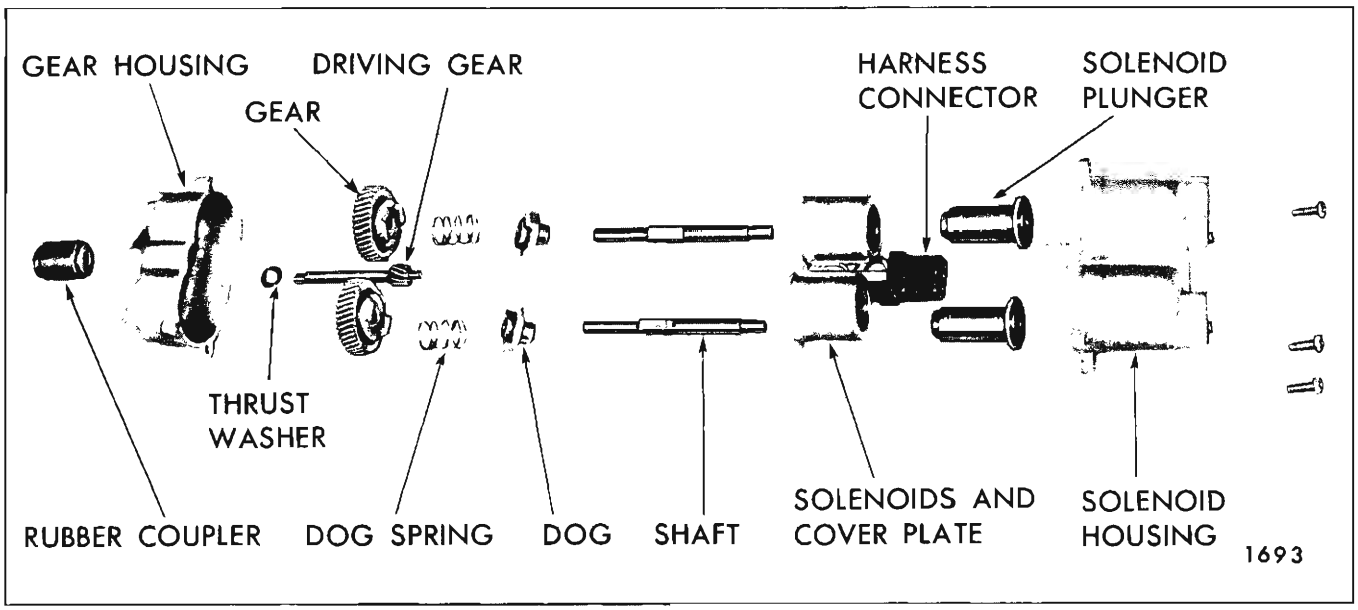


Fig. 1H25—Four-Way Seat Adjuster Transmission

2. Remove nuts securing support to both adjusters (Fig. 1H24).

3. Carefully remove support from adjusters with attached motor, transmission and relay assembly.

4. If replacing support, transfer motor, transmission and relay assembly to new parts.

5. To install, reverse removal procedure. Check seat adjusters for proper operation.

MOTOR RELAY—FOUR-WAY TILT (DRIVER'S SIDE ONLY) ALL SERIES EXCEPT 15-16000 SERIES

Removal and Installation

1. Remove front seat assembly from body and place upside down on a clean protected surface.

2. Disconnect motor-to-motor relay wire harness.

3. Remove nut securing relay to support and remove relay from seat assembly.

4. To install, reverse removal procedure.

REAR SEAT CUSHION ASSEMBLY

Removal

1. Push forward edge of cushion rearward and pull upward until wire loops on seat bottom frame disengages from floor pan stops.

2. Pull cushion forward and 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 wire retaining loops on seat bottom frame with stops on floor pan.

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

4. Push cushion rearward; then, push forward edge of cushion downward until wire retaining loops engage into slots in floor pan stops.

FOLDING REAR SEAT AND REAR COMPARTMENT FLOOR PANELS

The following views are typical of the station wagon six and nine-passenger folding rear seat back and rear compartment floor panels. These illustrations identify the component panels of the rear compartment area and their relationship.

Figure 1H26 is typical of 15000 and 16000 six-passenger station wagons.

Figure 1H27 is typical of 15000 and 16000 nine-passenger station wagons with split second seat option.

Figure 1H28 is typical of 25000 and 26000 six-passenger station wagons.

Figure 1H29 is typical of 25000 nine-passenger station wagons with split second seat option.

REAR FLOOR TO TAIL GATE FILLER PANEL ASSEMBLY 25-26000 SERIES

Removal and Installation

1. Lower tail gate assembly.

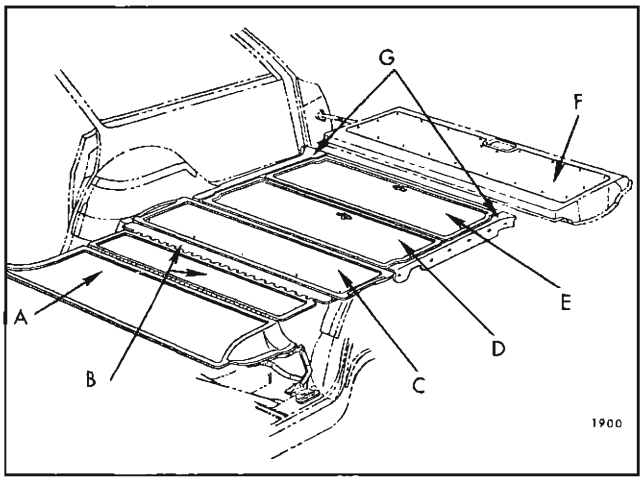


Fig. 1H26—Folding Seat and Floor Panels 15000 and 16000 "35" Styles

A. Second Seat Back Panel
B. Rear Floor Filler Panel
C. Compartment Floor Panel (at Kick-Up)
D. Luggage Compartment Front Panel
E. Luggage Compartment Rear Panel
F. Tail Gate Inner Cover Panel
G. Compartment Pan Side Filler Panels

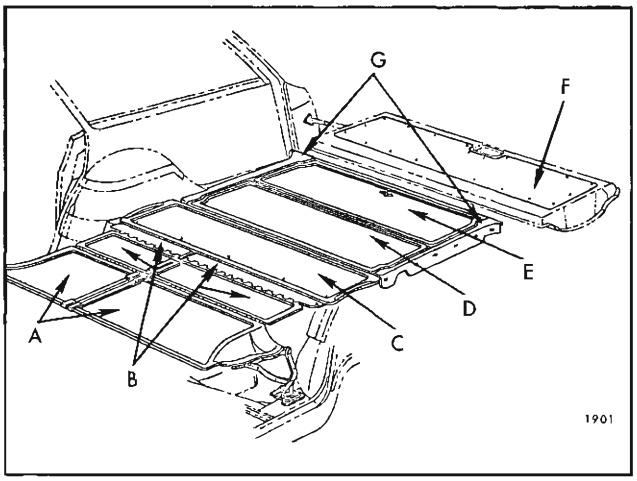


Fig. 1H27—Folding Seats and Floor Panels 15000 and 16000 "45" Styles

A. Second Seat Back Panels (Split Option)
B. Rear Floor Filler Panels
C. Compartment Floor Panel (at Kick-Up)
D. Third Seat Back Panel
E. Third Seat Cushion Panel
F. Tail Gate Inner Cover Panel
G. Compartment Pan Side Filler Panels

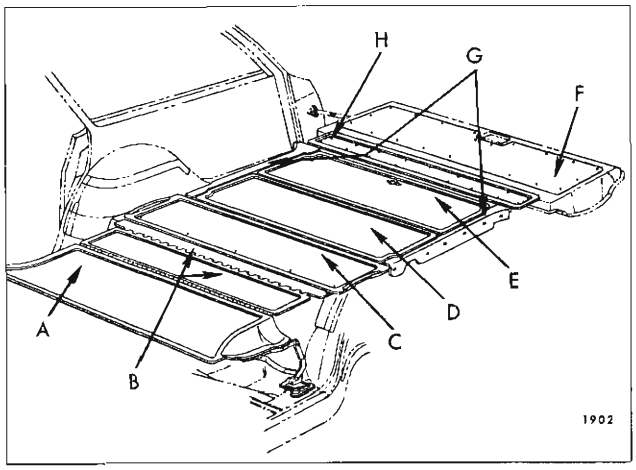


Fig. 1H28—Folding Seat and Floor Panels 25000 and 26000 "35" Styles

A. Second Seat Back Panel
B. Rear Floor Filler Panel
C. Compartment Floor Panel (at Kick-Up)
D. Luggage Compartment Front Panel
E. Luggage Compartment Rear Panel
F. Tail Gate Inner Cover Panel
G. Compartment Pan Side Filler Panels
H. Rear Floor-to-Tail Gate Panel

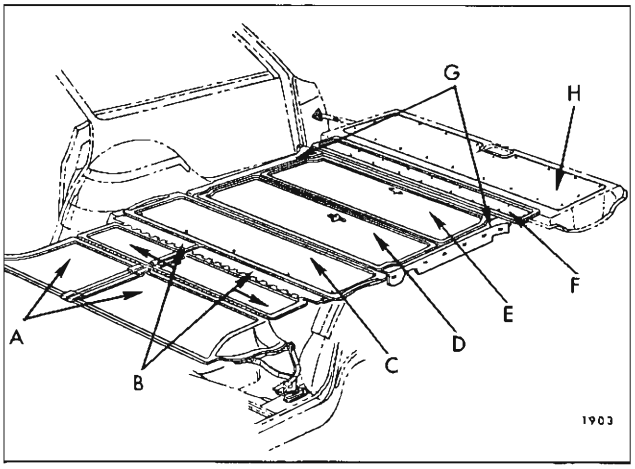


Fig. 1H29—Folding Seats and Floor Panels 25000 "45" Styles

A. Second Seat Back Panels (Split Option)
B. Rear Floor Filler Panels
C. Compartment Floor Panel (at Kick-Up)
D. Third Seat Back Panel
E. Third Seat Cushion Panel
F. Rear Floor-to-Tail Gate Panel
G. Compartment Pan Side Filler Panels
H. Tail Gate Inner Cover Panel

2. Lift up rear edge of filler panel assembly sufficiently to expose attaching screws along forward edge of panel.

3. Remove filler panel attaching screws and remove panel assembly from body opening.

4. To install, reverse removal procedure.

COMPARTMENT PAN SIDE FILLER PANEL (RIGHT OR LEFT SIDE) "35" AND "45" STYLES

Removal and Installation

1. On "35" styles, use handle and fold rear luggage compartment panel forward until it is resting entirely on front luggage compartment panel (Fig. 1H30).

2. On "45" styles, raise folding 3rd seat back assembly to up position; then raise 3rd seat bottom cushion assembly to up or "sitting" position.

3. For right floor side panel, remove spare tire cover panel.

4. On left side, remove screw which secures floor side panel to panel support.

5. Along inboard and outboard side facing of right and/or left panel, remove screws which secure panel to panel supports (Fig. 1H30) and remove panel(s) from body.

6. To install, reverse removal procedure. If installing new filler panel, apply cloth body tape over all screw attaching holes. (See Fig. 1H30).

LUGGAGE COMPARTMENT FRONT AND REAR PANEL ASSEMBLIES "35" STYLES

Removal and Installation

1. Using handle, fold rear luggage compartment panel forward until it is resting entirely on front luggage compartment panel.

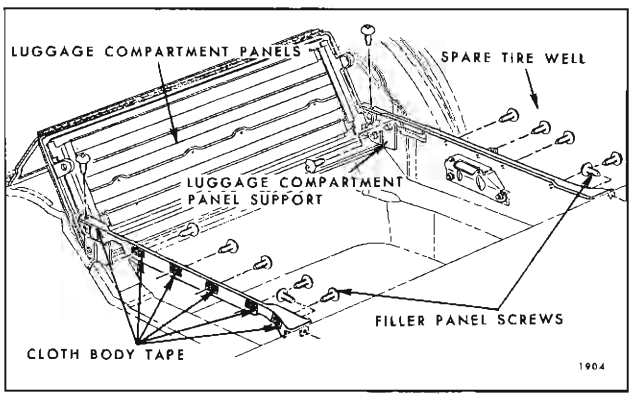


Fig. 1H30—Rear Compartment Pan Side Filler Panels

2. Fold combined front and rear luggage compartment panels to "up" or half open position. (See Fig. 1H30).

3. Remove bolt (Fig. 1H31) at both sides of front panel securing front and rear panel assemblies to supports; then remove assembly from body.

4. To install, reverse removal procedure. Make sure bushing and spring washer are properly installed (Fig. 1H31).

NOTE: When replacing front luggage compartment panel with new part, transfer rear luggage compartment panel with attached hinge to new part.

LUGGAGE COMPARTMENT REAR PANEL ASSEMBLY "35" STYLES

Removal and Installation

1. Using handle, fold rear luggage compartment panel forward until it is resting entirely on front luggage compartment panel.

2. Remove screws securing hinge assembly to rear luggage compartment panel and remove panel assembly from body.

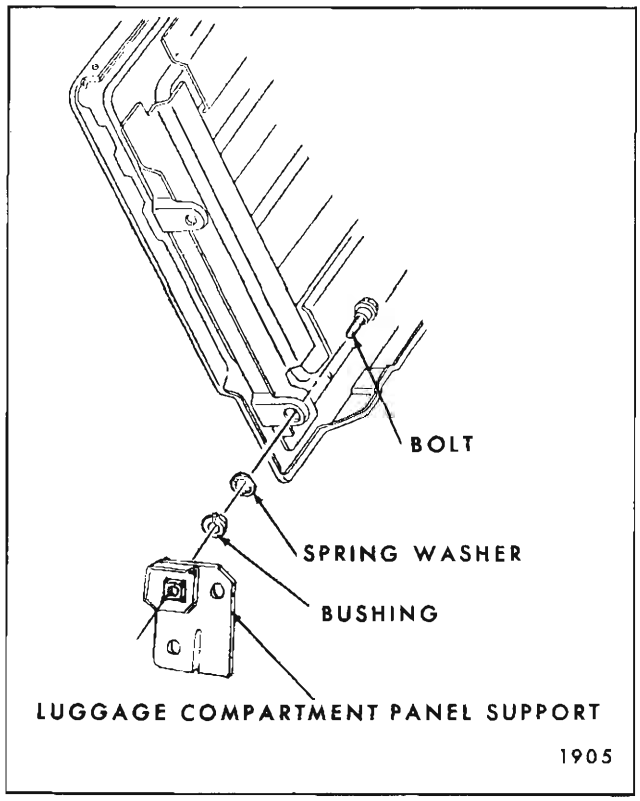


Fig. 1H31—Luggage Compartment Panel Attachment to Body

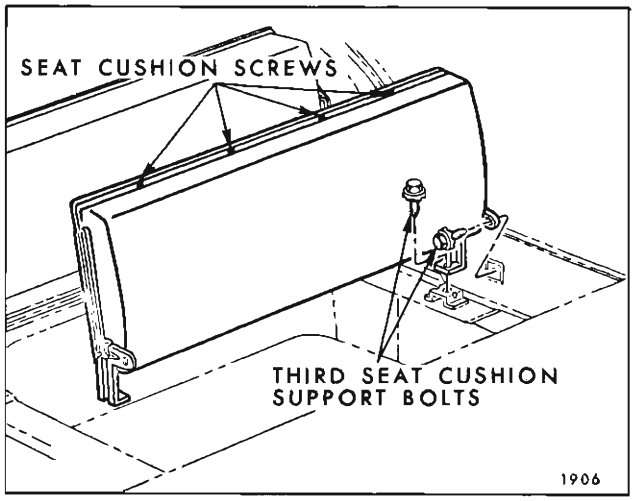


Fig. 1H32—Folding Third Seat Cushion

3. To install, reverse removal procedure.

LUGGAGE COMPARTMENT FRONT AND REAR PANEL HINGE ASSEMBLY "35" STYLES

Removal and Installation

1. Using handle, fold rear luggage compartment panel forward until it is resting entirely on front luggage compartment panel.

2. Remove screws securing hinge assembly to both front and rear panels and remove hinge from body.

3. To install, reverse removal procedure.

FOLDING THIRD SEAT CUSHION "45" STYLES

Removal and Installation

1. Lift third seat cushion to a half raised position or approximately vertical to floor pan (Fig. 1H32).

2. Remove four seat cushion screws from rearward edge of cushion (Fig. 1H32).

3. Pull rear edge of cushion away from flange of cushion panel then lift cushion upward to disengage cushion border wire from four tabs on panel. Remove cushion from body and place on a clean protected surface.

4. To install, reverse removal procedure. Make sure cushion border wire is engaged with all four panel tabs prior to installing cushion attaching screws.

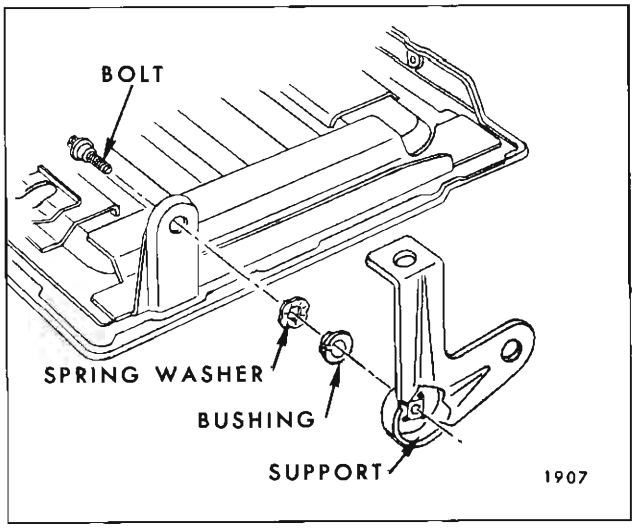


Fig. 1H33—Third Seat Cushion Panel and Support

FOLDING THIRD SEAT CUSHION, PANEL ASSEMBLY AND SUPPORT "45" STYLES

Removal and Installation

1. Lift third seat cushion to a half raised position or approximately vertical to floor pan. (See Fig. 1H32).

2. Remove two bolts at each side of seat securing supports to body (Fig. 1H32); then, remove seat cushion, panel assembly and supports from body and place on a clean protected surface.

To remove support, remove cushion from panel assembly; then remove bolt securing support to cushion (Fig. 1H33).

3. To install, reverse removal procedure. If support was removed from seat cushion panel, make sure bushing and spring washer are properly installed. (See Fig. 1H33).

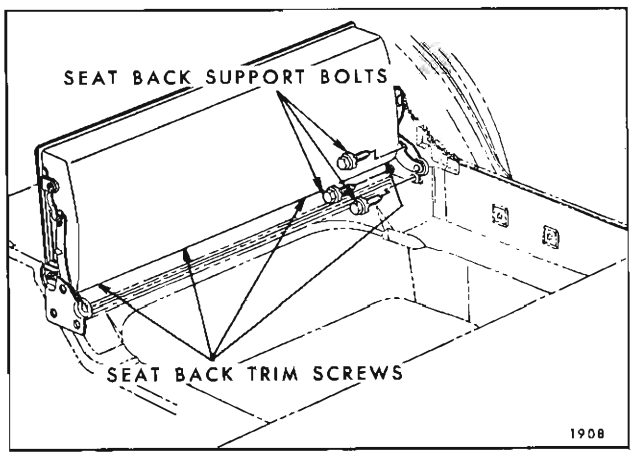


Fig. 1H34—Folding Third Seat Back

FOLDING THIRD SEAT BACK TRIM ASSEMBLY "45" STYLES

Removal and Installation

1. Raise third seat back assembly - leave cushion assembly in down position.

2. Remove four screws securing lower edge of seat back trim to seat back panel. (See Fig. 1H34).

3. Pull lower edge of seat back trim slightly rearward; then, lift trim assembly upward to disengage trim border wire from four tabs on upper portion of panel. Remove trim assembly from body and place on a clean protected surface.

4. To install, reverse removal procedure. Make sure seat back trim border wire is engaged with all four panel tabs at upper portion of panel prior to installing seat back trim attaching screws.

FOLDING THIRD SEAT BACK PANEL ASSEMBLY "45" STYLES

Removal and Installation

1. Remove third seat back trim assembly.

2. At both sides of third seat back panel remove seat back linkage bolt (Fig. 1H35) and bolt securing seat back panel to support (Fig. 1H35); then remove seat back panel assembly from body.

3. To install, reverse removal procedure.

COMPARTMENT FLOOR PANEL ASSEMBLY (AT KICK-UP) "35" AND "45" STYLES

Removal and Installation

1. On "45" styles, remove folding 3rd seat back assembly as previously described.

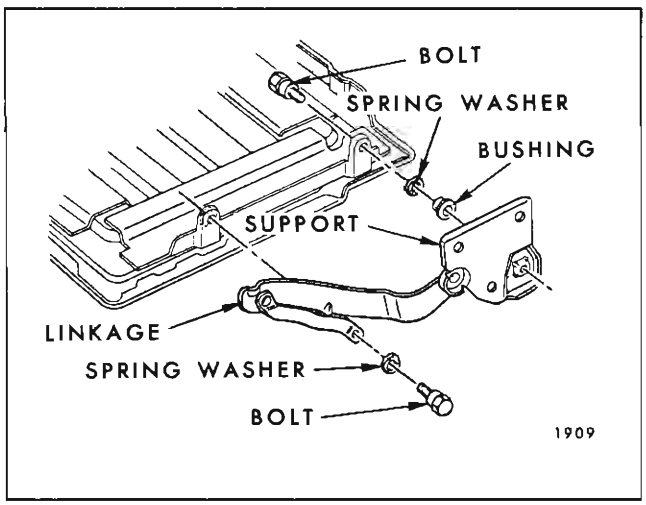


Fig. 1H35—Third Seat Back Panel and Linkage

2. On "35" styles, remove luggage compartment front and rear panel assemblies (complete) as previously described.

3. Directly under rear edge of compartment floor panel remove four screws securing panel to floor pan.

4. At front of compartment floor panel remove five screws securing panel to floor pan; then, remove compartment floor panel from body.

5. To install, reverse removal procedure.

REAR FLOOR FILLER PANEL "35" AND "45" STYLES

Removal and Installation

1. Remove compartment floor panel assembly (at kick-up) as previously described.

2. Along rear edge of filler panel, remove screws which secure panel to floor pan.

3. Fold filler panel forward sufficiently to remove screws which secure panel to folding 2nd seat back assembly and remove filler panel from body.

4. To install, reverse removal procedure.

SECOND SEAT CUSHION (FULL WIDTH OR SPLIT SEAT) "35" AND "45" STYLES

Removal and Installation

1. Lift up front edge of folding rear seat cushion assembly to disengage seat bottom frame from slots in rear seat support on floor pan; then, remove cushion assembly from body and place on a clean protected surface.

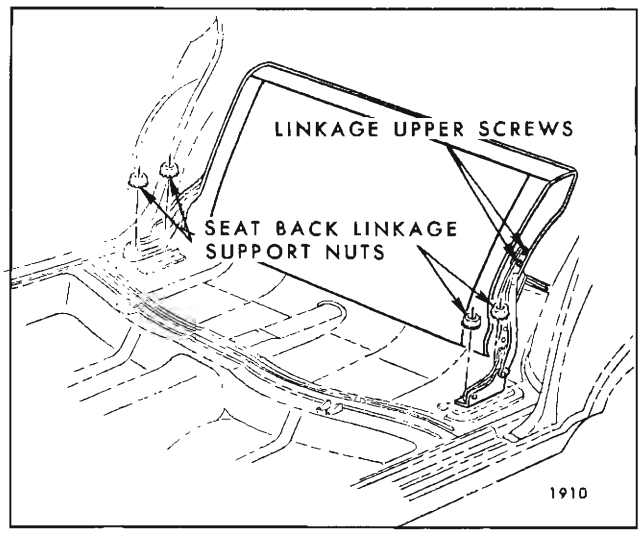


Fig. 1H36—Folding Second Seat Back Supports (Full Width Seat)

2. To install, reverse removal procedure. Make certain that seat cushion frame is fully engaged in supports on floor pan.

FOLDING SECOND SEAT BACK TRIM ASSEMBLY (FULL WIDTH OR SPLIT SEAT) "35" AND "45" STYLES

Removal and Installation

1. Raise folding second seat back and remove second seat cushion.

2. On underside of second seat back panel, remove screws securing seat back trim assembly to seat back panel.

NOTE: Do not remove screws securing rear floor filler panel hinge to second seat back panel.

3. Pull lower edge of seat back trim slightly forward; then lift trim assembly upward to disengage trim border wire from tabs on upper portion of panel. Remove trim assembly from body and place on a clean protected surface.

4. To install, reverse removal procedure. Make sure seat back trim border wire is engaged with panel tabs at upper portion of seat back panel prior to installing seat back trim attaching screws.

FOLDING SECOND SEAT BACK TRIM, PANEL AND LINKAGE ASSEMBLY (FULL WIDTH OR SPLIT SEAT) "35" AND "45" STYLES

Removal and Installation

1. Raise folding second seat back and remove second seat cushion.

2. On underside of folding second seat back remove screws securing rear floor filler panel hinge to seat back panel.

NOTE: Do not remove screws securing seat back trim assembly to seat back panel.

3. Mark position of folding second seat back linkage supports on floor pan. Remove nuts from both sides of seat back securing linkage supports to floor pan (See Fig. 1H36), full width seat (Fig. 1H37) for split seat.

Lift seat back assembly with attached linkage from body and place on a clean protected surface.

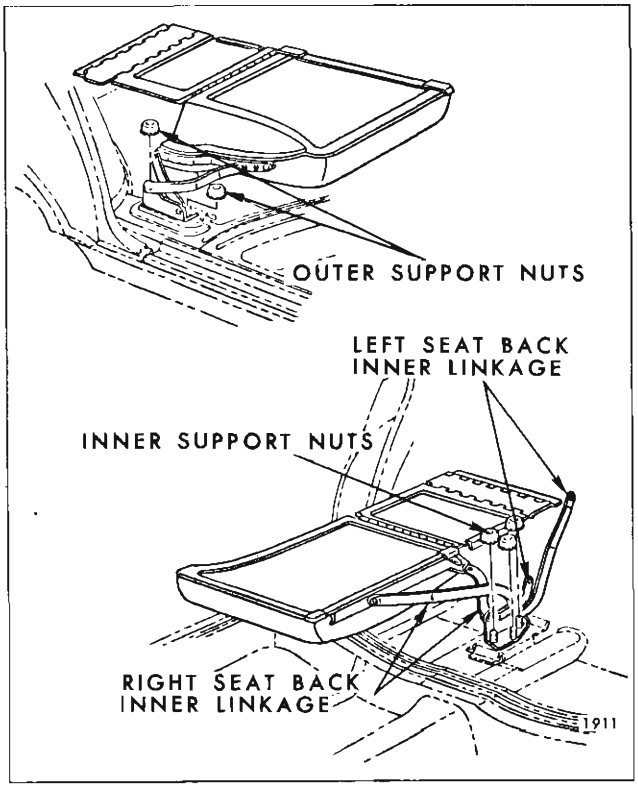


Fig. 1H37—Folding Second Seat Back Supports and Linkages (Split Seat)

4. To remove linkage from folding second seat back remove linkage-to-seat back panel attaching bolts and remove linkage - See (Fig. 1H38 for full width seat) (Fig. 1H39 for split seat).

5. To install, reverse removal procedure. If linkage was removed from split seat back, make sure bushings and spring washers are properly installed prior to installing linkage attaching bolts. (See Fig. 1H39).

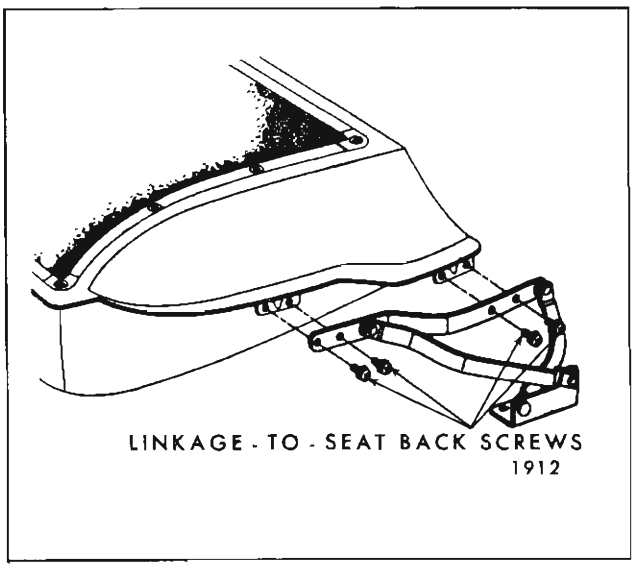


Fig. 1H38—Folding Second Seat Back Supports and Linkage (Full Width Seats)

FOLDING SECOND SEAT BACK LINKAGE ASSEMBLY (FULL WIDTH SEAT-RIGHT OR LEFT SIDE SPLIT SEAT-OUTER LINKAGE ONLY) "35" AND "45" STYLES

If both right and left linkage assemblies are to be removed on full width second seat remove second seat back trim, panel and linkage assembly and remove linkage from seat back panel as described under "Folding Second Seat Back Trim, Panel and Linkage Assembly - Removal and Installation".

If one linkage assembly (right or left side) is to be removed proceed as follows:

Removal and Installation

1. Remove second seat cushion.

2. Move folding second seat back forward just sufficiently to remove two lower linkage-to-seat back panel attaching screws. (See Fig. 1H38).

3. Carefully return seat back to full up position; then, place a support under seat back assembly to support seat back in this position.

4. Remove two upper linkage-to-seat back panel attaching screws. (See Fig. 1H38).

5. Remove nuts securing linkage support to floor pan (See Fig. 1H36); then carefully remove linkage assembly from seat back and floor pan.

6. To install, reverse removal procedure.

FOLDING SECOND SPLIT SEAT BACK INNER LINKAGE ASSEMBLY "35" AND "45" STYLES

Removal and Installation

1. Remove left second seat cushion and place

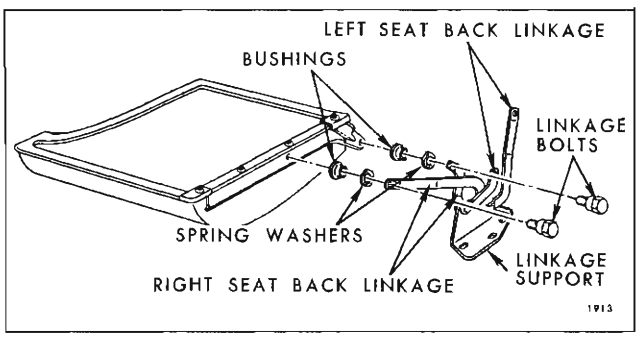


Fig. 1H39—Folding Second Seat Back Inner Linkage and Support

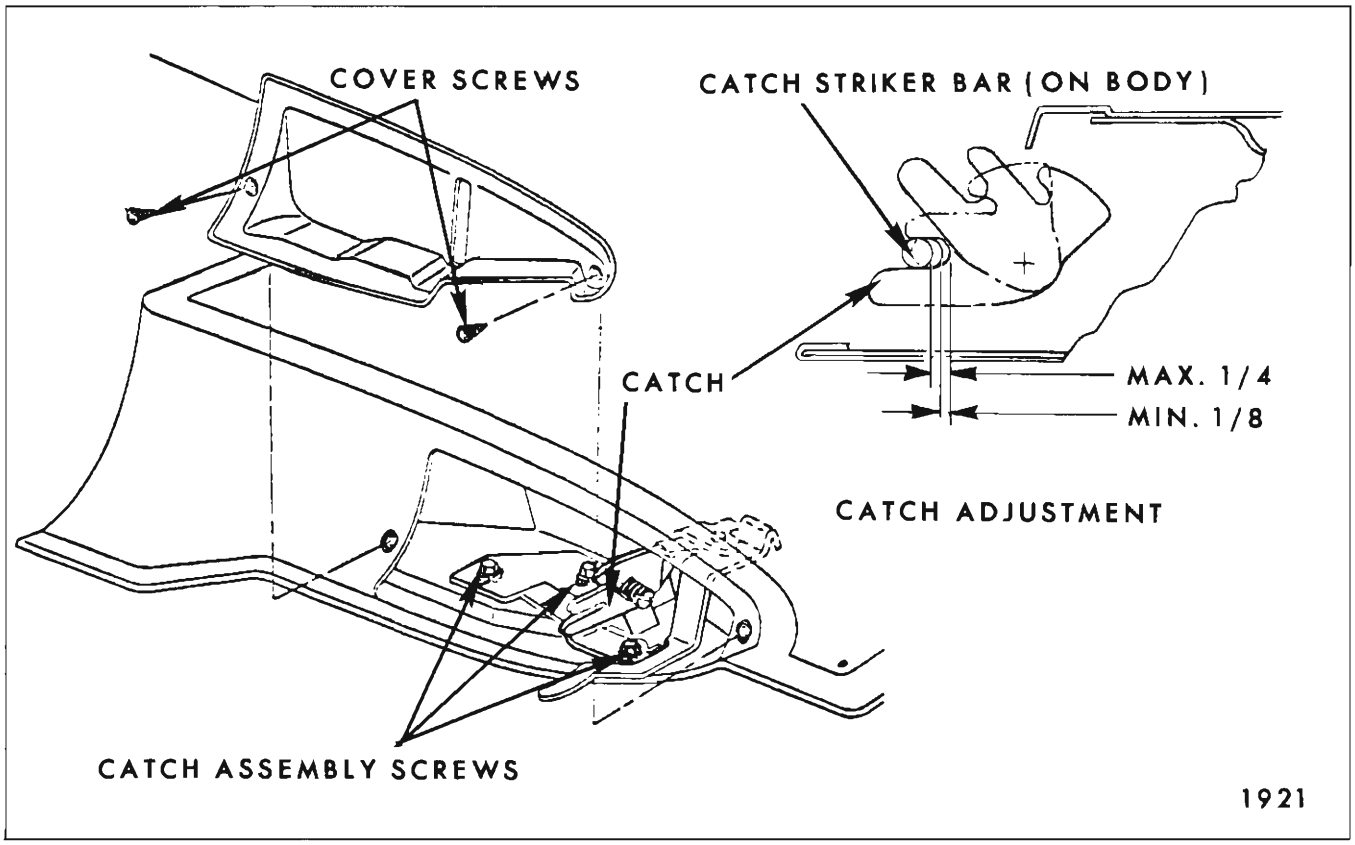


Fig. 1H40—Folding Seat Back Catch

left seat back in full up position. Place a support under right side of left seat back to support seat back in this position.

2. Place right seat back in partially down position (resting on seat cushion).

3. Remove nuts securing inner linkage assembly to floor pan (See Fig. 1H37).

4. Remove inner linkage-to-seat back bolts from both right and left seats (See Fig. 1H39); then carefully disengage inner linkage from seat backs and floor pan studs and remove linkage assembly.

5. To install, reverse removal procedure. Make sure bushings and spring washers are properly installed prior to installing linkage attaching bolts to both right and left seat back panels. (See Fig. 1H39).

FOLDING SECOND SEAT BACK CATCH ASSEMBLY 25-26000 "35" AND "45" STYLES

Removal and Installation

1. Fold second seat back forward.

2. Remove catch cover screws and remove cover (Fig. 1H40).

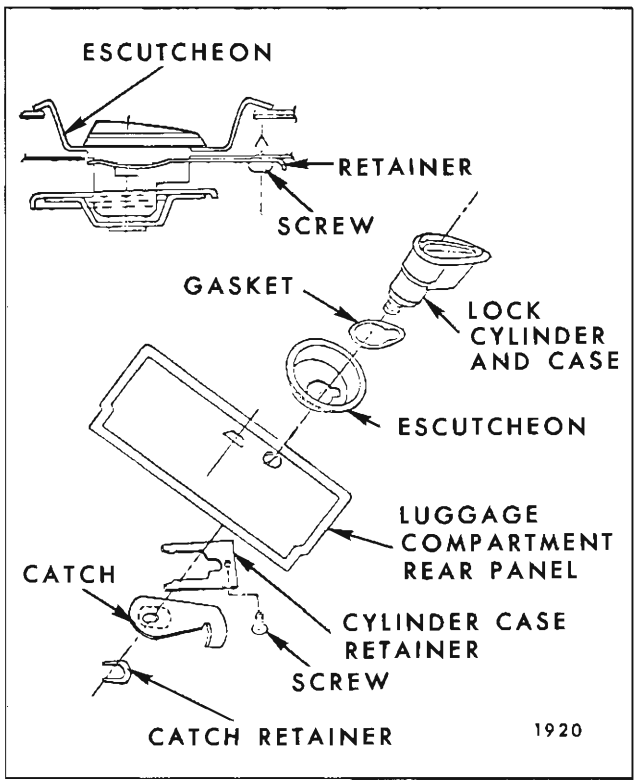


Fig. 1H41—Luggage Compartment Lock 15000 and 16000 Series

3. Remove three screws securing catch to seat back frame and remove catch assembly from seat back (Fig. 1H40).

4. To install, reverse removal procedure.

IMPORTANT: To assure proper operation of the folding second seat back the catch assembly should be installed and, where necessary, adjusted for a minimum gap of 1/64 inch to a maximum gap of 3/16 inch between bottom of slot in catch and catch striker when seat back is in full "up" position (Fig. 1H40).

LUGGAGE COMPARTMENT LOCK CYLINDER (OPTIONAL EQUIPMENT) 15-16000 "35" STYLES

Removal and Installation

1. Open luggage compartment rear panel.

2. On underside of luggage compartment rear panel remove catch retainer and catch from lock cylinder case (Fig. 1H41); then turn lock cylinder with key until cylinder can be removed from case.

3. To install, reverse removal procedure.

LUGGAGE COMPARTMENT LOCK (OPTIONAL EQUIPMENT) 15-16000 "35" STYLES

Removal and Installation

1. Open luggage compartment rear panel.

2. On underside of luggage compartment rear panel, remove catch retainer and catch (Fig. 1H41).

3. Remove lock cylinder case retainer screw and retainer (Fig. 1H41); then, remove lock cylinder and case, gasket and escutcheon from panel (Fig. 1H41).

4. To install, reverse removal procedure.

SEAT BELTS

FRONT STANDARD SEAT BELTS ALL SERIES

Removal and Installation

1. Remove bolt on outboard seat belt anchor plate at rocker inner panel and inboard seat belt anchor plate on side of floor pan tunnel. (See Fig. 1H42).

2. Bench Type Seats Only: Pull inboard belt from front of seat thru protector, and from between front seat cushion and back (Fig. 1H43).

3. To install, reverse removal procedure, making certain that anchor plates are facing direction of seat belt pull.

FRONT DELUXE SEAT BELTS WITH RETRACTORS 15000 AND 16000 SERIES

Description:

As a option the 15000 and 16000 series seat belts are available with seat belt retractors on the outboard belt only. The outboard seat belt must be fully extended and the inboard belt adjusted for individual requirements when the seat belt is fastened by the driver or passenger. When the seat belt buckle is operated to disengage the belts, the outboard belt will automatically retract to the floor pan.

DELUXE SEAT BELTS

Removal and Installation

1. Remove bolt on outboard seat belt anchor plate at inner rocker panel and inboard seat belt anchor plate on side of floor pan tunnel by first sliding plastic boot up away from plates. (See Fig. 1H44).

2. Bench Type Seats Only: Pull inboard seat belt from front of seat thru protector and from between front seat cushion and back. (See Fig. 1H43).

3. To install, reverse removal procedure, making certain that anchor plates are facing direction of seat belt pull.

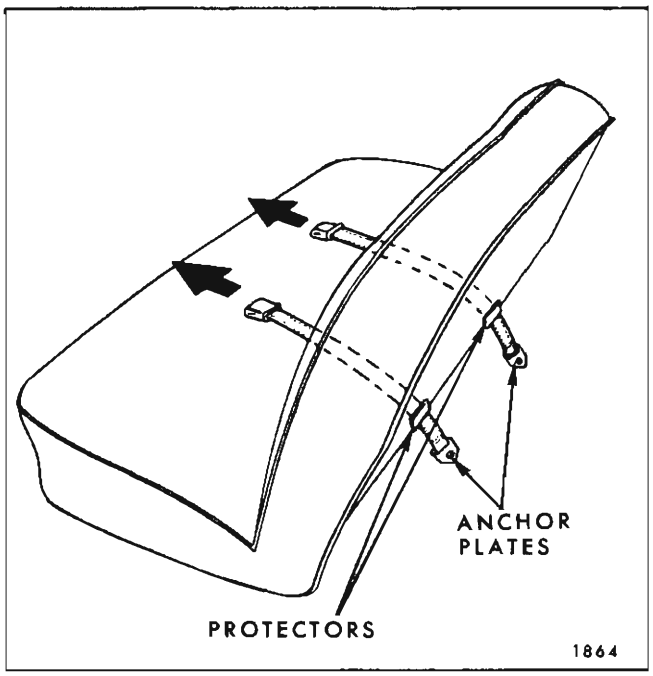


Fig. 1H43—Removal of Seat Belts from Bench Type Seats

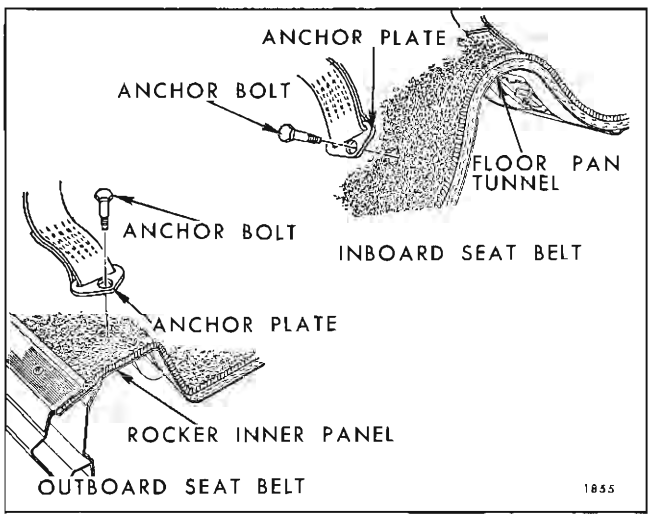


Fig. 1H42—Standard Seat Belt Attachments - All except 68000 Series

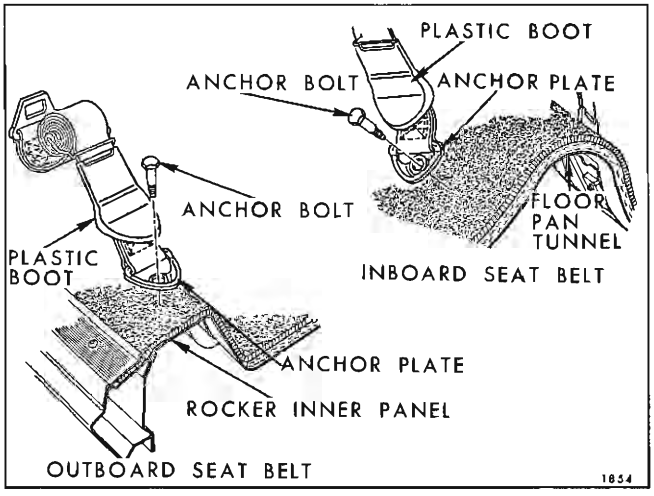


Fig. 1H44—Deluxe Seat Belt Attachments - 15000 - 16000 Series

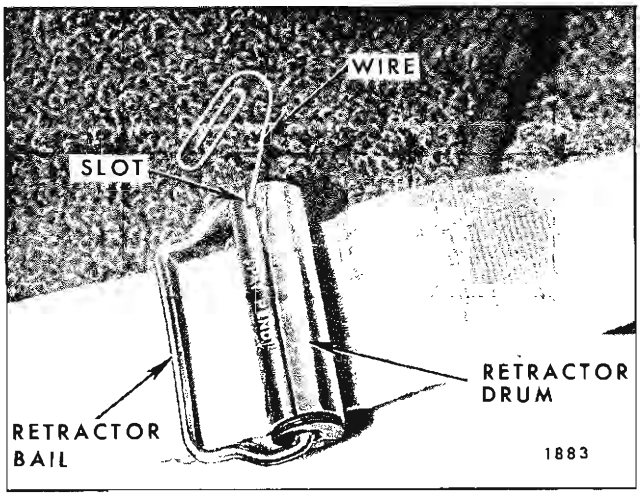


Fig. 1H45—Locking Seat Belt Retractor Drum

RETRACTOR

Removal

1. Extend outboard seat belt to full length.

2. Insert a piece of stiff wire such as a paper clip in slot in roller drum to maintain spring tension of retractor. (See Fig. 1H45).

IMPORTANT: Wire to remain in slot until retractor is reinstalled. In the event that spring tension is lost, drum on retractor can be turned 8 revolutions by hand to regain spring tension.

3. Using a flat-bladed tool pry open tabs that secure belt on drum and remove retractor from belt. (See Fig. 1H46).

Installation

1. With seat belt fully extended, insert belt under tabs on retractor and position on center of seat belt.

NOTE: Tabs on retractor to be on inboard side of seat belt and bail pointing frontward.

2. Using pliers, lightly bend down tabs securing belt to drum.

3. Remove wire from slot in drum (when replacing with new retractor a retaining clip that retains spring tension will be on retractor which is to be removed) and allow belt to roll up on retractor.

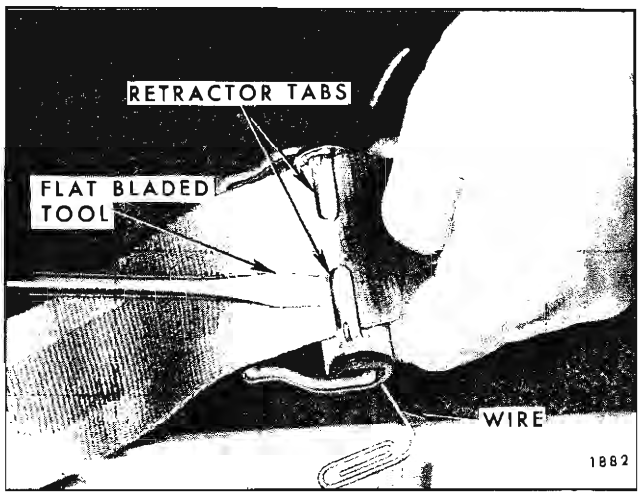


Fig. 1H46—Removal of Retractor from Seat Belt - 15000 - 16000 Series

FRONT DELUXE SEAT BELTS WITH RETRACTORS 25-26-35-36-38-45-46-48000 SERIES

Description:

As a option the 25-26-35-36-38-45-46-48000 series, and as standard equipment on 62-63-68000 series seat belts are equipped with seat belt retractors on the outboard side only. The outboard seat belt must be fully extended and the inboard belt adjusted for individual requirements when the seat belt is fastened by the driver or passenger. When the seat belt buckle is operated to disengage the belts; the outboard belt will automatically retract to the floor pan.

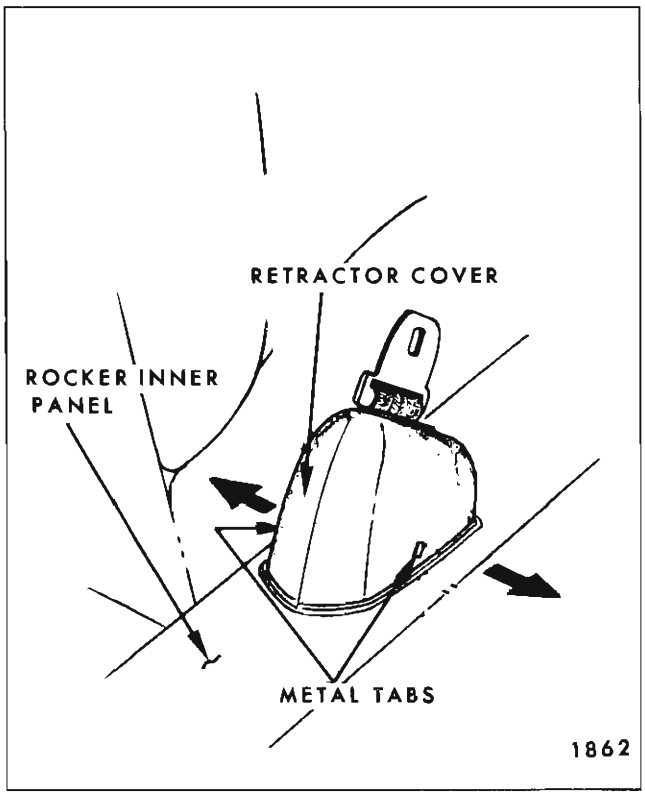


Fig. 1H47—Removal of Seat Belt Retractor Cover - All except 15000 - 16000 Series

A. OUTBOARD SEAT BELT

Removal

1. Using fingers, gently squeeze retractor cover at forward and rearward ends to spread sides of cover outward sufficiently to disengage cover from metal tabs on sides of retractor base. (See Fig. 1H47).

2. Lift up cover to expose bolt securing seat belt retractor. (See Fig. 1H48).

3. Remove bolt and remove retractor. (See Fig. 1H48).

Installation

1. With retractor cover disengaged insert bolt thru retractor and into top of rocker inner panel and secure.

2. Gently pull sides of retractor cover outward, and position cover on retractor snapping slots in cover over metal taps on retractor.

NOTE: Seat belt retractor and seat belt is serviced only as an assembly.

B. INBOARD SEAT BELT—BUCKET SEATS

Removal and Installation

1. Remove bolt securing seat belt anchor plate from side of floor pan tunnel. (See Fig. 1H42).

2. To install, reverse removal procedure.

INBOARD SEAT BELTS—FULL WIDTH SEATS

Removal and Installation

1. Remove bolt securing seat belt anchor plate from side of floor pan tunnel. (See Fig. 1H42).

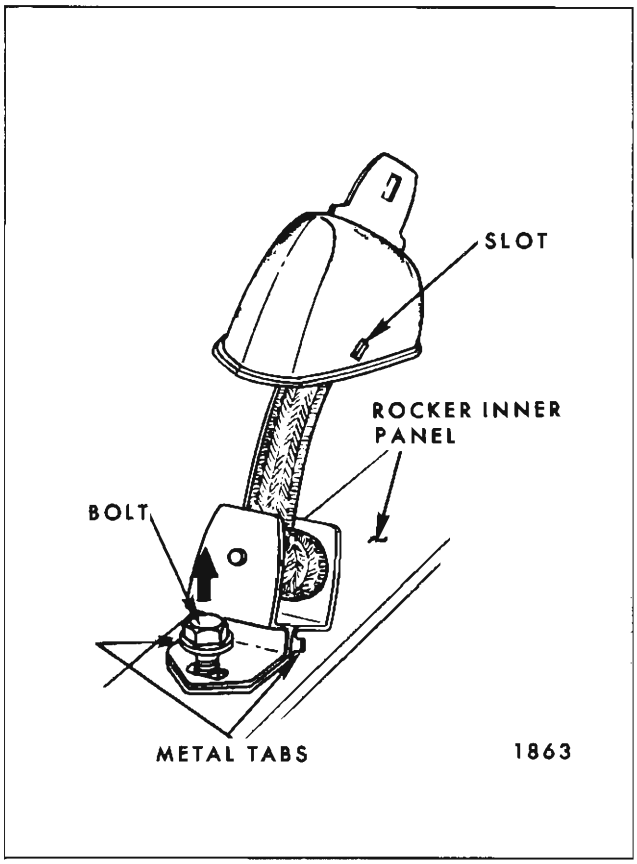


Fig. 1H48—Removal of Seat Belt Retractor - All except 15000 - 16000 Series

2. From front of seat pull seat belt thru protector and from between front seat cushion and back. (See Fig. 1H43).

CENTER ARM REST

FRONT SEAT CENTER ARM REST AND CURTAIN 35-38-46-48-68000 SERIES "37"-"39" AND "67" STYLES

Removal and Installation

1. Lower arm rest to approximately 2 inches short of full down position.

2. Carefully pull curtain back sufficiently to remove screws securing center arm rest to support linkage and loosen outer screws securing curtain retainer to arm rest (Fig. 1H49).

3. Remove screw finishing covers (Fig. 1H49). Disengage arm rest from support linkage and turn arm rest upside down on trim panel finishing cover with curtain attached. Remove three screws securing curtain retainer to trim panel finishing cover (Fig. 1H49); then remove arm rest and curtain from seat.

4. To install, reverse removal procedure.

FRONT SEAT CENTER ARM REST ASSEMBLY 35-38-46-48-68000 SERIES "37"-"39" AND "67" STYLES

Removal and Installation

1. Place arm rest in up position.

2. Working between arm rest and seat back, remove fastener at both sides of arm rest securing front end of screw finishing covers (Fig. 1H49).

3. Working at rear of seat, push one seat back to full forward position. Carefully pull up front of screw finishing cover sufficiently to expose arm rest support attaching screws; then remove screws (Fig. 1H50). Repeat this operation on opposite side of arm rest; then carefully remove arm rest assembly, including trim panel finishing cover, from seat.

NOTE: If washers are present between arm rest support and supports on seat (Fig. 1H50), note location and number of washers used to facilitate installation in same position. Washer(s) are used to align arm rest to front seat back(s).

4. To install, reverse removal procedure. Prior to bending down screw finishing covers check alignment and operation of arm rest. Where necessary to align arm rest with seat back(s) install washer(s), as required, between arm rest support and supports on seat. (See Fig. 1H50).

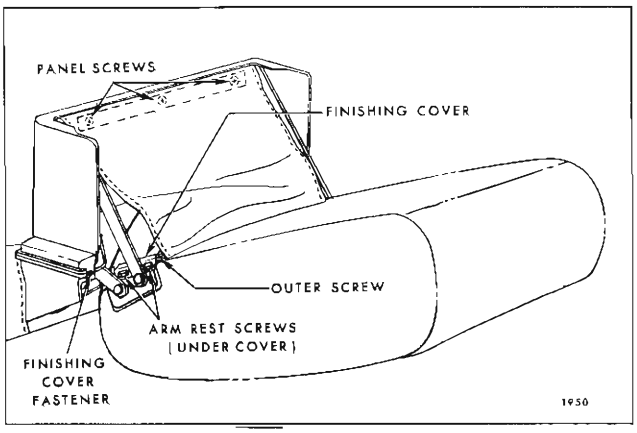


Fig. 1H49—Front Seat Center Arm Rest 35-38-46-48-68000 Series

FRONT SEAT CENTER ARM REST SUPPORT 35-38-46-48-68000 SERIES "37"-"39" AND "67" STYLES

Removal and Installation

1. Remove center arm rest assembly.

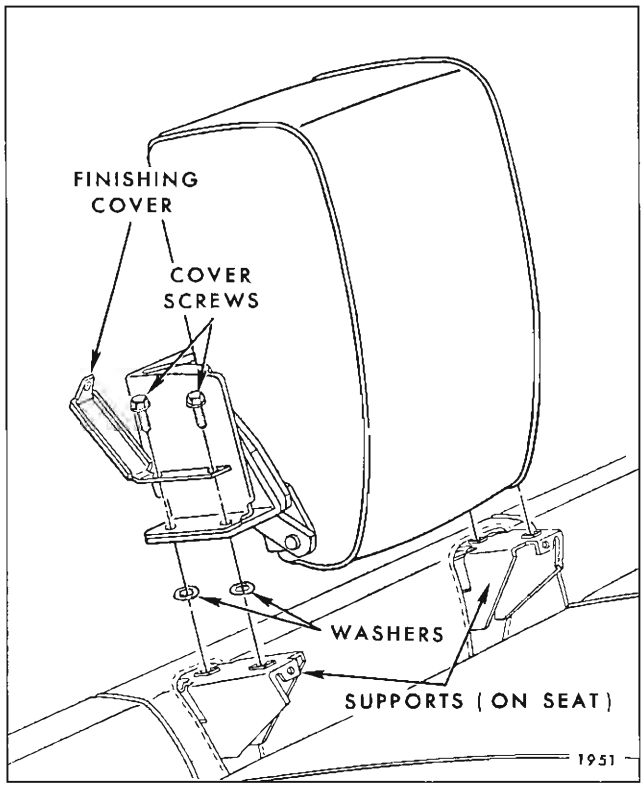


Fig. 1H50—Front Seat Center Arm Rest Supports 35-38-46-48-68000 Series

2. Remove screws securing arm rest to support (Fig. 1H49); then, remove support from arm rest, finishing cover and curtain.

3. To install, reverse removal procedure. Prior to bending down support screw finishing covers check alignment and operation of arm rest. Where necessary to align arm rest with seat back(s), install washer(s), as required, between arm rest support and supports on seat. (See Fig. 1H50).

FRONT SEAT CENTER ARM REST AND CURTAIN 26239, 38669, 48469 AND 68069 STYLES

Removal and Installation

1. Place center arm rest in down position.

2. At top of arm rest curtain, remove two screws securing curtain to seat back frame (Fig. 1H51) and pull curtain forward to expose screws securing arm rest to support linkage (Fig. 1H51).

3. Remove arm rest-to-support linkage screws (Fig. 1H51) and remove arm rest and curtain from seat.

4. To install, reverse removal procedure.

FRONT SEAT CENTER ARM REST ASSEMBLY 26239, 38669, 48469 AND 68069 STYLES

Removal and Installation

1. Place center arm rest in down position.

2. At top of arm rest curtain, remove two screws securing curtain to seat back frame (Fig. 1H51).

3. Remove two screws securing arm rest to supports on seat back (Fig. 1H51); then, carefully lift arm rest and linkage upward to disengage hooks of arm rest from slots in supports and remove assembly from seat.

4. To install, reverse removal procedure. Prior to installing curtain screws check alignment and operation of arm rest.

REAR SEAT BACK CENTER ARM REST AND CURTAIN 26-38-46-48-68000 SERIES

Removal and Installation

1. Lower rear seat back arm rest. On all styles except 68069 carefully pull upper portion of arm rest curtain out of slot in hanger plate and fold curtain forward. On 68069 style fold arm rest flipper forward.

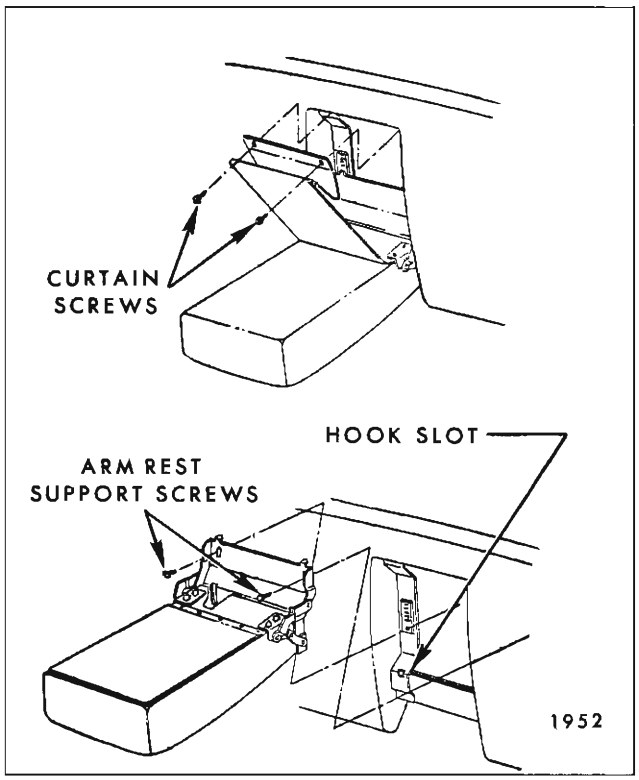


Fig. 1H51—Front Seat Back Center Arm Rest 26239, 38669, 48469 and 68069 Styles

2. Remove four screws securing arm rest to hanger plate linkage then, remove arm rest from seat back.

3. To install, reverse removal procedure.

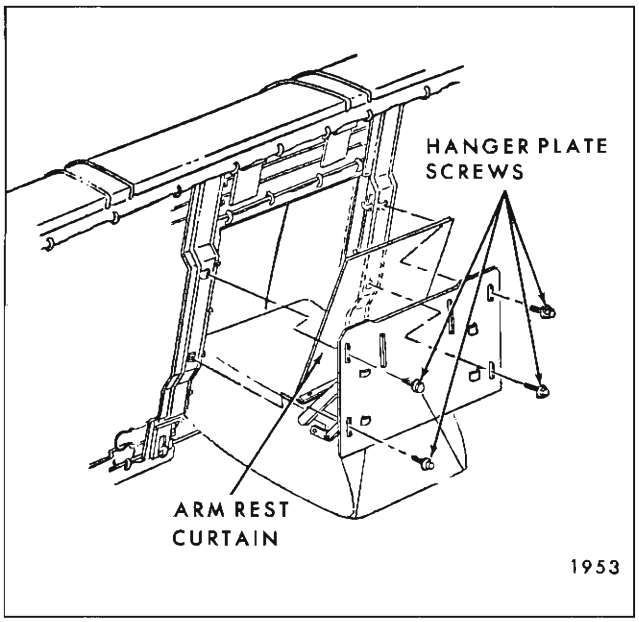


Fig. 1H52—Rear Seat Back Arm Rest and Hanger Plate 26-38-46-48-68000 Series

REAR SEAT BACK CENTER ARM REST HANGER PLATE AND LINKAGE 26-38-46-48-68000 SERIES

Removal and Installation

1. Remove rear seat back center arm rest; then, remove two screws securing arm rest hanger plate to body seat back support brace. Remove rear seat back.

2. On back side of rear seat back, remove four screws securing arm rest hanger plate to seat back supports; then, carefully remove arm rest and hanger plate assembly from seat back (Fig. 1H52).

3. To install, reverse removal procedure. Prior to tightening hanger plate screws move arm rest assembly upward until top is snug against top of opening in seat back.

FOLDING TOP

FOLDING TOP TRIM ASSEMBLY (COMPLETE) ALL SERIES

All convertible top trim cover assemblies incorporate 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.

All back curtain assemblies incorporate, as an integral part of the back curtain upper valance, a 15" piece of elastic webbing. The elastic webbing is located in the upper corners of the back curtain. The elastic webbing reduces tension on the zipper assembly at the radius, providing improved zipper operation.

All back curtain assemblies incorporate a hard, curved back window. The back window is dielectrically bonded to the vinyl back curtain material.

REMOVAL OF FOLDING TOP AND BACK CURTAIN TRIM ASSEMBLY

1. Place protective covers on all exposed panels which may be contacted during procedure.

2. Remove rear seat cushion and back.

CAUTION: Disconnect rear seat speaker wire if present.

3. Remove right and left folding top compartment side trim panels.

4. Remove right and left side roof rail rear weatherstrip attaching screws; then remove weatherstrips from rails.

5. Detach folding top quarter flaps from side roof rear rails.

6. Lower top to "stacked" position.

7. Remove right and left side roof rail front weatherstrip attaching screws; then remove weatherstrips from rails.

8. Remove front roof rail front and rear weatherstrips (Fig. 1I1).

9. Detach top material from front roof rail (Fig. 1I1).

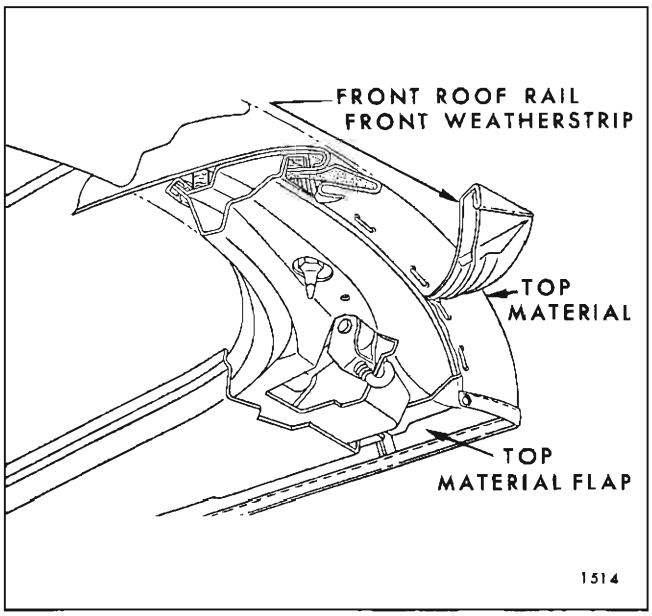


Fig. 1-1-1—Front Roof Rail Assembly

10. Detach top material flaps from side roof front rail (Fig. 1I1).

11. Raise top and lock to windshield header.

12. At right and left side roof front and rear rails, remove hold-down cable front and rear attaching screws. (See views "A" and "B" in Fig. 1I2).

13. Pull both hold-down cables forward until cables are completely removed from top material retaining pockets.

14. At underside of front bow, remove screws securing listing pocket retainer to bow (Fig. 1I3).

15. Push top material upward sufficiently until retainer is disengaged from bow; then remove retainer from listing pocket.

16. 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. 1I4).

17. At each rear quarter area remove attaching bolts securing rear quarter trim stick assembly to rear quarter inner panel (Fig. 1I5).

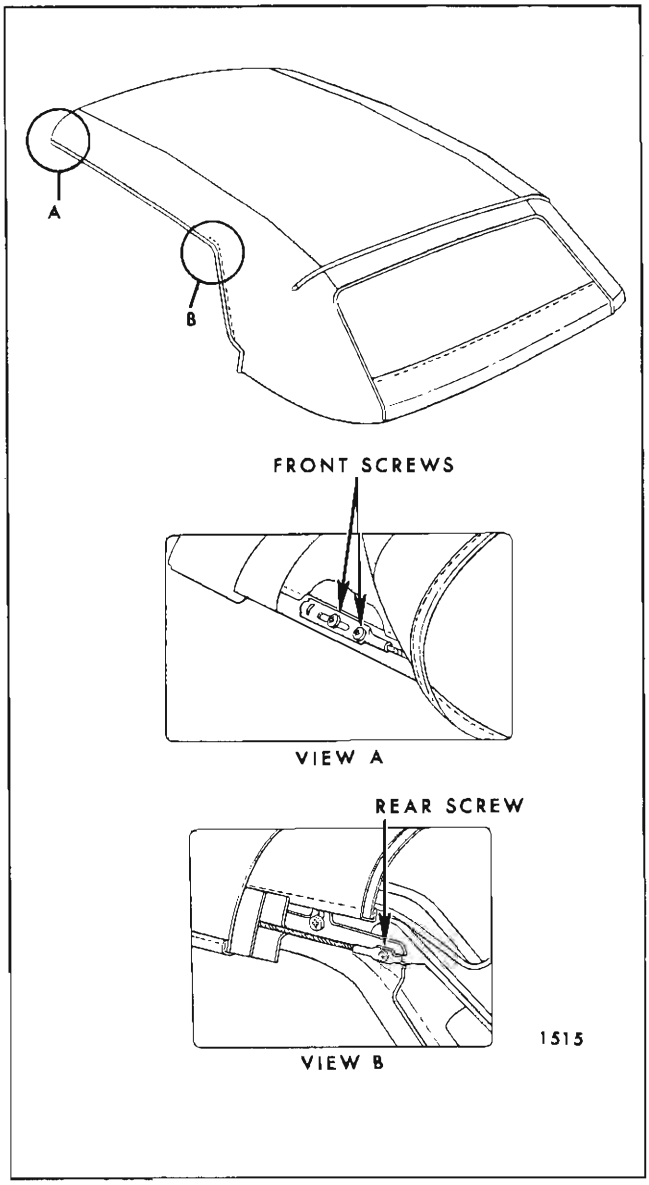


Fig. 1-I-2—Hold-Down Cable Attachment

18. Remove rear trim stick attaching bolts; then lift trim assembly with attached quarter and rear trim sticks on top of rear compartment front panel.

19. 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 material at both locations with a grease pencil (Fig. 1I6). Reference marks should be transferred to new back curtain when step 6 of installation procedure is performed.

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

20. To establish relationship of old top material to its position on rear trim sticks, cut selvage end

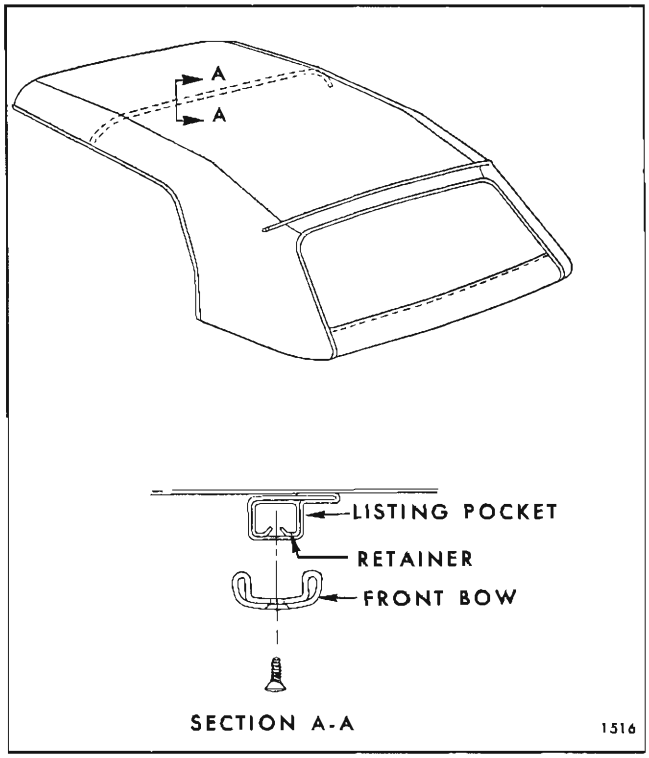


Fig. 1-I-3—Listing Pocket Retainer

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.

21. Using a pencil, mark both ends of rear and rear quarter trim sticks on vinyl surface of top

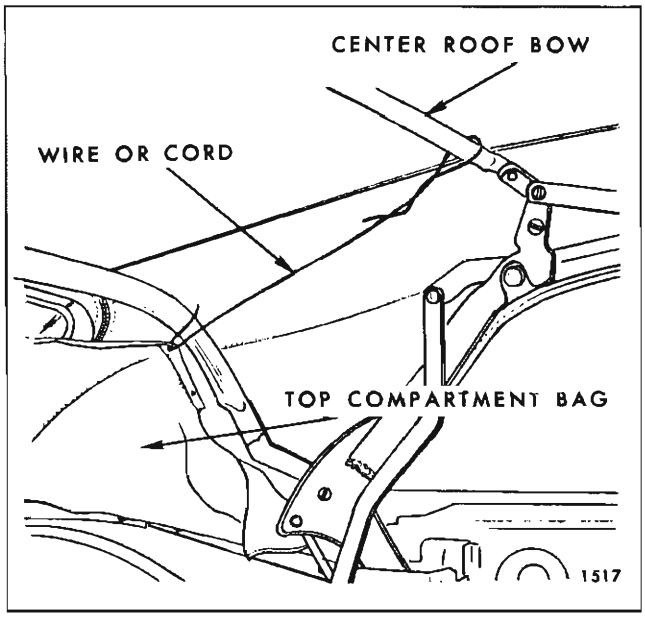


Fig. 1-I-4—Top Compartment Bag Tied to Center Bow

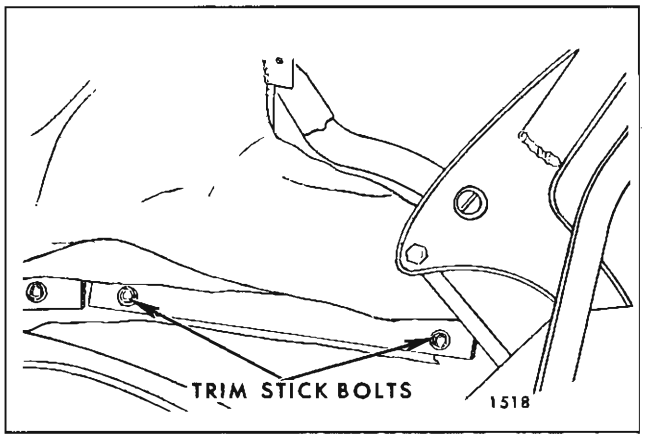


Fig. 1-1-5—Rear Quarter Trim Stick

material (Fig. 117). Reference marks for trim sticks should be transferred to new top material when step 28 of installation procedure is performed.

22. Remove screw securing escutcheon clip at each end of wire-on binding on rear bow. Remove wire-on binding from rear bow. Detach top material from rear roof bow and from trim sticks, then remove top cover assembly (Fig. 118).

23. 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. 119). Spacer sticks should be installed along inboard edge of side stay pad.

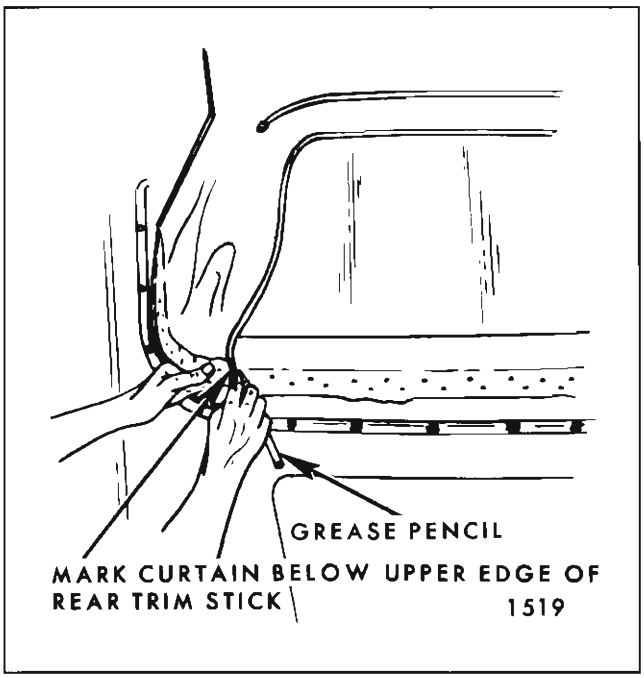


Fig. 1-1-6—Locating Edge of Top Material

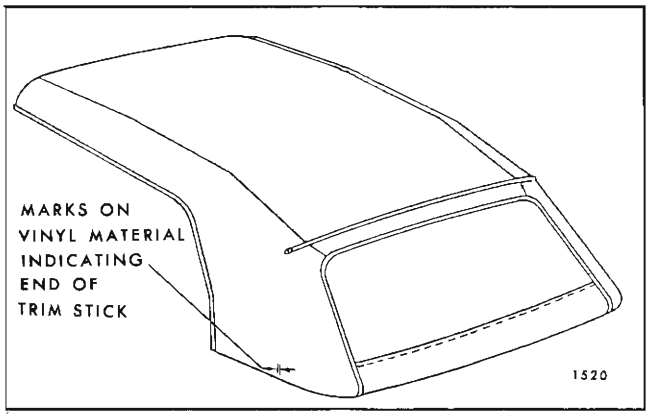


Fig. 1-1-7—Marking Top Material

NOTE: The approximate dimension for location of spacer sticks, measuring outboard from centerline dimple of rear roof bow, is 19-3/4".

While exerting rearward pressure on rear bow to draw side stay pads taut, extend spacer sticks until they fit snugly between center bow and rear roof bow, then tighten wing nuts.

24. Spacer stick may be fabricated as shown in Figure 1110.

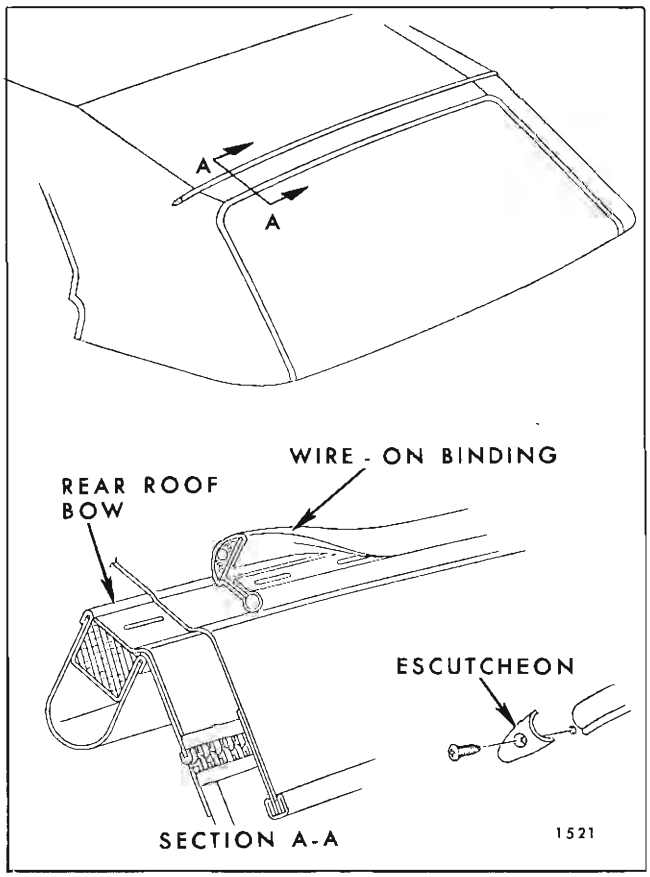


Fig. 1-1-8—Rear Roof Bow Wire-On Binding

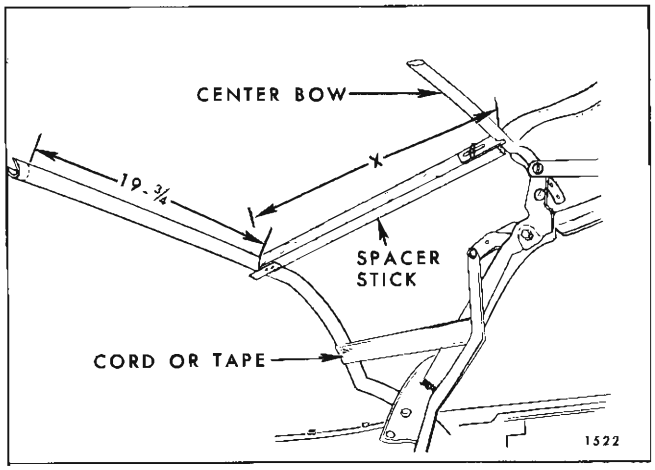


Fig. 1-1-9—Spacer Stick Installation

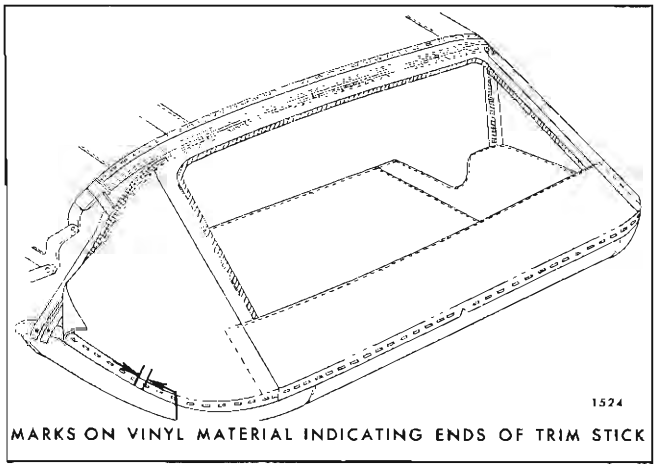


Fig. 1-1-11—Marking Back Curtain

25. Temporarily tie or tape rear bow to rear side roof rails. (See Fig. 1I9). Detach nylon webbing, side stay pads and back curtain assembly from rear bow.

26. Remove rear trim stick with attached back curtain assembly and top compartment bag from body and place on clean, protected surface.

27. Remove right and left nylon webbing from rear trim stick.

28. Using chalk, or other suitable material, mark ends of rear quarter trim sticks on vinyl surface of back curtain material (Fig. 1I11). Reference marks for trim sticks should be transferred to new back curtain material when step 6 of installation procedure is performed.

29. Remove back curtain assembly from rear and rear quarter trim sticks.

30. 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 new top is being installed but it was impossible to perform step 23 of removal procedure,

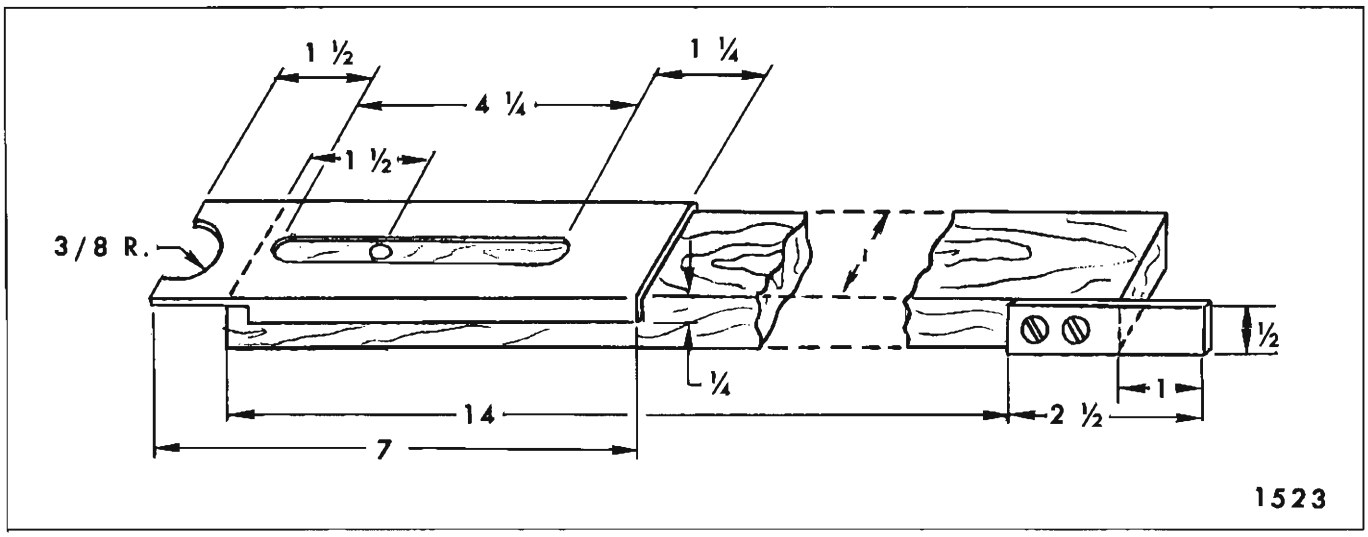


Fig. 1-1-10—Spacer Stick Dimensions

MATERIAL PER STICK

Wood - 1/2 x 1 x 15-1/2
Steel - 1/32 x 1/2 x 2-1/2
Steel - 1/32 x 1-1/2 x 7
2 Screws #6 x 1/2"
Bolt 1/4 - 20 UNC - 2A x 1"
Wingnut 1/4 - 20 UNC - 2B
2 Washers 1/4" I.D.

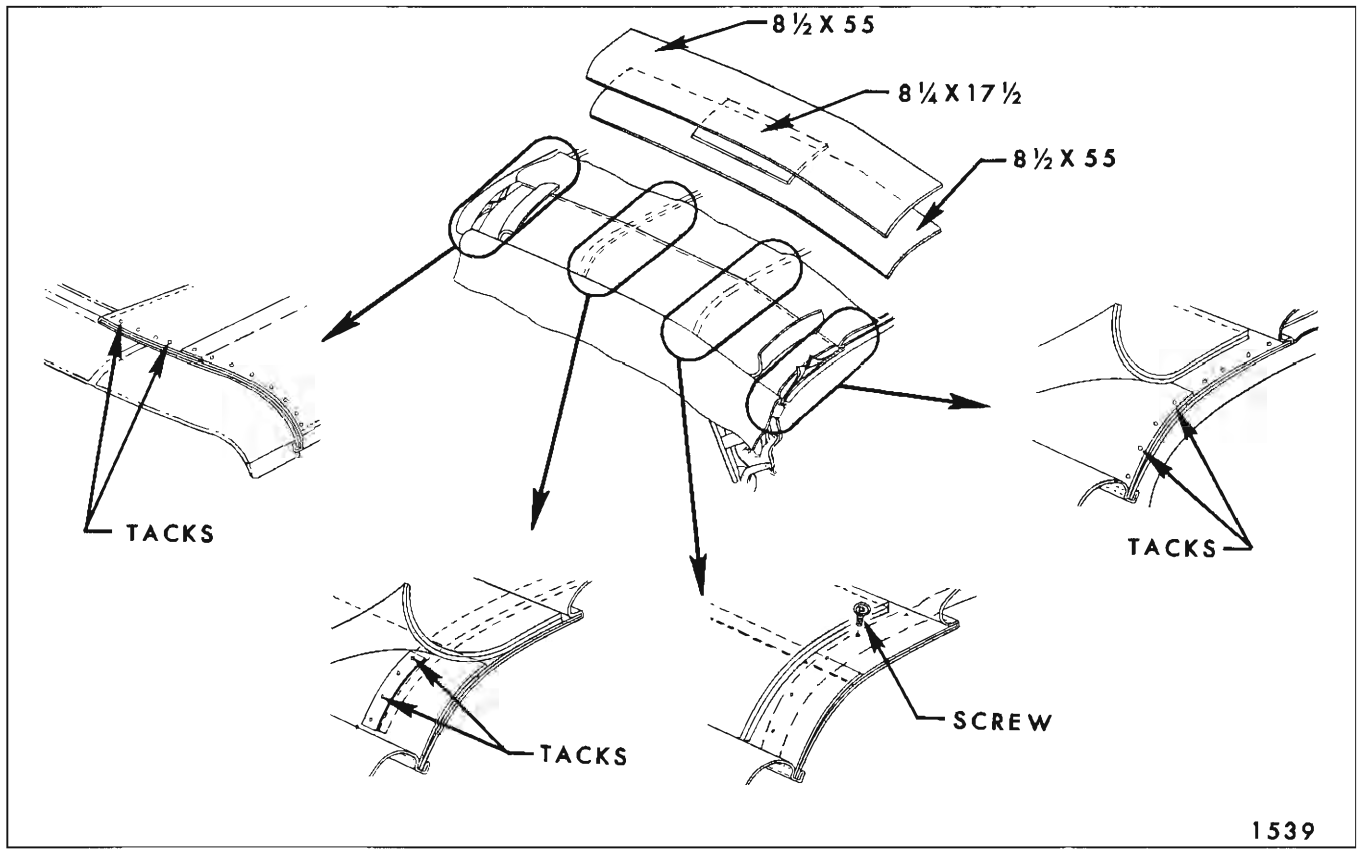


Fig. 1-I-12—Side Stay Pad Installation

pre-set spacer sticks to shortest length and install between center and rear roof bow (Fig. 1I9). Adjust sticks so that dimension "X" in Figure 1I9 (measured along spacer stick from front upper rolled edge of rear roof bow to center of center bow) is 14-7/8". Tie or tape rear bow to rear side roof rails.

NOTE: In all cases, above dimension may be changed slightly within tolerances to correspond with new top after tryout. Dimension should be equal on both right and left sides.

2. 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 pad to front bow. Install pad to center bow with screws. Make sure inboard edge of pad is properly aligned within depression in bow. Install stay pad wadding in conventional manner using an approved trim cement. (See Fig. 1I12 for 16-25-26-35-36-45-46000 Series. See Fig. 1I13 for 38-48-68000 Series).

3. Trim selvage end of side stay pads just forward of rear rolled edge of rear roof bow (Fig. 1I14).

4. Distance from center of center bow to rolled forward upper edge of rear roof bow is 14-7/8".

NOTE: Dimension may vary ± 1/4" after back curtain has been completely installed.

Re-adjust spacer sticks and side roof rail pads as required if rear bow does not come within this position range.

5. Place new back curtain assembly on clean covered work bench with interior surface of back window facing down.

6. 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 guide. (See steps 19 and 28 of removal procedure). In addition, mark trim stick bolt hole locations on new back curtain assembly.

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

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

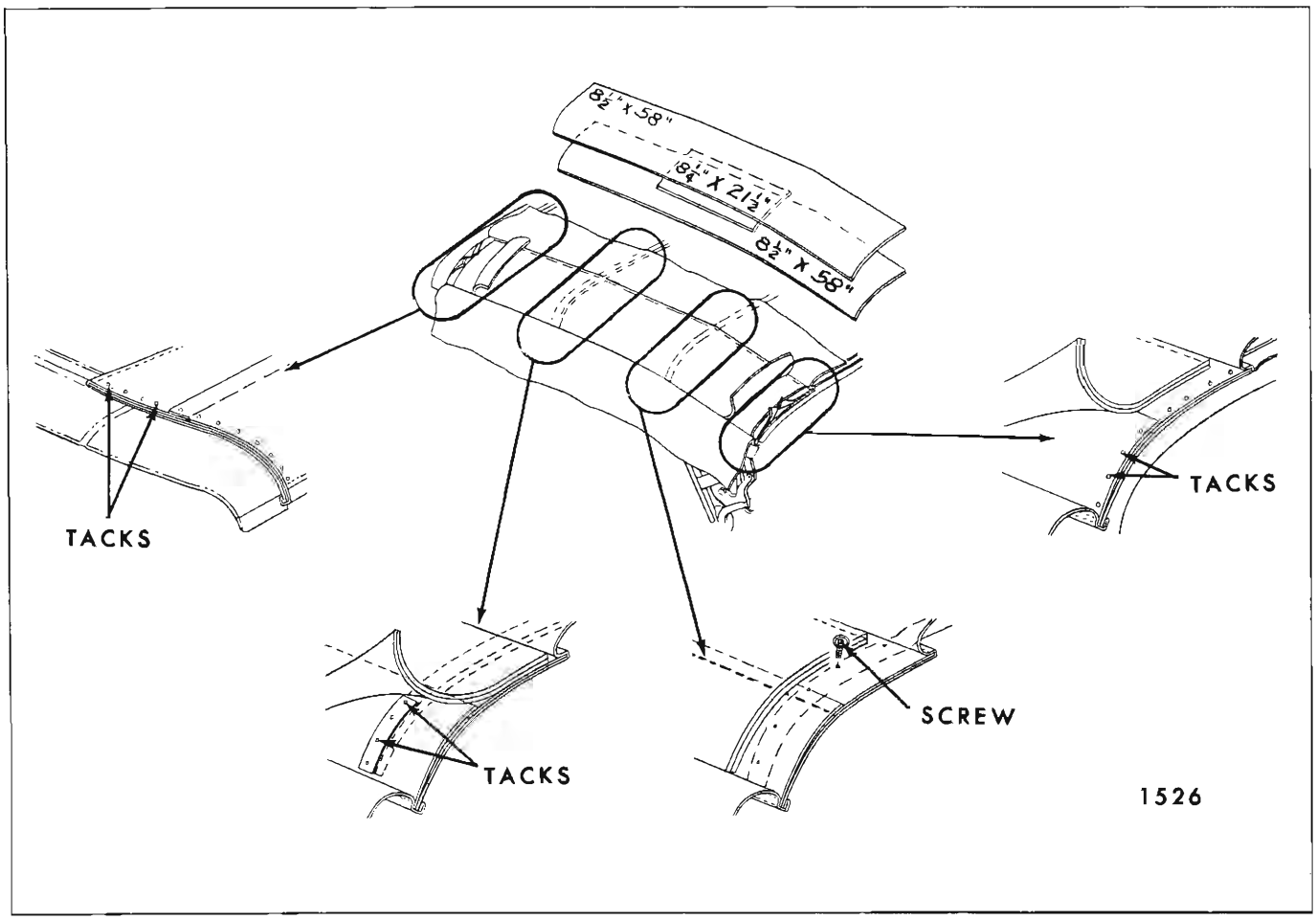


Fig. 1-I-13—Side Stay Pad Installation

NOTE: Notch in back curtain material at lower edge indicates centerline of back curtain assembly (Fig. 1I15). In addition, back curtain lower edge should extend approximately 1/2" below lower edge of trim sticks.

8. Tack curtain to rear and rear quarter trim sticks (Fig. 1I15). On right side, tack zipper tape to forward edge of rear quarter trim stick.

NOTE: 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.

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

10. 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.

11. Tack nylon webbing to rear trim stick. Forward edge of webbing should be even with edge of rear trim stick. New webbing may be cut from a piece of nonstaining type webbing 2" x 24". Excess webbing should be trimmed off at rear trim stick, 1/2" above back curtain lower edge.

12. Inspect rubber trim stick fillers cemented to body below pinchweld. Re-cement, if necessary, (Fig. 1I16).

13. Fasten back curtain assist straps to rear roof bow; then secure back curtain assembly with three or four tacks to rear bow to prevent accidental damage to backlight.

14. Install rear trim stick with attached back curtain assembly into body.

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

15. Working from body center progressively outboard to right and left sides, tack back curtain

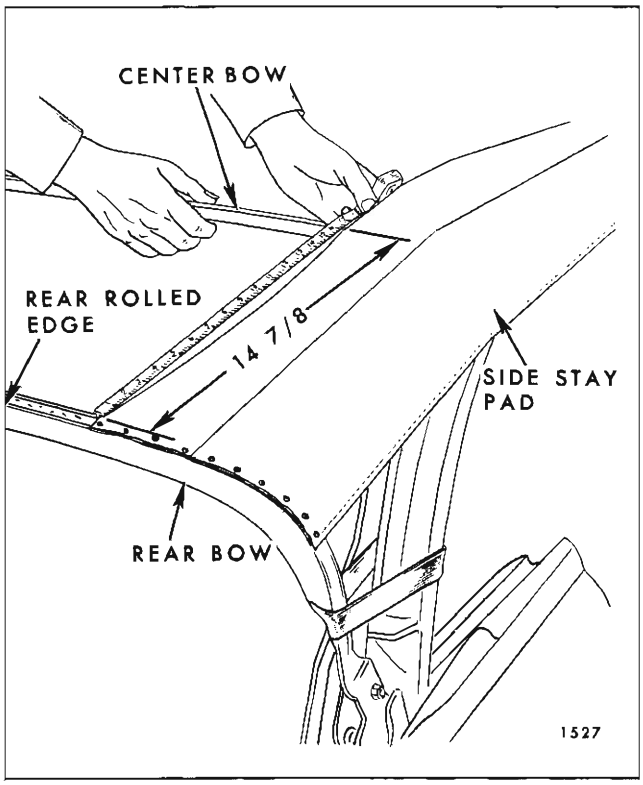


Fig. 1-1-14—Positioning Rear Bow

upper valance to rear bow. Make sure all fullness has been drawn from curtain material (Fig. 1I15). Fold any excess back curtain upper valance material rearward and tack to rear bow.

IMPORTANT: 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 outer surface of back curtain along pinchweld

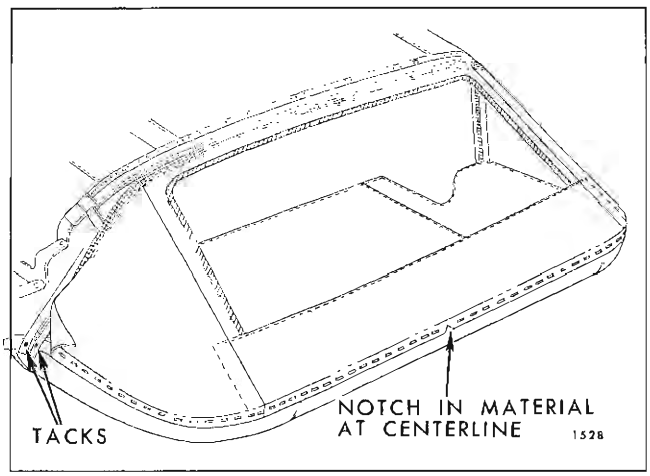


Fig. 1-1-15—Back Curtain Installation

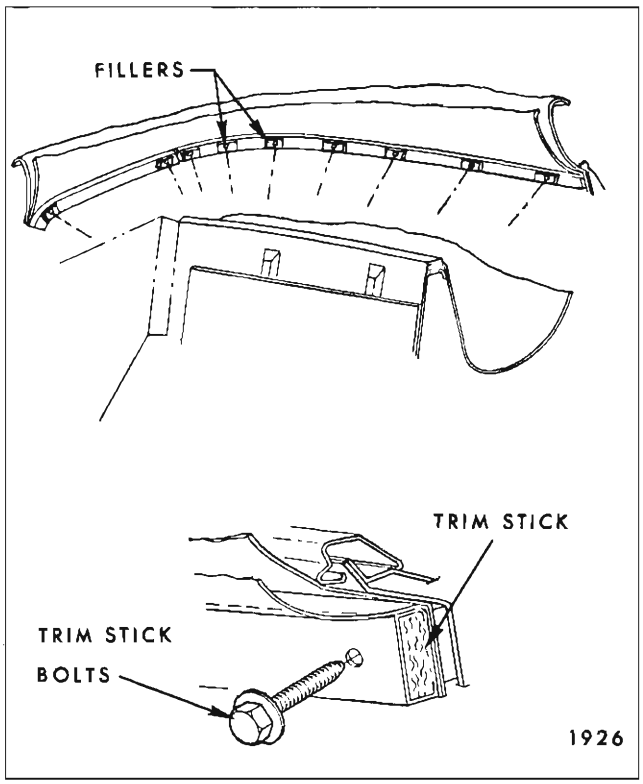


Fig. 1-1-16—Checking Trim Stick Fillers

finishing molding. Re-adjust back curtain assembly as required (Fig. 1I17).

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 top covering material in conventional manner using nitrile or neoprene type trim cement.

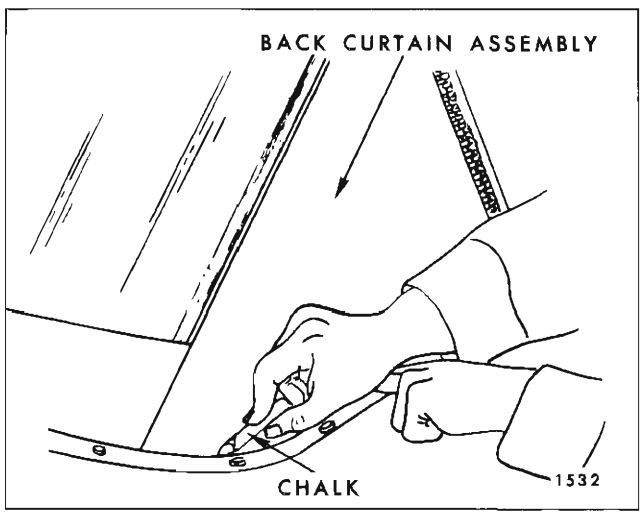


Fig. 1-1-17—Marking Back Curtain

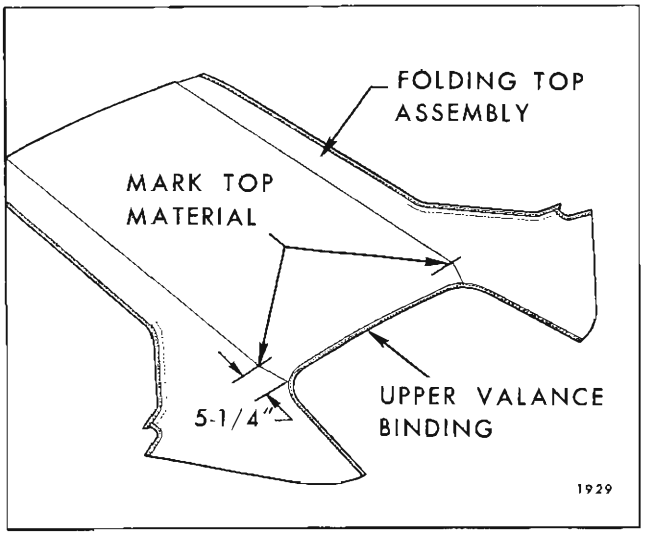


Fig. 1-I-18—Marking Top Material

19. Tack nylon webbing to rear roof bow. Outboard edge of webbing should be installed even with outboard edge of side roof rail pad. Fold excess webbing rearward and tack to rear bow. Remove excess by trimming webbing just forward of rear rolled edge of rear roof bow.

CAUTION: Do not cut back curtain or side stay pad material.

20. Detach rear trim stick with attached back curtain assembly from body.

21. Lay out new top material on clean protected surface with outer layer of material exposed.

22. Using a pencil, mark top material (mark should be approximately 1/2" in length) at deck seam 5-1/4" from edge of top material upper valance binding (Fig. 1I18).

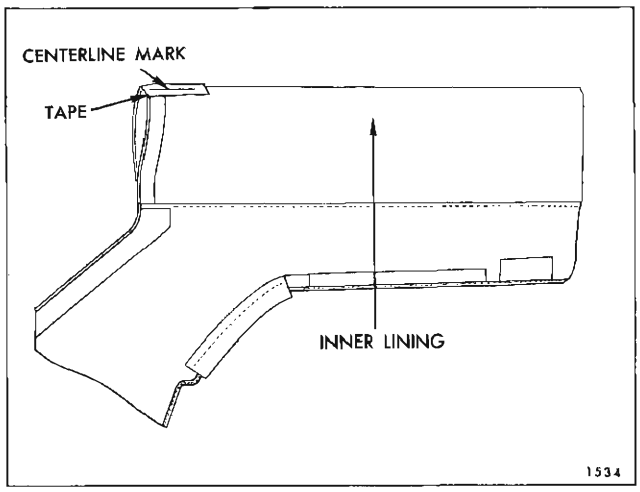


Fig. 1-I-19—Marking Folding Top Material

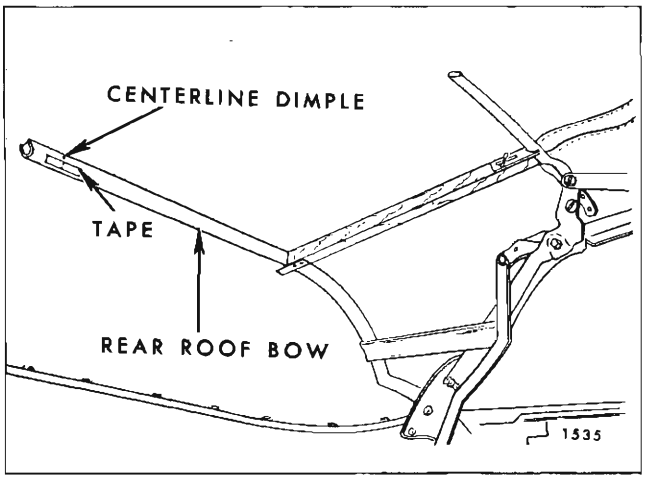


Fig. 1-I-20—Marking Rear Roof Bow

23. Fold new top material in half so that inner lining of top material is exposed (Fig. 1I19). Install a 6" piece of tape on inner surface at centerline fold of new top material (Fig. 1I19). Using a pencil, mark the approximate centerline of new top material along entire length of tape.

IMPORTANT: Be sure mark will be visible inside of body after new top is installed on convertible top framework.

24. 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. 1I20).

25. Remove rear bow spacer sticks and positioning tape or cord.

26. 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 (± 1/4") depending upon position of rear roof bow. Also check centerline mark on inner lining of top material. Mark should correspond to centerline mark on rear roof bow.

27. Remove top trim material.

28. 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 guide. Also mark edges of trim sticks

on vinyl surface of new top material. (See steps 20 and 21 of removal procedure).

29. Position top trim on framework and center assembly both fore and aft and side to side.

30. Install listing pocket retainer into listing pocket.

31. Center retainer in listing pocket; then, install retainer into front bow.

NOTE: Retainer should be evenly centered between side roof rail stay pads.

32. Install front bow to listing pocket retainer attaching screws (Fig. 1I3).

33. On right side of top material, at front of hold-down cable pocket, install cable through pocket in top assembly.

NOTE: Welding rod or similar material may be bent at one end to form a hook. Then at rear of hold-down pocket, slip hooked end of rod into pocket. Push 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 hold-down pocket, disengage hooked portion of rod from cable attaching bracket. Repeat above operation on opposite side of top assembly.

34. 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. 1I2).

35. 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 bow.

NOTE: The deck seam mark will vary slightly (± 1/4") depending upon position of rear roof bow. Also check centerline mark on inner lining of top material. Mark should correspond to centerline mark on rear roof bow. (See Fig. 1I20).

36. Using 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.

NOTE: 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.

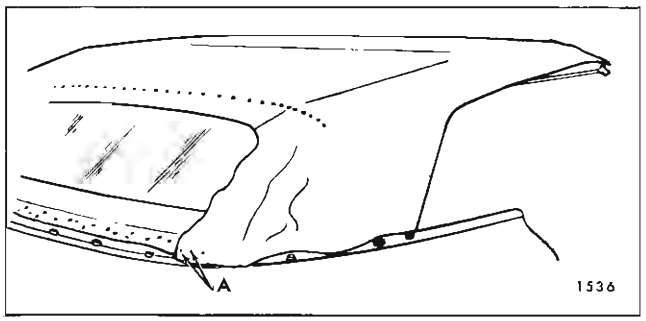


Fig. 1-I-21—Tacking Top Material

37. Using an awl or other suitable tool, pierce flaps for side roof rail rear weatherstrip attaching screws. Install side roof rail rear weatherstrips to help maintain position of quarter flaps while adhesive is drying.

38. Using previously marked lines (ends of trim stick) as locating reference, tack top material to rear and rear quarter trim sticks. "A" in Figure 1I21 shows top material installed to rear trim stick at inboard edge.

39. Cut or punch hole in top material for each trim stick attaching bolt.

40. Install top material into body. Make sure rear and rear quarter trim stick attaching bolts are completely driven in to represent finished condition.

41. Check fit of top material. Rear quarter trim sticks may be adjusted downward to remove minor wrinkles in top material in rear quarter area.

42. Where required, re-mark 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 sticks.

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 obtained.

43. Remove trim sticks with attached top material from top compartment well. Back curtain should extend 1/2" below trim sticks. (See step 7 of installation procedure). In addition, top material must extend 1/2" to 5/8" below trim sticks to minimize water wicking on inner lining of back curtain material. Trim top material as required.

44. Install trim sticks with attached top material into top compartment well and tighten side and rear trim stick attaching bolts.

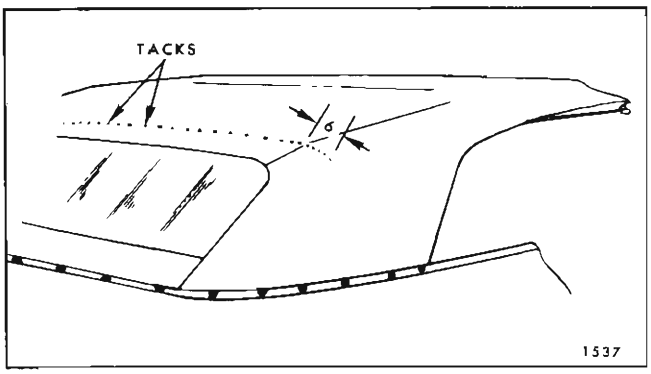


Fig. 1-I-22—Tacking Outboard of Seams

45. Re-check side roof rail flaps. Make sure mark at deck seams is in center of rear bow. Also re-check centerline mark on inner surface of top material at rear bow.

46. Where required, remove side roof rail rear weatherstrips. Re-adjust top material at side roof rails and reinstall weatherstrips.

47. While pulling top material slightly rearward, stay tack top material along rear roof bow.

IMPORTANT: Tacks must be installed along a straight line in center of rear bow. (See Fig. 1I22). Tacks outboard of deck seams should be restricted to distance not to exceed six inches, which is length wire-on binding extends past seam (Fig. 1I22).

48. At front roof rail, pull top trim material forward to desired tension. While maintaining tension on top trim, place a pencil mark on outer

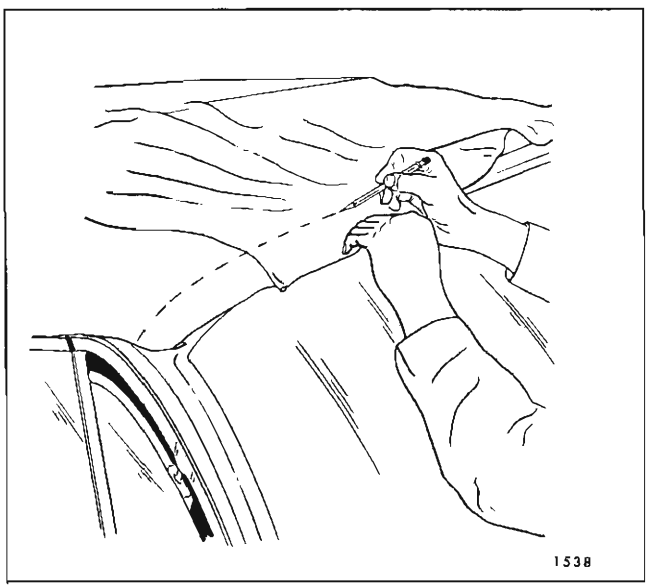


Fig. 1-I-23—Marking Top Material at Front Roof Rail

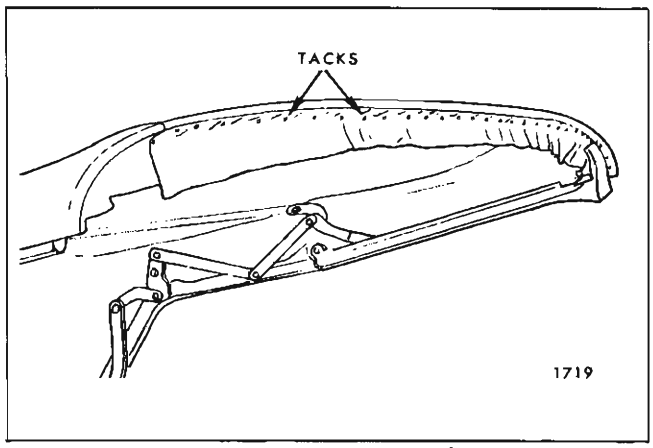


Fig. 1-I-24—Installation of Top Material to Front Roof Rail

surface of trim material along forward edge of front roof rail (Fig. 1I23).

49. 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. Fasten top trim to cemented area and stay tack trim to rail (Fig. 1I24).

50. Apply nitrile cement or neoprene-type weatherstrip adhesive to front flaps and to corresponding areas on side roof front rails. Fasten flaps to side roof front rails. (See Fig. 1I25).

51. 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 re-check top appearance).

52. Complete tacking of top trim to front roof rail and trim off excess material.

53. Permanently tack top material to rear roof bow. Apply 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 neoprene-type weatherstrip adhesive.

54. 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 window and material or pads.

FOLDING TOP TRIM (LESS BACK CURTAIN) ALL SERIES

FOLDING TOP TRIM COVER

Removal

1. Place protective covers on all exposed panels which may be contacted during procedures.

2. Remove rear cushion and back.

CAUTION: Disconnect rear seat speaker wire if present.

3. Remove right and left folding top compartment side trim panels.

4. Remove right and left side roof rail rear weatherstrip attaching screws; then remove weatherstrips from rails.

5. Detach folding top quarter flaps from side roof rear rails.

6. Lower top to "stacked" position.

7. Remove right and left side roof rail front weatherstrip attaching screws; then remove weatherstrip from rails.

8. Remove front roof rail front and rear weatherstrips (Fig. 1I25).

9. Detach top material from front roof rail (Fig. 1I25).

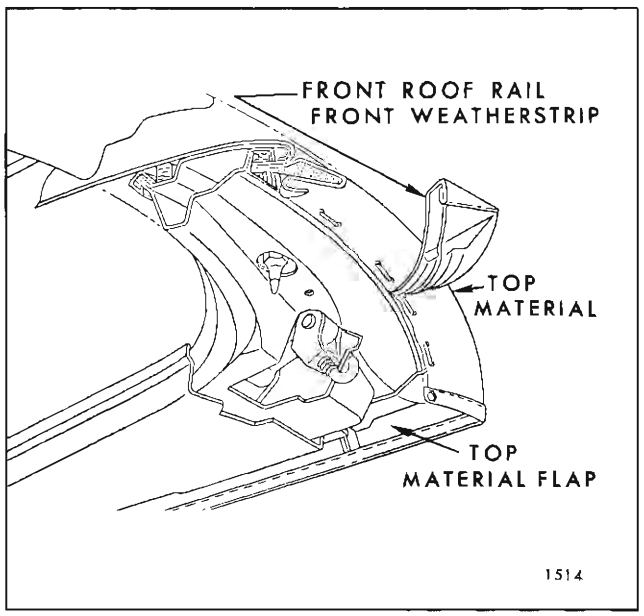


Fig. 1-I-25—Front Roof Rail Assembly

10. Detach top material flaps from side roof front rail (Fig. 1I25).

11. Raise top and lock to windshield header.

12. At right and left side roof front and rear rails, remove hold-down cable front and rear attaching screws. (See Views "A" and "B" in Fig. 1I26).

13. Pull both hold-down cables forward until cables are completely removed from top material retaining pockets.

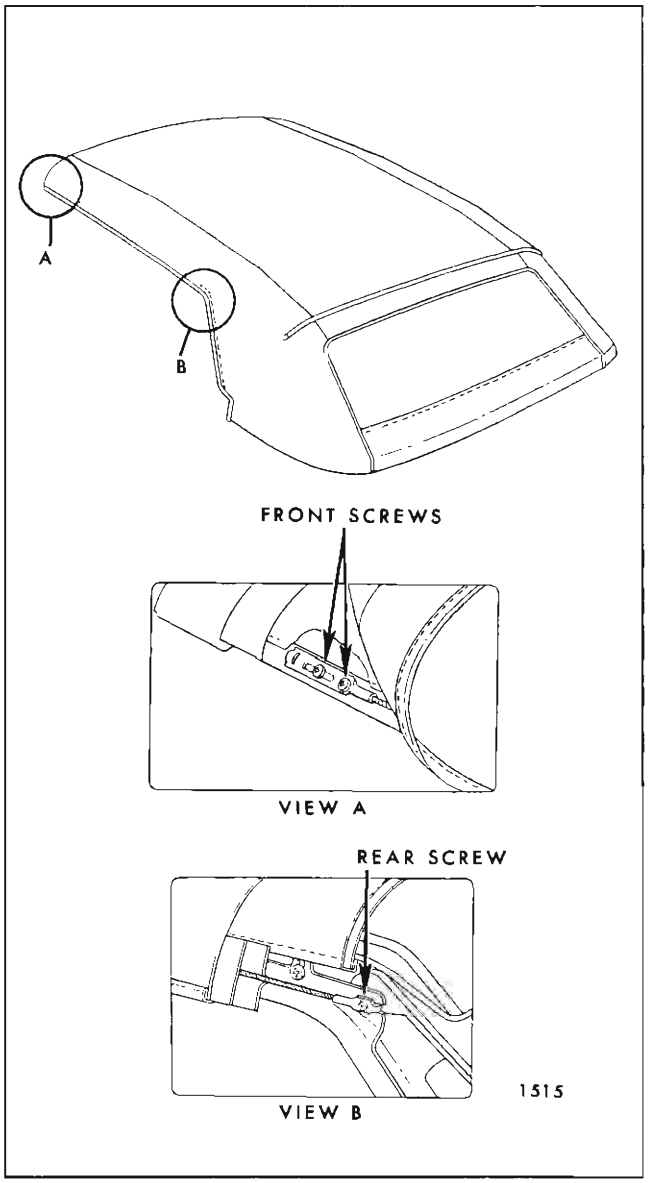


Fig. 1-I-26—Hold-Down Cable Attachment

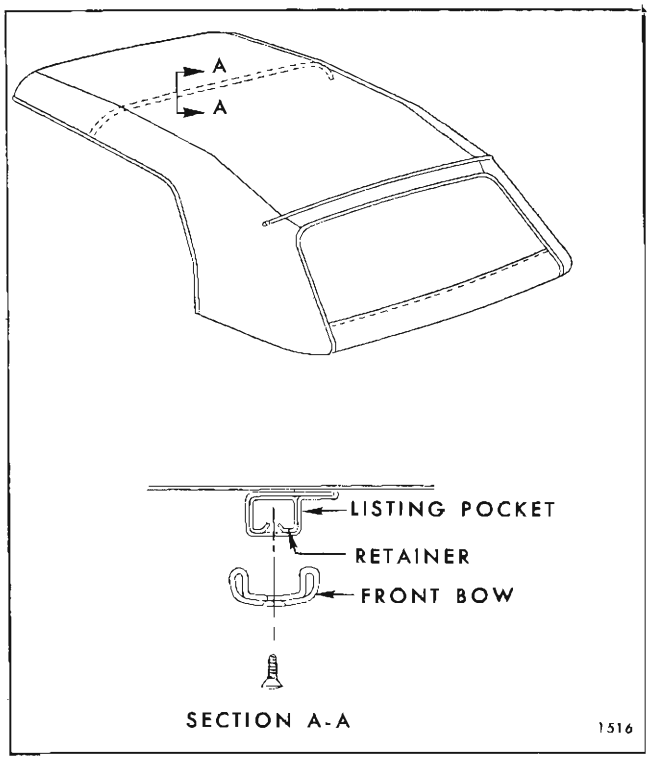


Fig. 1-I-27—Listing Pocket Retainer

14. At underside of front bow, remove screws securing listing pocket retainer to bow (Fig. 1I27).

15. Push top material upward sufficiently until retainer is disengaged from bow; then, remove retainer from listing pocket.

16. Detach folding top compartment bag from rear seat back panel, thus exposing rear quarter

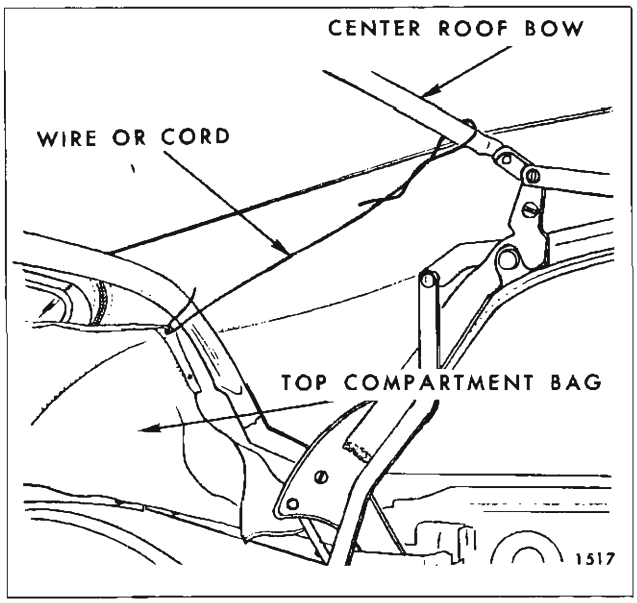


Fig. 1-I-28—Top Compartment Bag Tied to Center Bow

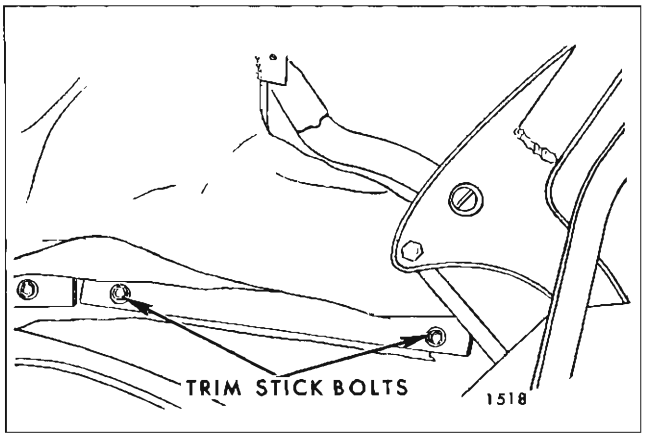


Fig. 1-I-29—Rear Quarter Trim Stick

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. 1I28).

17. At each rear quarter area remove attaching bolts securing rear quarter trim stick assembly to rear quarter inner panel (Fig. 1I29).

18. Remove rear trim stick attaching bolts; then lift trim assembly with attached quarter and rear trim sticks on top of rear compartment front panel.

19. 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 material at both locations with a grease pencil (Fig. 1I30).

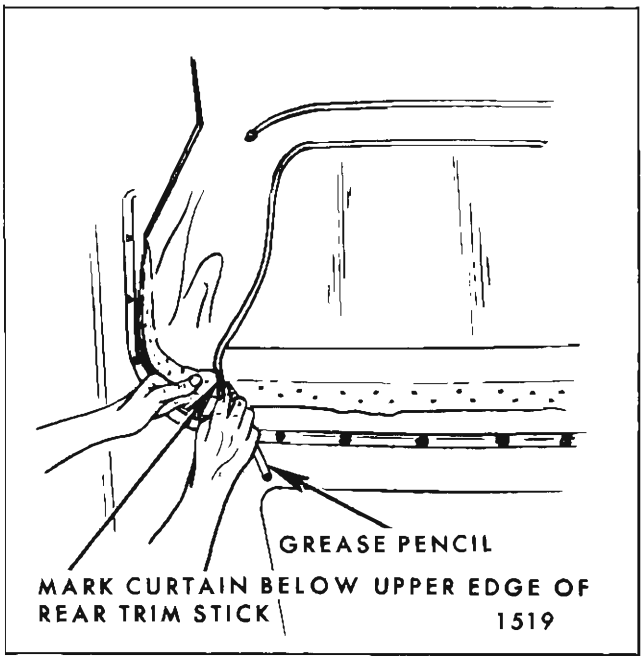


Fig. 1-I-30—Locating Edge of Top Material

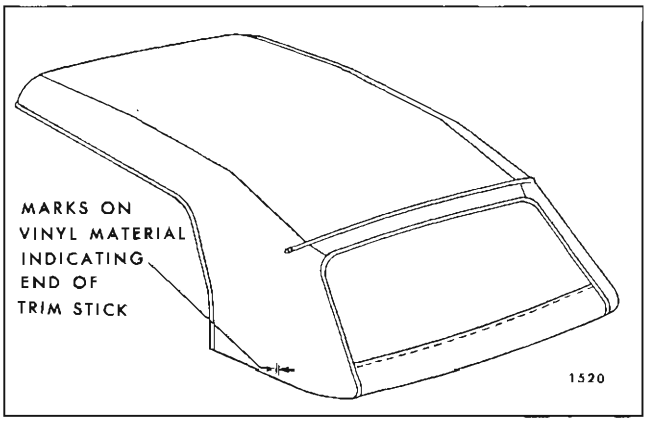


Fig. 1-I-31—Marking Top Material

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

20. 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.

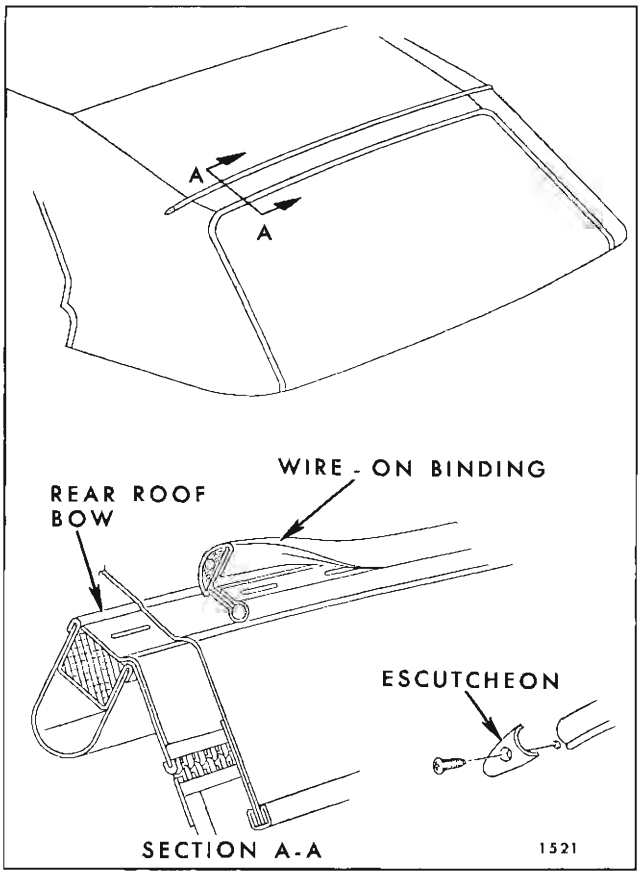


Fig. 1-I-32—Rear Roof Bow Wire-On Binding

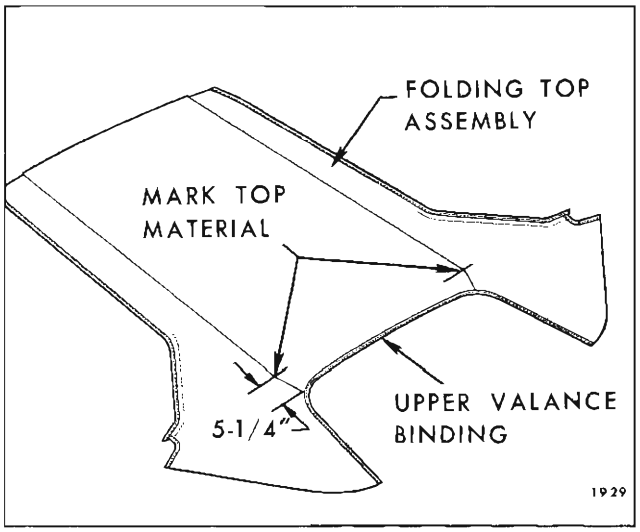


Fig. 1-I-33—Marking Top Material

21. Using a pencil, mark both ends of rear and rear quarter trim sticks on vinyl surface of top material (Fig. 1I31). Reference marks for trim sticks should be transferred to new top material when step 8 of installation procedure is performed.

22. Remove screw securing escutcheon clip at each end of wire-on binding on rear bow. Remove wire-on binding from rear bow. Detach top material from rear roof bow and from trim sticks, then remove top cover assembly (Fig. 1I32).

Installation

1. Prior to installation of new top trim material, check contour of back curtain and side stay pad assemblies. Where required, adjust back curtain and/or side stay pads.

2. Lay out new top material on clean protected surface with outer layer of material exposed.

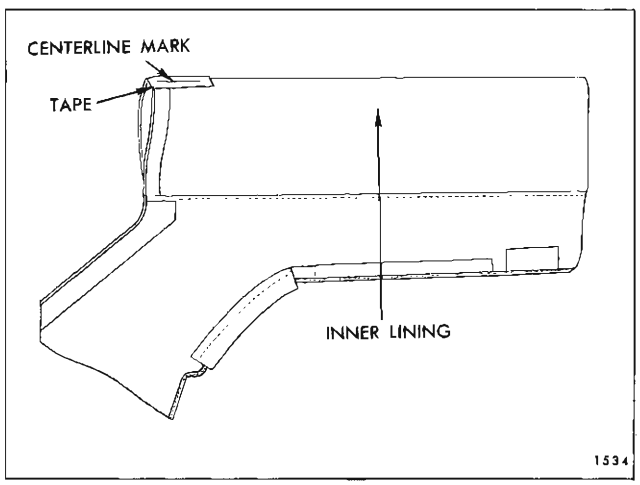


Fig. 1-I-34—Marking Folding Top Material

3. Using a pencil, mark top material (mark should be approximately 1/2" in length) at deck seam 5-1/4" from edge of top material upper valance binding (Fig. 1I33).

4. Fold new top material in half so that inner lining of top material is exposed (Fig. 1I34). Install a 6" piece of tape on inner surface at centerline fold of new top material (Fig. 1I34). Using a pencil, mark the approximate centerline of new top material along entire length of tape.

IMPORTANT: Be sure mark will be visible inside of body after new top is installed on convertible top framework.

5. 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. 1I35).

6. 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 (± 1/4") depending upon position of rear roof bow. Also check centerline mark on inner lining of top material. Mark should correspond to centerline mark on rear roof bow.

7. Remove top trim material.

8. 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 guide. Also mark edges of trim sticks on vinyl surface of new top material. (See steps 20 and 21 of removal procedure).

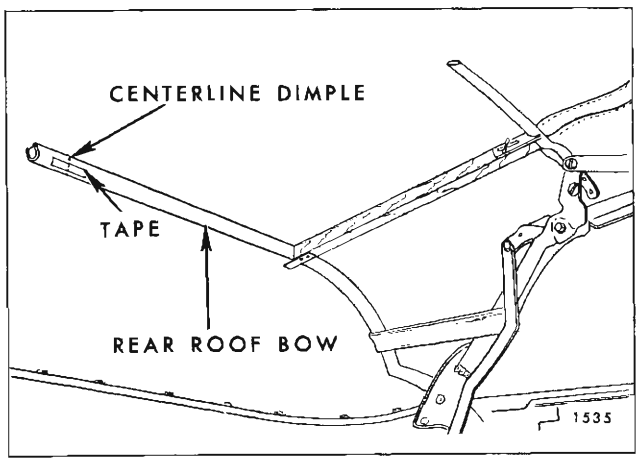


Fig. 1-I-35—Marking Rear Roof Bow

9. Position top trim on framework and center assembly both fore and aft and side to side.

10. Install listing pocket retainer into listing pocket.

11. Center retainer in listing pocket; then install retainer into front bow.

NOTE: Retainer should be evenly centered between side roof rail stay pads.

12. Install front bow to listing pocket retainer attaching screws (Fig. 1I27).

13. On right side of top material, at front of hold-down cable pocket, install cable through pocket in top assembly.

NOTE: Welding rod or similar material may be bent at one end to form a hook. Then at rear of hold-down pocket slip hooked end of rod into pocket. Push 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 hold-down pocket, disengage hooked portion of rod from cable attaching bracket. Repeat above operation on opposite side of top assembly.

14. 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. 1I26).

15. 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 bow.

NOTE: The deck seam mark will vary slightly (± 1/4") depending upon position of rear roof bow. Also check centerline mark on inner lining of top material. Mark should correspond to centerline mark on rear roof bow. (See Fig. 1I35).

16. Using nitrile cement or neoprene-type weatherstrip adhesive, fasten rear quarter flaps to side roof rails. Make sure that quarter flap seam breaks at forward edge of side roof rear rail.

NOTE: 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.

17. Using an awl or other suitable tool, pierce flaps for side roof rail rear weatherstrip attaching screws. Install side roof rail rear weatherstrip to help maintain position of quarter flaps while adhesive is drying.

18. Using previously marked lines (ends of trim stick) as locating reference, tack top material to rear and rear quarter trim sticks. "A" in Figure 1136 shows top material installed to rear trim stick at inboard edge.

19. Cut or punch hole in top material for each trim stick attaching bolt.

20. Install top material into body. Make sure rear and rear quarter trim stick attaching bolts are completely driven in to represent finished condition.

21. Check fit of top material. Rear quarter trim sticks may be adjusted downward to remove minor wrinkles in top material in rear quarter area.

22. Where required, re-mark 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 sticks.

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 obtained.

23. Remove trim sticks with attached top material from top compartment well. Top material must extend 1/2" to 5/8" below trim sticks to minimize water wicking on inner lining of back curtain material. Trim top material as required.

24. Install trim sticks with attached top material into top compartment well and tighten side and rear trim stick attaching bolts.

25. Re-check side roof rail flaps. Make sure mark at deck seams is in center of rear bow. Also re-check centerline mark on inner surface of top material at rear bow.

26. Where required, remove side roof rail rear weatherstrips. Re-adjust top material at side roof rails and reinstall weatherstrips.

27. While pulling top material slightly rearward, stay tack top material along rear roof bow.

IMPORTANT: Tacks must be installed along a straight line in center of rear bow. (See Fig. 1137). Tacks outboard of deck seams should be restricted to distance not to exceed six inches,

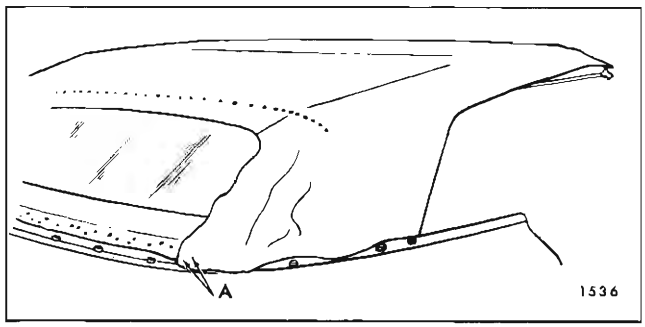


Fig. 1-1-36—Tacking Top Material

which is length wire-on binding extends past seam (Fig. 1137).

28. 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. 1138).

29. 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. Fasten top trim to cemented area and stay tack trim to rail (Fig. 1139).

30. Apply nitrile cement or neoprene-type weatherstrip adhesive to front flaps and to corresponding areas on side roof front rails. Fasten flaps to side roof front rails. (See Fig. 1125).

31. 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).

32. Complete tacking of top trim to front roof rail and trim off excess material.

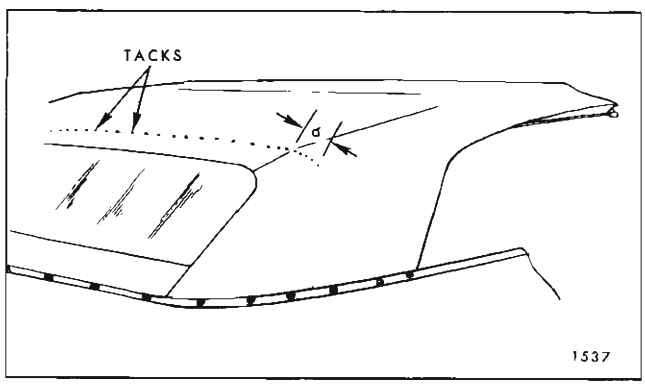


Fig. 1-1-37—Tacking Outboard of Seams

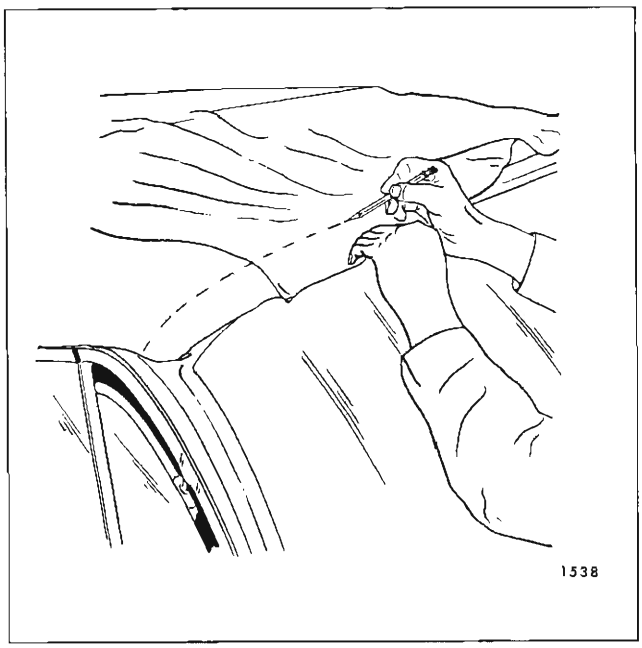


Fig. 1-I-38—Marking Top Material at Front Roof Rail

33. Permanently tack top material to rear roof bow. Apply bead of neoprene-type weatherstrip adhesive around each tack head, and into two holes pierced into top material for wire-on binding clip escutcheons.

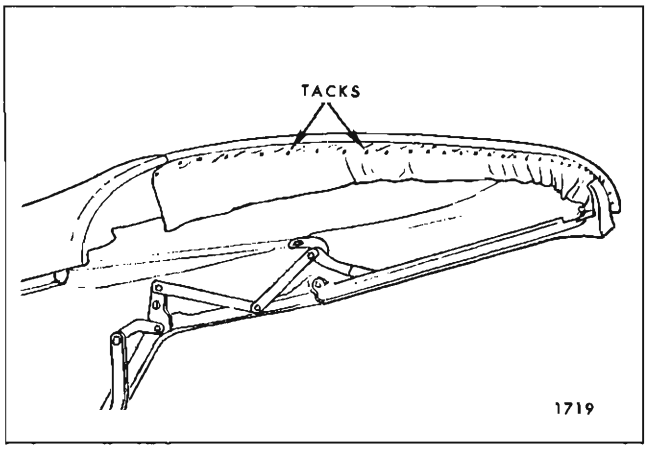


Fig. 1-I-39—Installation of Top Material to Front Roof Rail

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

34. 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, backlight and material or pads.

BACK CURTAIN ASSEMBLY (COMPLETE) ALL SERIES

Removal

1. Place protective covers on all exposed panels which may be contacted during procedure.

2. Remove following trim and hardware items:

a. Rear seat cushion and back.

CAUTION: Disconnect rear seat speaker wire if present.

b. Folding top compartment side trim panel assemblies.

c. Side roof rail rear weatherstrip; then loosen folding top quarter flaps from rails.

3. 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. 1I40).

4. At each rear quarter area remove attaching bolts securing rear quarter trim stick assembly to rear quarter inner panel (Fig. 1I41).

5. Remove rear trim stick attaching bolts; then lift trim assembly with attached quarter and rear trim sticks on top of rear compartment front panel.

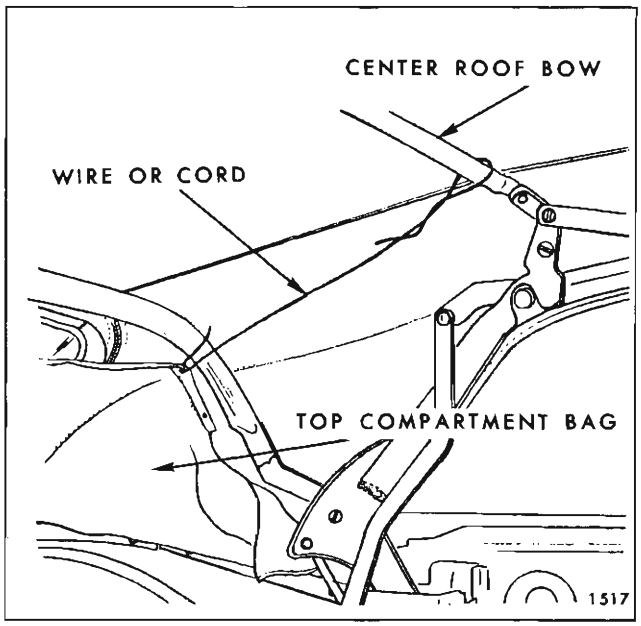


Fig. 1-I-40—Top Compartment Bag Tied to Center Bow

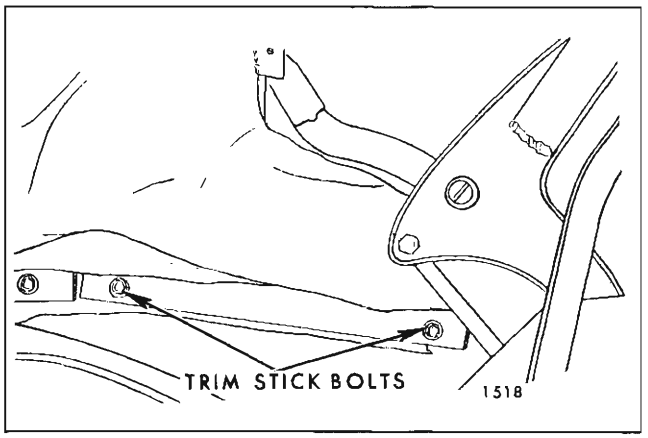


Fig. 1-I-41—Rear Quarter Trim Stick

6. 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 material at both locations with a grease pencil (Fig. 1I42). Reference marks should be transferred to new back curtain when step 3 of installation procedure is performed.

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

7. Using a pencil, mark both ends of rear and rear quarter trim sticks on vinyl surface of top material (Fig. 1I43).

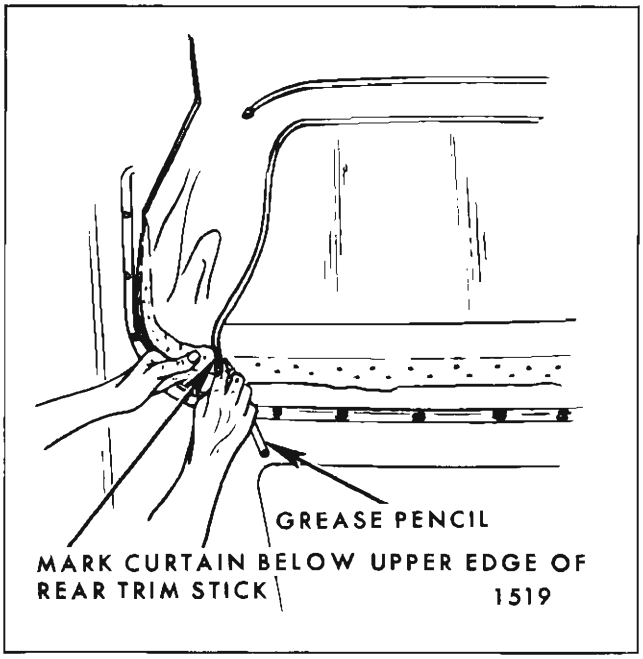


Fig. 1-I-42—Locating Edge of Top Material

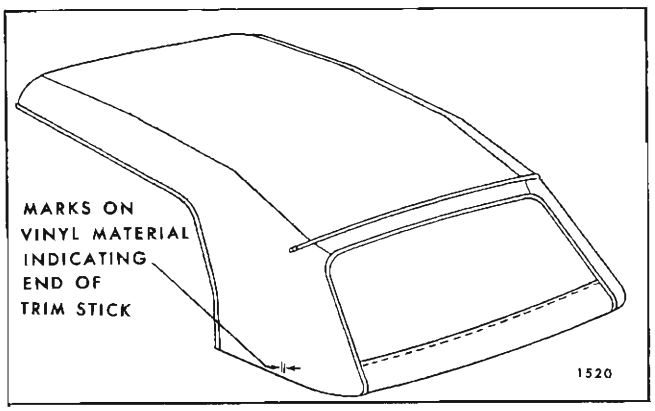


Fig. 1-I-43—Marking Top Material

8. Remove screw securing escutcheon clip at each end of wire-on binding on rear bow. Remove wire-on binding from rear bow (Fig. 1I44).

9. Detach folding top trim from rear roof bow and from rear and rear quarter trim sticks.

10. Carefully slide top trim forward exposing tacked edge of back curtain at rear roof bow.

11. Detach nylon webbing and 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.

12. Remove right and left nylon webbing from rear trim stick.

13. Using chalk, or other suitable material, mark ends of rear and rear quarter trim sticks on vinyl surface of back curtain material (Fig. 1I45). Reference marks for trim sticks should be transferred to new back curtain material when step 3 of installation procedure is performed.

14. Remove back curtain assembly from rear and rear quarter trim sticks.

Installation

1. Preset spacer sticks to shortest length and install between center and rear roof bow (Fig. 1I46). Adjust sticks so that dimension "X" in Figure 1I46 (measured along spacer stick from front upper rolled edge of rear roof bow to center of center bow) is 14-7/8".

NOTE: Dimension may vary ±1/4" after back curtain has been completely installed.

Tie or tape rear bow to rear side roof rails.

2. Place new back curtain assembly on clean covered work bench with interior surface of backlight facing down.

3. 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 guide. (See steps 6 and 13 of removal procedure). In addition, mark trim stick bolt hole locations on new back curtain assembly.

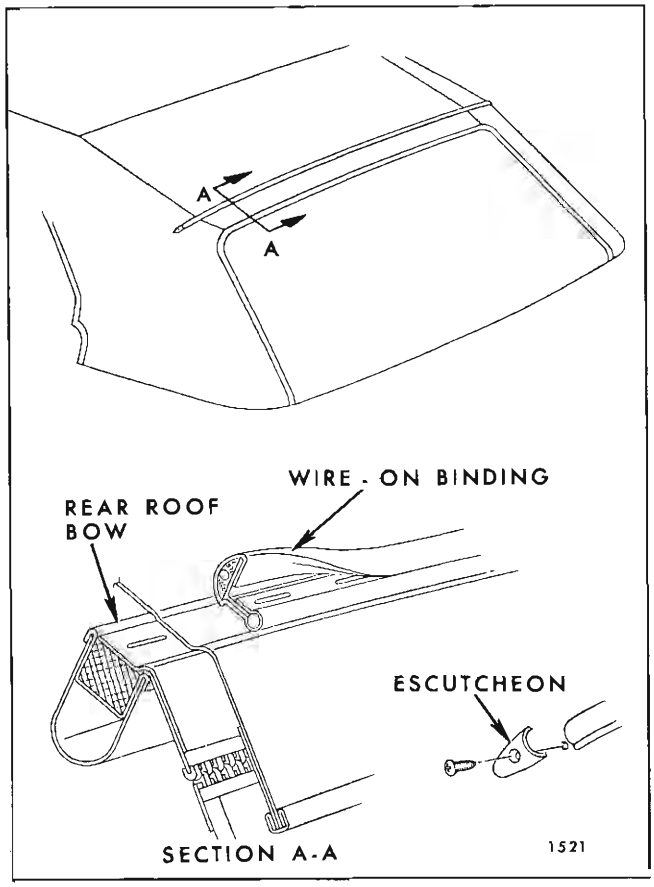


Fig. 1-I-44—Rear Roof Bow Wire-On Binding

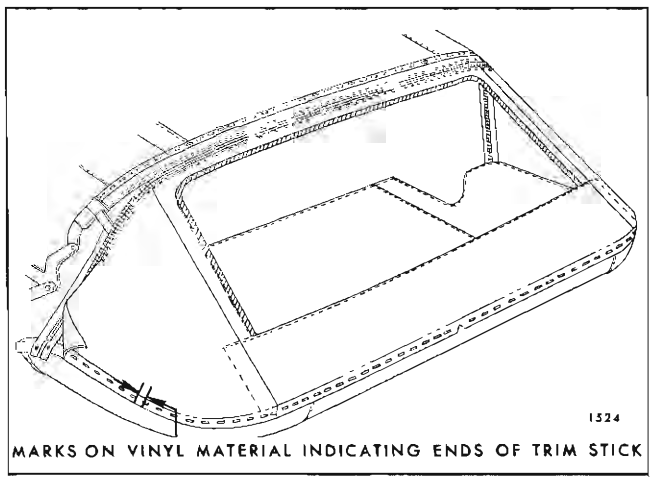


Fig. 1-I-45—Marking Back Curtain

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

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

NOTE: Notch in back curtain material at lower edge indicates centerline of back curtain assembly. (See Fig. 1147). In addition, back curtain lower edge should extend approximately 1/2" below lower edge of trim sticks.

5. Tack curtain to rear and rear quarter trim sticks (Fig. 1147). On right side, tack zipper tape to forward edge of rear quarter trim stick.

NOTE: 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.

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

7. 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.

8. Tack nylon webbing to rear trim stick. Forward edge of webbing should be even with edge of rear trim stick.

9. Inspect rubber trim stick fillers cemented to body below pinchweld. Re-cement, if necessary (Fig. 1148).

10. Fasten back curtain assist straps to rear roof bow; then secure back curtain assembly with

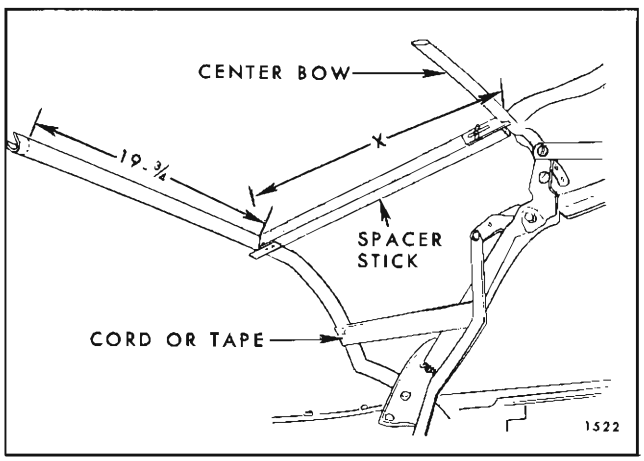


Fig. 1-1-46—Spacer Stick Installation

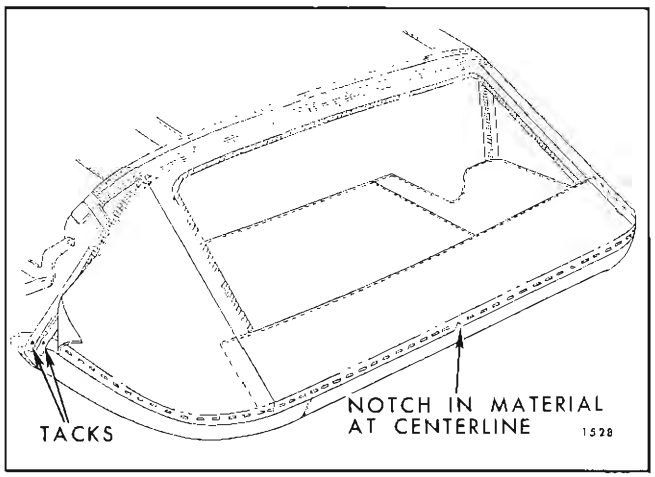


Fig. 1-1-47—Back Curtain Installation

three or four tacks to rear bow to prevent accidental damage to backlight.

11. Install rear trim stick with attached back curtain assembly into body.

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

12. 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 curtain material. Fold any

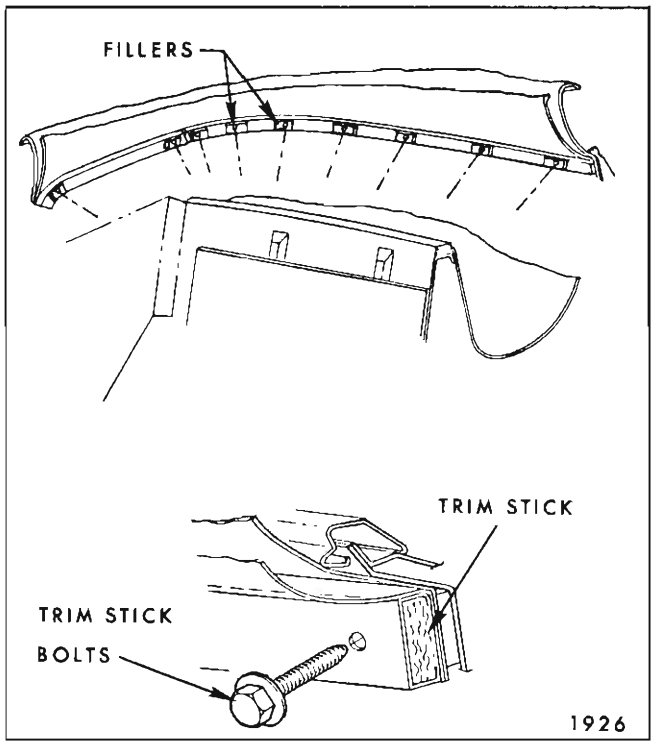


Fig. 1-1-48—Checking Trim Stick Fillers

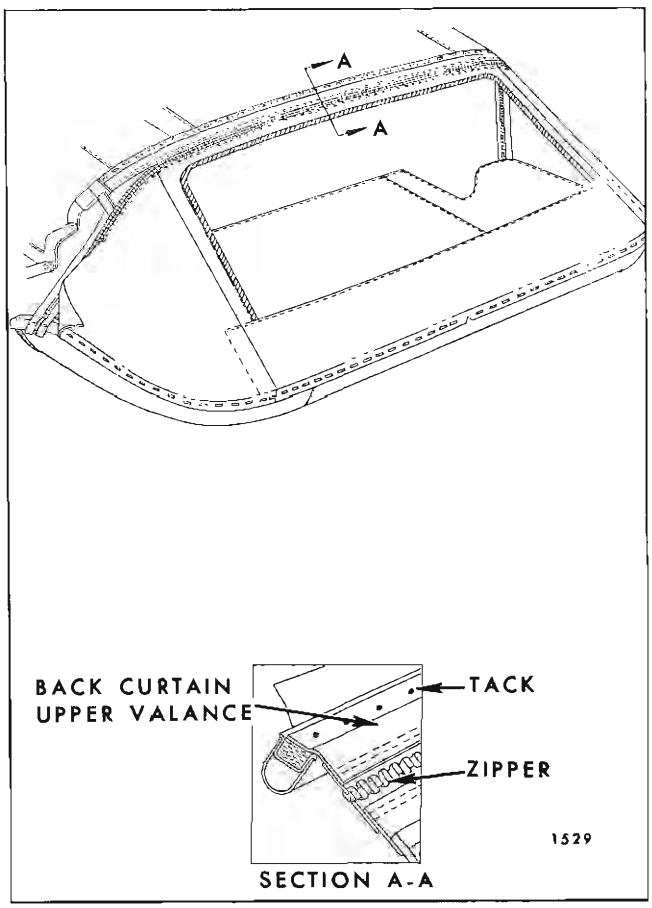


Fig. 1-I-49—Back Curtain Installation

excess back curtain upper valance material rearward and tack to rear bow (Fig. 1I49).

IMPORTANT: DO NOT CUT OFF EXCESS UPPER VALANCE MATERIAL AS MATERIAL MAY UNRAVEL.

13. Check contour of back curtain assembly to rear roof bow and at pinchweld molding.

14. Where required, place reference chalk mark on outer surface of back curtain along pinchweld finishing molding. Re-adjust back curtain assembly as required (Fig. 1I50).

15. Tack nylon webbing to rear roof bow. Outboard edge of webbing should be installed even with outboard edge of side roof rail pad. Fold excess webbing rearward and tack to rear bow. Remove excess by trimming webbing just forward of rear rolled edge of rear roof bow.

CAUTION: Do not cut back curtain or side stay pad material.

16. Detach rear trim stick with attached back curtain assembly from body and 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.

17. Install all previously removed trim and hardware.

BACK CURTAIN ZIPPER REPLACEMENT ALL DIVISIONS—ALL "B" AND "C" CONVERTIBLE STYLES

If only the back curtain zipper is being replaced, use the Removal and Installation procedure for "Back Curtain Assembly (Complete)" and perform the following additional operations after the back curtain assembly has been removed from body (after step 14 of removal procedure).

1. Using chalk or similar material, on old zipper tape mark location of zipper in relation to edges of back window 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 material 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 Assembly (Complete)".

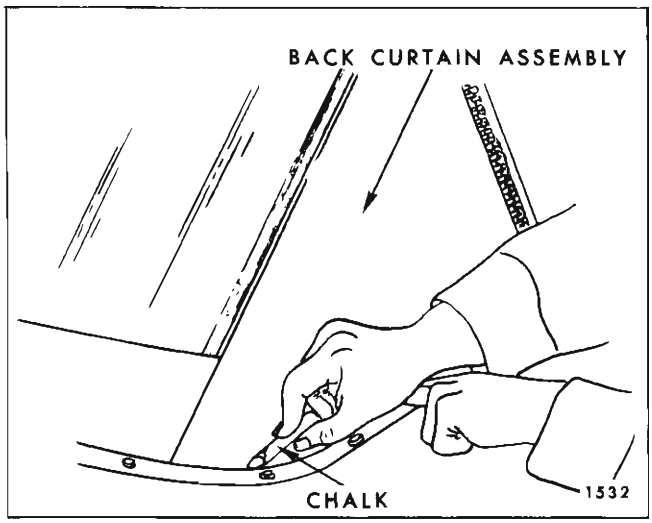


Fig. 1-I-50—Marking Back Curtain

BACK WINDOW AND EXTENSIONS ALL SERIES

BACK WINDOW AND EXTENSION REPLACEMENT (INCLUDES TRANSFER OF ZIPPER TO NEW BACK WINDOW)

Removal

1. Place protective covers on all exposed panels which may be contacted during procedures.

2. Remove rear seat cushion and back.

CAUTION: Disconnect rear seat speaker wire if present.

3. Remove folding top compartment side trim panel assemblies and side roof rail rear weatherstrip; 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.

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 material at both locations with a grease pencil (Fig. 1I51). 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 material. 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 nylon webbing from rear trim stick.

9. Operate zipper slide fastener to open position; then detach lower portion of zipper from slide fastener.

10. Remove rear and rear quarter trim sticks with attached back curtain and compartment bag material from body and place on a clean, protected surface.

11. Using chalk, or other suitable material, mark ends of rear and rear quarter trim sticks on vinyl surface of back curtain material (Fig. 1I52). Reference marks for trim sticks should be transferred to new back curtain material when step 4 of installation procedure is performed.

12. Using chalk or similar material, mark zipper tape near upper edge of back window (Fig. 1I53).

13. Remove back curtain assembly from rear and rear quarter trim sticks.

14. As a bench operation, cut stitches securing lower half of zipper assembly to back curtain.

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

Installation

1. Using chalk mark as guide, locate lower half of zipper to new back curtain. Zipper tape may be

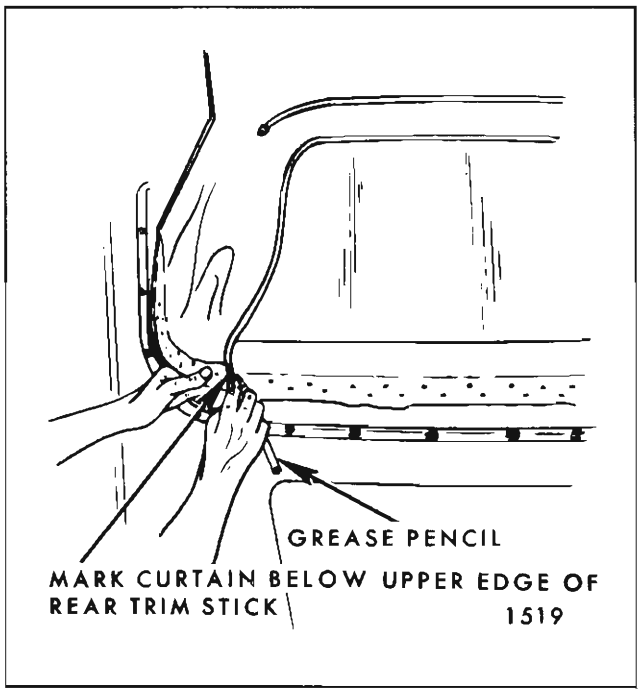


Fig. 1-I-51—Locating Edge of Top Material

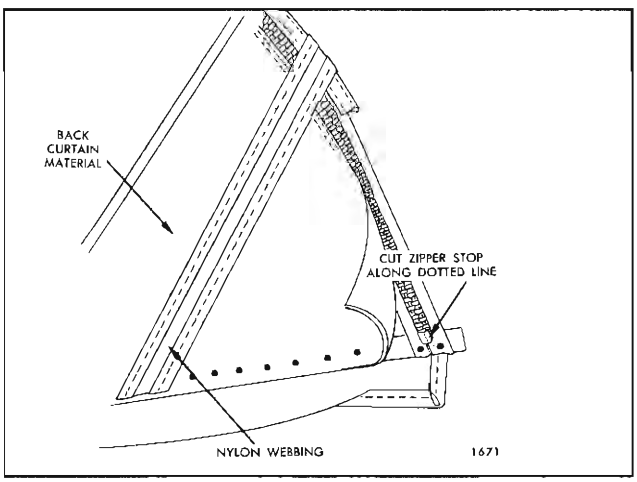


Fig. 1-I-52—Marking Back Curtain

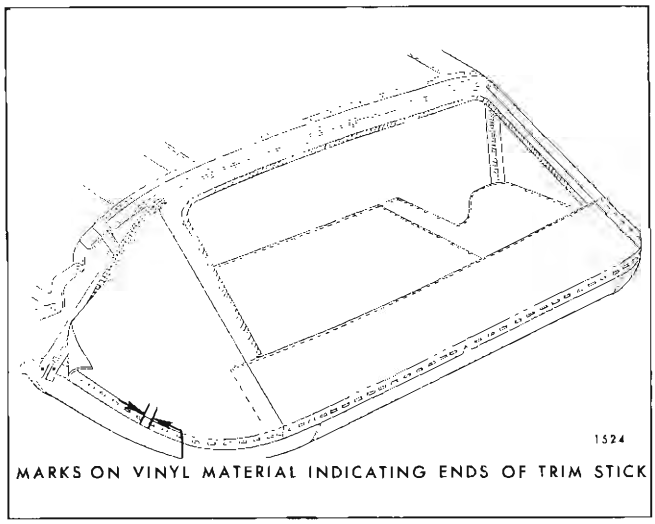


Fig. 1-1-53—Marking Zipper Tape

stapled to new back curtain to aid in holding zipper in proper position during sewing operation.

2. Sew zipper to new back curtain assembly.

3. Place back curtain assembly on clean covered work bench with interior surface of back window facing down.

4. Transfer marks on old back curtain to new back curtain assembly. See steps 5 and 11 of removal procedure.

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

NOTE: Notch in back curtain material at lower edge indicates centerline of back curtain assembly. In addition, back curtain lower edge should extend approximately 1/2" below lower edge of trim sticks.

6. Tack curtain to rear and rear quarter trim sticks.

7. 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.

8. Tack nylon webbing to rear trim stick.

9. Inspect rubber trim stick fillers cemented to body below pinchweld. Re-cement, if necessary.

10. Install trim sticks with attached back curtain assembly into body.

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

11. Engage lower end of zipper into slide fastener; then operate slide fastener to closed position.

12. 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. Re-adjust back curtain assembly by retacking curtain to rear or rear quarter trim sticks.

13. Detach rear trim stick with attached back curtain assembly from body.

14. Carefully replace top in position in rear quarter area.

15. 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.

16. Using previously marked line (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.

17. Install top material into body. Make sure rear and rear quarter trim stick attaching bolts are completely driven in to represent finished condition.

18. Check fit of top material. Rear quarter trim sticks may be adjusted downward to remove minor wrinkles in top material in rear quarter area.

19. Where required, re-mark top material; then make necessary adjustments to top material by repositioning rear quarter trim sticks or by re-tacking top material to rear or rear quarter trim sticks.

20. 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.

21. Where required, remove side roof rail rear weatherstrips. Re-adjust top material at side roof rails and reinstall weatherstrips.

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

FOLDING TOP ADJUSTMENTS
ALL SERIES

DESCRIPTION

The folding top linkage consists of three sections of right and left side roof rails and a front roof rail connected by bolts, hinges, and a series of connecting links and bows. The top linkage is attached to the body at the rear quarter area by a male hinge. The hinge is attached directly to the quarter panel brace. The front roof rail is locked at the windshield header by two hook type locks which are an integral part of the two locking handles.

The following information outlines and illustrates procedures which may be used to correct misaligned folding top linkage. To correct some top variations, 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.

ADJUSTMENT OF FOLDING TOP FRONT ROOF RAIL GUIDE

If the front roof rail guides do not properly engage with the striker assemblies when the top is in an "up" or raised position, the guides may be adjusted laterally as follows:

1. Raise top assembly to half-open position.

2. Loosen guide sufficiently to permit adjustment (Fig. 1I56).

3. Shift guide to desired position; then tighten guide.

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.

2. Loosen side roof rail lock attaching screws and adjust front roof rail fore or aft as required. Repeat on opposite side if necessary (Fig. 1I57).

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

3. When front roof rail is properly adjusted, tighten lock attaching screws. Check forward section of side roof rail front weatherstrip. Re-fit and re-cement as required; then install weatherstrip attaching screws.

FRONT ROOF RAIL LOCK ASSEMBLY

Removal and Installation

1. Unlock top from windshield header.

2. With top in a half-open position, remove lock attaching screws; then, remove lock assembly from front roof rail (Fig. 1I57).

3. To install, reverse removal procedure.

FRONT ROOF RAIL LOCK ADJUSTMENT

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

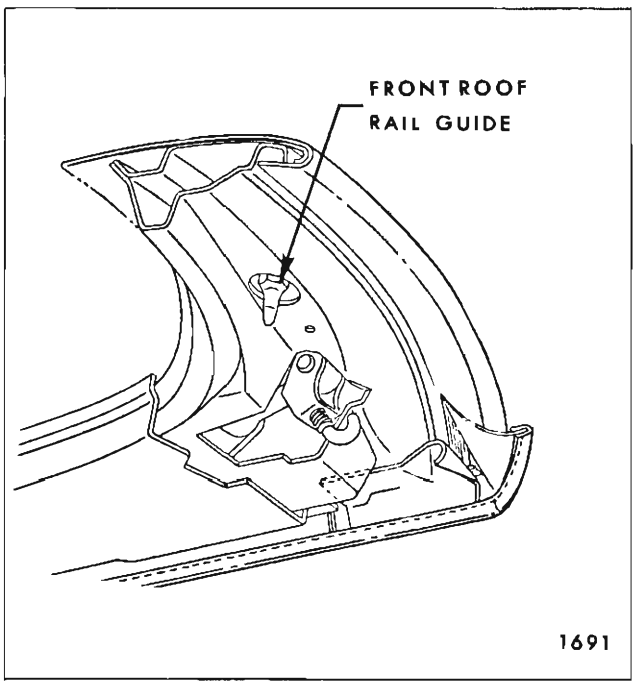


Fig. 1-I-56—Guide Adjustment

1. To tighten or increase locking action, turn lock hook clockwise.

2. To reduce or decrease locking action, turn lock hook counterclockwise.

ADJUSTMENT OF TOP 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.

b. Scribe location of control link adjusting plate on folding top compartment brace.

c. Loosen two bolts securing control link adjusting plate sufficiently to permit adjustment of plate (Fig. 1I58).

d. 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.

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.

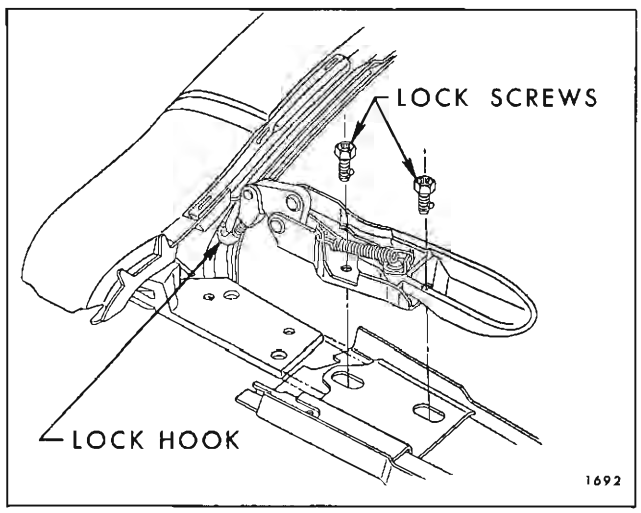


Fig. 1-I-57—Lock Attachment

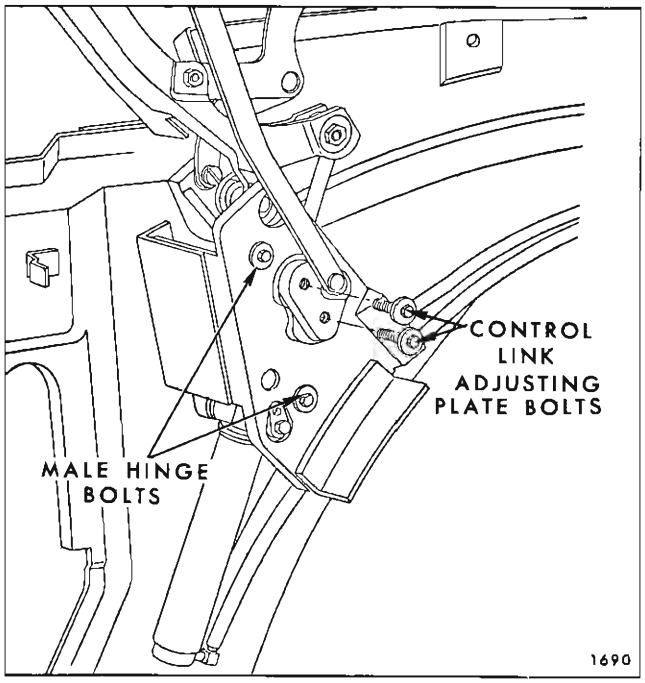


Fig. 1-I-58—Male Hinge Attachment

NOTE: If top cannot be fully lowered, even after control link plate has been adjusted, re-adjust male hinge assembly as required. Check top for proper operation.

ADJUSTMENT OF TOP 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. 1I58).

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 and proper alignment of side roof rails over door and quarter windows. Where required, adjust control link adjusting plate as previously described. (See steps #1 and 2 under "Adjustment of Top Control Link Adjusting Plate").

NOTE: If top cannot be fully raised or lowered, even after control link plate has been adjusted, re-adjust male hinge assembly as required. Check top for proper operation.

2. If side roof rail is too high or too low at rear quarter window area, proceed as follows:

a. Mark location of male hinge attaching bolt washers and control link on folding top compartment brace.

b. Loosen male hinge assembly attaching bolts (Fig. 1I58).

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 quarter windows.

d. Tighten attaching bolts, while maintaining proper alignment of vertical 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 and proper alignment of side roof rails over door and quarter windows. Where required, adjust control link adjusting plate as previously described. (See steps #1 and 2 under "Adjustment of Top Control Link Adjusting Plate").

NOTE: If top cannot be fully raised or lowered, even after control link plate has been adjusted, re-adjust male hinge assembly as required. Check top for proper operation.

DESCRIPTION

The following procedure describes and illustrates various types of folding top misalignment conditions, their apparent causes and the recommended procedure for their correction.

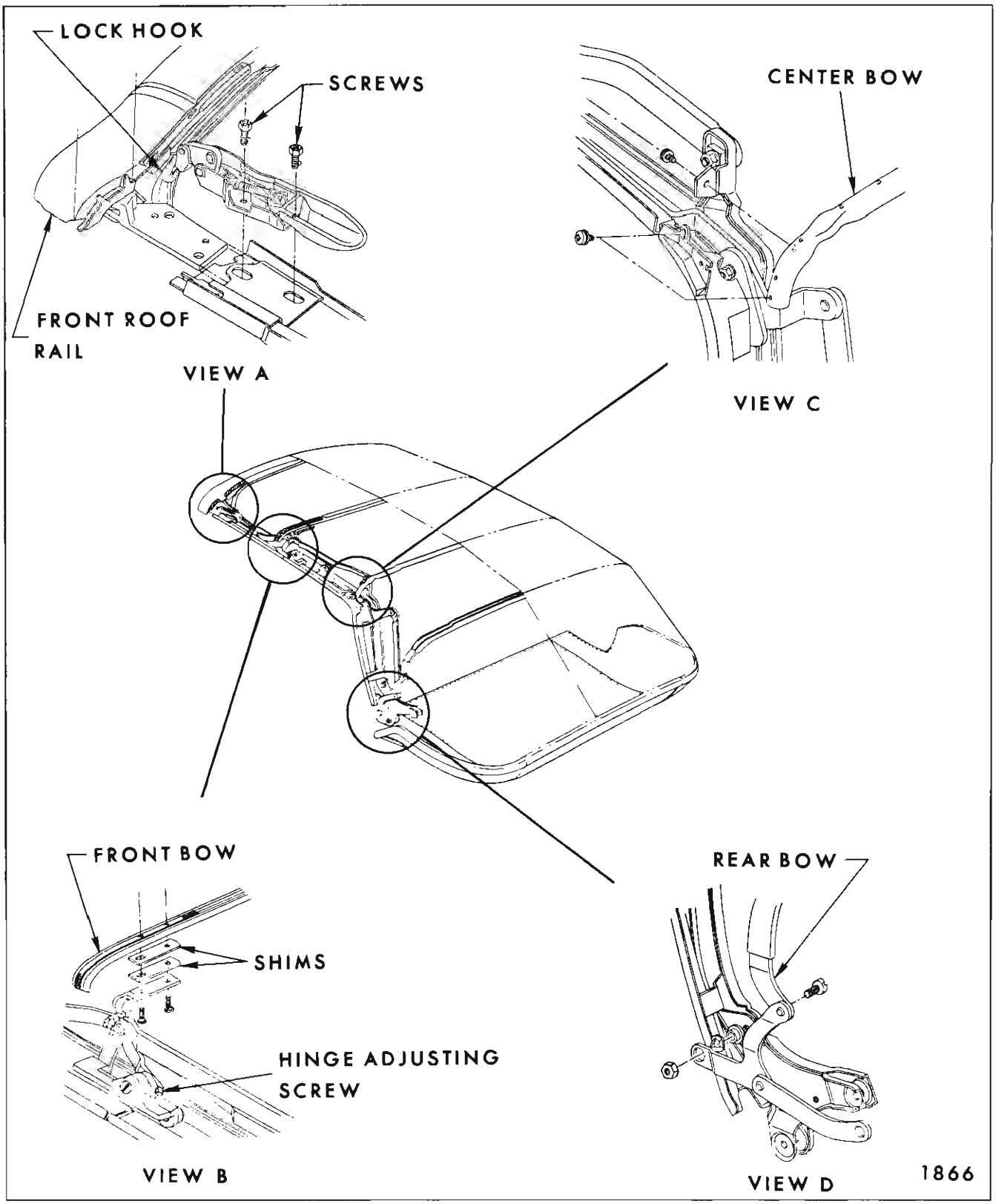


Fig. 1-1-59—Folding Top Adjustments

CONDITION	APPARENT CAUSE	CORRECTION
A. Difficult locking action at front roof rail.	1. Lock hook improperly adjusted.	Adjust lock hook counterclockwise.
	2. Misaligned front roof rail front weatherstrip.	Loosen, realign and retack front roof rail front weatherstrip.
	3. Front roof rail misaligned.	Adjust front roof rail.
B. Top does not lock tight enough to windshield header.	1. Lock hook improperly adjusted.	Adjust lock hook clockwise.
	2. Misaligned front roof rail front weatherstrip.	Loosen, realign and retack front roof rail front weatherstrip.
	3. Front roof rail misaligned.	Adjust front roof rail.
C. Top travels too far forward.	1. Front roof rail misaligned.	Adjust front roof rail rearward (Fig. 1I59).
	2. Male hinge assembly misaligned.	Adjust male hinge assembly rearward (Fig. 1I58).
D. Top does not travel forward far enough.	1. Front roof rail misaligned.	Adjust front roof rail forward (Fig. 1I59).
	2. Male hinge assembly misaligned.	Adjust male ninge assembly forward (Fig. 1I58).
	3. Improper spacing between rear trim stick and body metal.	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 rear of rear quarter window.	1. Male hinge assembly misaligned.	Adjust male hinge assembly rearward (Fig. 1I58).
F. Gap between side roof rail rear weatherstrip and rear of rear quarter window.	1. Male hinge assembly misaligned.	Adjust male hinge assembly forward (Fig. 1I58) and/or shim side roof rail rear weatherstrip forward as required.
G. Side roof rail rear weatherstrip too tight against top of rear quarter window.	1. Male hinge misaligned.	Adjust male hinge upward (Fig. 1I58).
H. Gap between side roof rail rear weatherstrip and top of rear quarter window.	1. Male hinge misaligned.	Adjust male hinge downward and/or shim side roof rail weatherstrip downward as required.
I. Sag at front to center side roof rail joint.	1. Control link adjusting plate misaligned.	Adjust control link adjusting plate downward (Fig. 1I58).
	2. Center side roof rail hinge adjusting screw improperly adjusted.	Adjust screw counterclockwise (Fig. 1I59).

CONDITION	APPARENT CAUSE	CORRECTION
J. Front and center side roof rails bow upward at hinge joint.	1. Control link adjusting plate misaligned.	Adjust control link adjusting plate upward (Fig. 1I58).
	2. Center side roof rail hinge adjusting screw improperly adjusted.	Adjust screw clockwise (Fig. 1I59).
K. Folding top dust boot is difficult to install.	1. Improper stack height due to misaligned control link adjusting plate.	Adjust control link plate rearward or forward as required (Fig. 1I58).
	2. Misaligned folding top dust boot female fastener.	Where possible, align female with male fastener.
	3. Rear seat back assembly is too far forward.	Relocate rear seat back panel rearward until dimension between upper rear edge of rear seat back to forward edge of pinch-weld finishing molding is 21-1/8" ± 1/16". The dimension is measured at approximate centerline of body.
	4. Excessive build-up of padding in side roof rail stay pads.	Repair side stay pads as required.
L. Folding top dust boot fits too loosely.	1. Improper stack height due to misaligned control link adjusting plate.	Adjust control link plate forward (Fig. 1I58).
	2. Rear seat back assembly is too far rearward.	Relocate rear seat back panel forward until dimension between upper rear edge of rear seat back to forward edge of pinch-weld finishing molding is 21-1/8" ± 1/16". The dimension is measured at approximate centerline of body.
M. Top material is too low over windows or side roof rails.	1. Front roof bow improperly shimmed.	*Install one or two 1/8" shims between front roof bow and slat iron (Fig. 1I59).
	2. Excessive width in top material.	If top is too large, detach binding along affected area, trim off excessive 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.	1. Front roof bow improperly shimmed.	*Remove one or two 1/8" shims from between front roof bow and slat iron (Fig. 1I59).

CONDITION	APPARENT CAUSE	CORRECTION
O. Top material has wrinkles or draws.	1. Rear quarter trim stick improperly adjusted.	Adjust rear quarter trim stick on side affected.
	2. Top material improperly installed to center of rear quarter trim stick.	Retack top material as required.
P. Wind whistles or waterleak along front roof rail.	1. Top does not lock tight enough to windshield header.	Adjust lock hook clockwise.
	2. Misaligned front roof rail front weatherstrip.	Retack front weatherstrip to front roof rail.
	3. Front roof rail contour does not conform to windshield header.	Contour of front roof rail may be changed slightly by reforming rail.
Q. Wind whistle or air leak between top material and side roof rail stay pads.	1. 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 #4413016 (1/4-20 x 7/16" oval head with external tooth lock washer, type "T-T" tapping screw, chrome finish) or equivalent.

When two shims are required, use attaching screw part #4412619 (1/4-20 x 3/4" oval head with external tooth lock washer, type "T-T" tapping screw, chrome finish) or equivalent.

HYDRO-LECTRIC SYSTEM
ALL SERIES

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 beneath the rear seat back panel (Fig. 1I60).

Figure 1I61 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 seal 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.

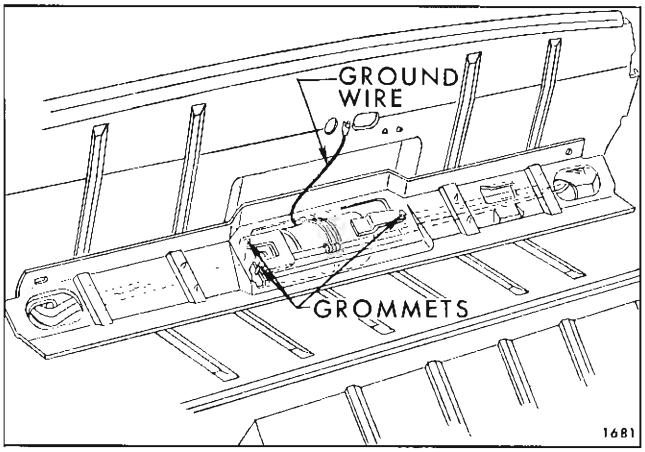


Fig. 1-I-60—Hydro-Lectric Motor and Pump Assembly

MOTOR AND PUMP ASSEMBLY
ALL "B" AND "C" CONVERTIBLE STYLES

Removal

1. Operate folding top to full "up" position.

2. Disconnect positive battery cable.

3. Remove 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 hydraulic hose to rear seat back panel.

6. At rear of seat back panel, disconnect wiring harness and remove ground wire attaching screw (Fig. 1I60).

7. To facilitate removal, apply a rubber lubricant to pump attaching grommets; then, carefully disengage grommets from compartment pan brace.

8. Place absorbent rags below hose connections and end of reservoir.

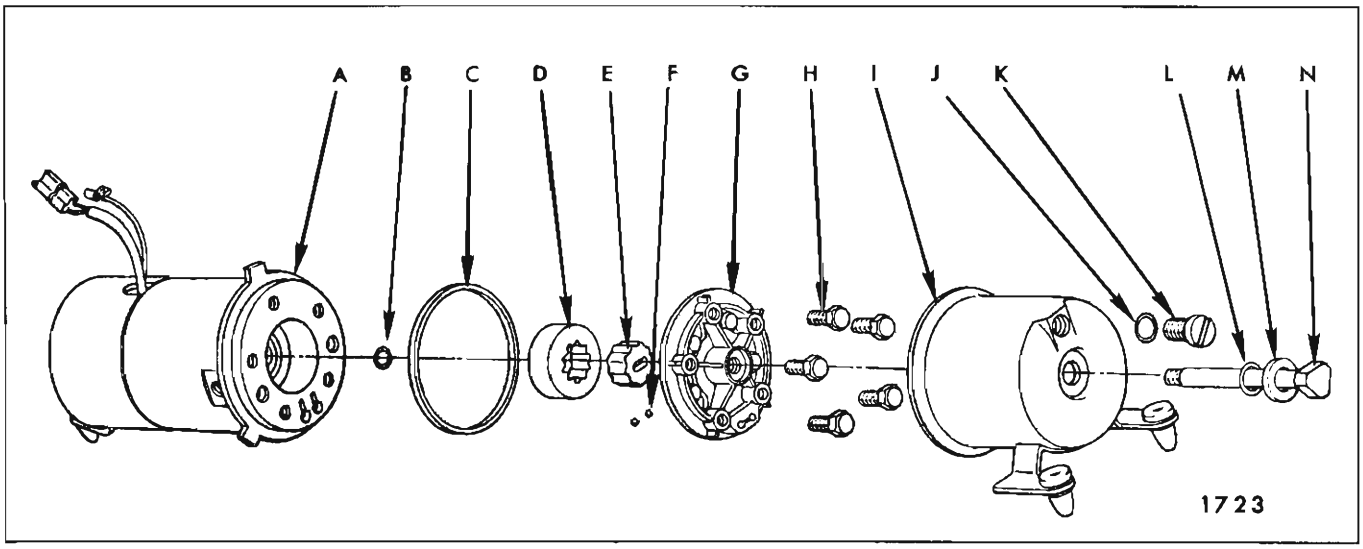


Fig. 1-I-61—Hydro-Lectric Motor and Pump Disassembled

A. Motor Assembly
B. Motor Shaft "O" Ring Seal
C. Reservoir Seal
D. Outer Pump Rotor
E. Inner Pump Rotor
F. Fluid Control Valve Balls
G. Pump Cover Plate Assembly
H. Pump Cover Attaching Screws
I. Reservoir Tube and Bracket Assembly
J. Reservoir Filler Plug "O" Ring Seal
K. Reservoir Filler Plug
L. Reservoir End Plate Attaching Bolt "O" Ring Seal
M. Reservoir End Plate Attaching Bolt Washer
N. Reservoir End Plate Attaching Bolt

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 body.

Installation

1. If a replacement unit is being installed, fill reservoir unit with specified Delco No. 11 Hydraulic Fluid (GM 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 all previously removed parts.

RESERVOIR TUBE

Disassembly From Motor and Pump Assembly

1. Remove motor and pump assembly from body.

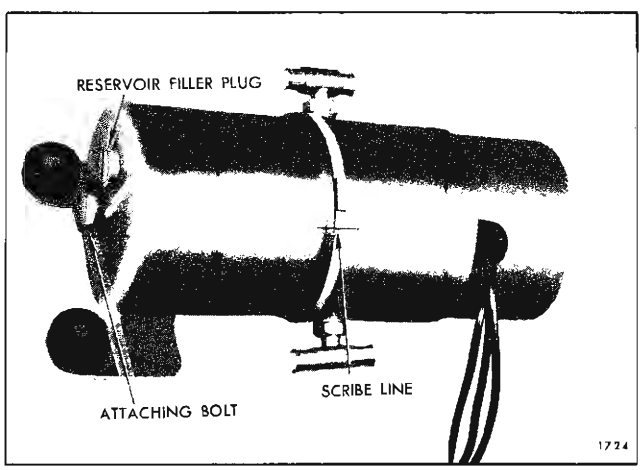


Fig. 1-1-62—Hydro-Lectric Motor and Pump Assembly

2. Scribe a line across pump end plate and reservoir tube to insure a correct assembly of parts. See Fig. 1162.

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 tube. Note sealing rings around bolt 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.

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

2. Install and tighten attaching bolt.

3. Place unit in horizontal position and fill with fluid until fluid level is within 1/4 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 ALL "B" AND "C" CONVERTIBLE STYLES

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 ALL "B" AND "C" CONVERTIBLE STYLES

The rotor type pump assembly is designed to

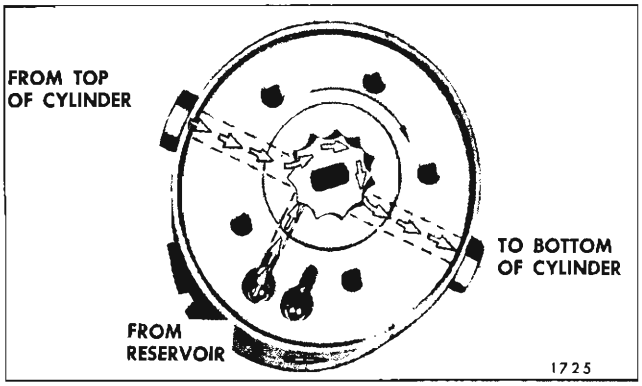


Fig. 1-I-63—Operation of Pump to Raise Top

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 1I63. The action of the pump rotors forces the fluid 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 1I64. 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

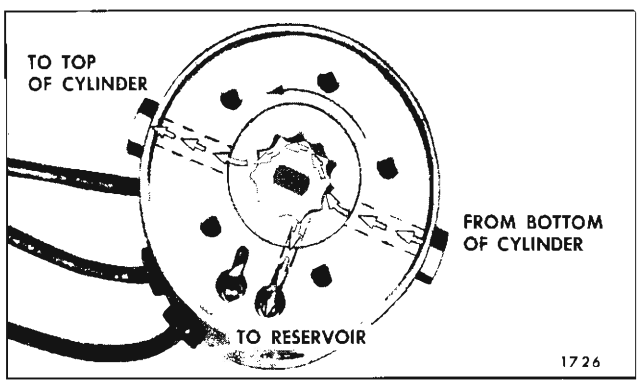


Fig. 1-I-64—Operation of Pump to Lower Top

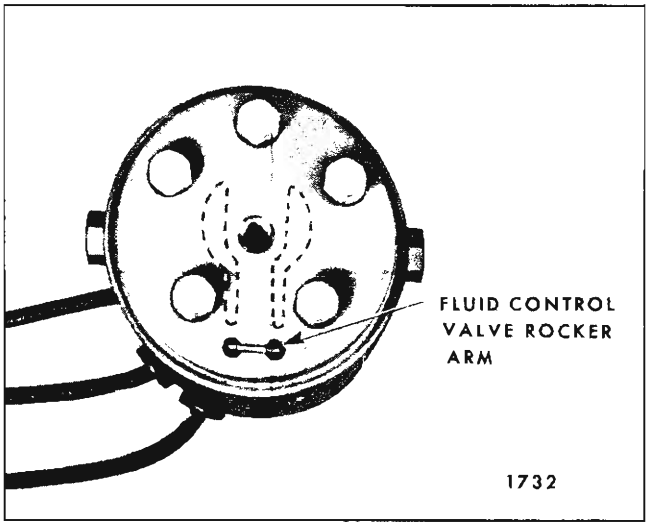


Fig. 1-I-65—Pump Cover Plate

installed in the pump cover plate, and two steel balls. Figure 1I65 shows the top surface of the pump coverplate. The dotted lines indicate the cavities on the bottom side of the coverplate. The cavities are designed to permit fluid flow between pump rotors and the reservoir.

Figure 1I66 and Figure 1I67 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

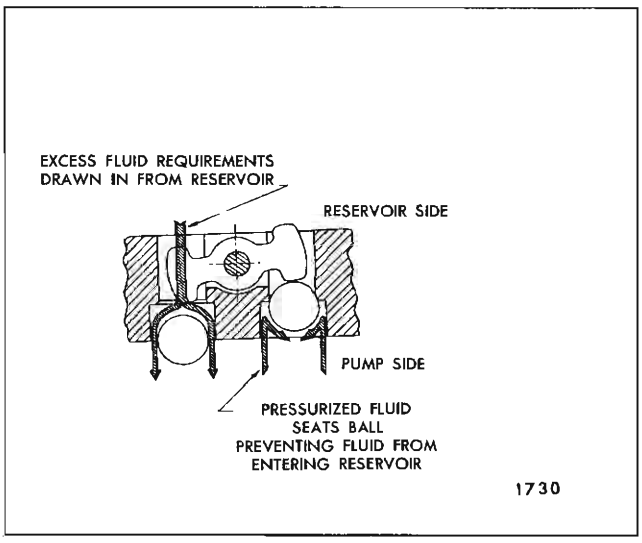


Fig. 1-I-66—Fluid Control Valve

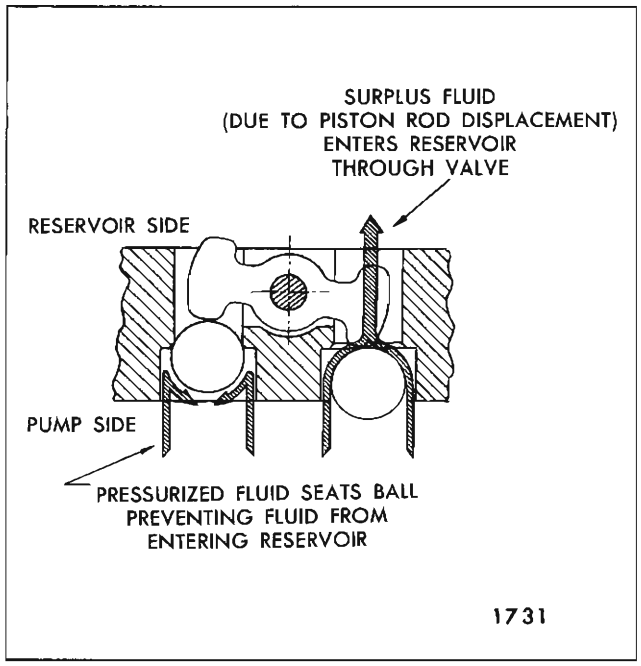


Fig. 1-1-67—Fluid Control Valve

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 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 hydro-lectric 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.

d. If light tester does not light, there is an open or short circuit between power source and switch.

2. Checking 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 #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.

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 Fig. 1168.

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.

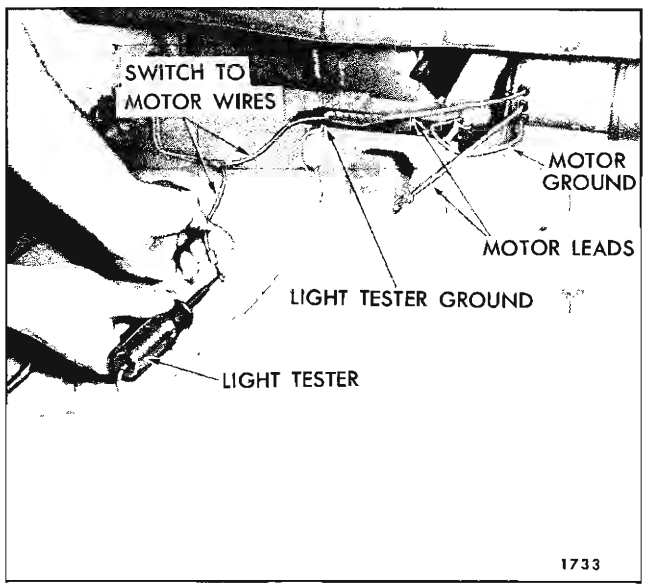


Fig. 1-1-68—Checking Motor Wiring

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. (See Fig. 1I60).

b. Connect a #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 ALL "B" AND "C" CONVERTIBLE STYLES

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. Remove rear seat cushion and back.

c. Detach front edge of folding top compartment bag from rear seat back panel.

d. Remove clips securing hydraulic hose to rear seat back panel.

e. Disengage pump attaching grommets from compartment pan brace.

f. Place absorbent rags below reservoir at filler plug.

g. With a straight-bladed screwdriver, remove filler plug. Fluid level should be within 1/4 inch of lower edge of filler plug hole.

h. If fluid is low, add Delco #11 Hydraulic Fluid (GM Hydraulic Brake Fluid Super #11 or its equivalent) to bring to specified level. See "Filling of Hydro-Lectric Reservoir".

i. Install filler plug.

j. Install motor and pump assembly and all previously removed parts.

2. Checking Operation of Lift Cylinders

a. Remove rear seat cushion and back 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 uncoordinated 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 Fig. 1I69).

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.

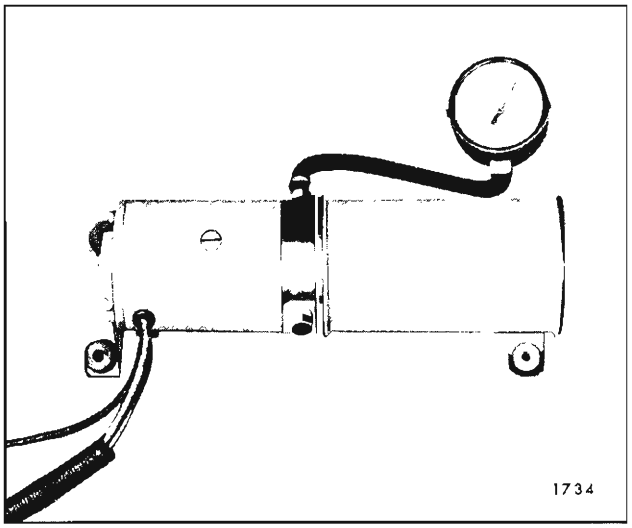


Fig. 1-1-69—Checking Pump Pressure

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

Removal and Installation

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 clips securing hydraulic hose to rear seat back panel.

6. Remove attaching nut, bolt and bushing from upper end of cylinder (Fig. 1I70).

7. Remove inner and outer bolt securing cylinder to male hinge (Fig. 1I70).

8. Carefully move cylinder to inboard side of top compartment brace, exposing upper and lower hydraulic hose to cylinder connections.

9. Prior to disconnecting hydraulic connections, place suitable wiping rags under connections to absorb any drippage of hydraulic fluid.

10. Disconnect hydraulic connections from old cylinder and transfer to new cylinder assembly.

11. Install new cylinder to male hinge.

12. Connect positive battery cable to battery terminal.

13. Using power, raise cylinder piston rod to extended position.

14. Attach upper end of cylinder to folding top linkage using previously removed nut, bolt, bushing and washer.

15. 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".

16. Install hydraulic hose to rear seat back panel with clips.

17. Install all previously removed trim and hardware.

FILLING OF HYDRO-LECTRIC RESERVOIR ALL "B" AND "C" CONVERTIBLE STYLES

This procedure virtually eliminates discharge or

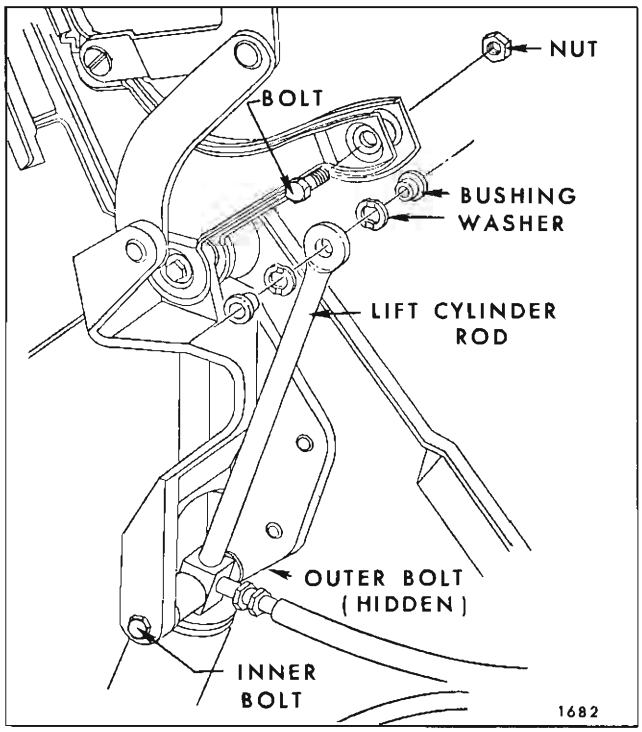


Fig. 1-1-70—Hydraulic Lift Cylinder Attachment

spillage of hydraulic fluid and possible trim damage while filling and bleeding system.

1. Filler Plug Adapter

a. Drill 1/4 inch diameter hole through center of spare reservoir filler plug.

b. Install two inch length of metal tubing (1/4" O.D. x 3/16" I.D.) into center of filler plug and solder tubing on both sides of filler plug to form air tight connection. (See Fig. 1I71).

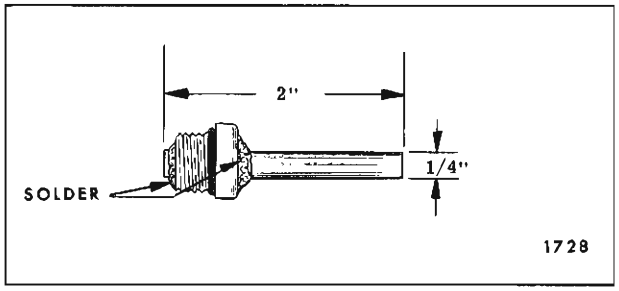


Fig. 1-1-71-Reservoir Filler Plug Adapter

2. Filling and Bleeding of Reservoir

a. With top in raised position, remove rear seat cushion and back.

b. Working inside body, detach front edge of folding top compartment bag from rear seat back panel.

c. Remove clips securing hydraulic hose to rear seat back panel.

d. To facilitate removal, apply a rubber lubricant to pump attaching grommets; then, carefully disengage grommets from compartment pan brace.

e. 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.

f. Install filler plug adapter to reservoir and attach four to five foot length of 3/16 inch I.D. rubber tubing or hose to filler plug tubing.

g. Install opposite end of hose into a container of GM Hydraulic Brake Fluid Super #11 or equivalent.

NOTE: Container may be placed on floor pan area beneath rear seat. However, fluid in container must be below level of fluid in reservoir. In addition, sufficient fluid must be available in container to avoid drawing air into hydraulic system.

h. 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.

i. Operate top several times or until operation of top is consistently smooth in both up and down cycles.

j. Remove hose from filler plug tubing and remove filler plug adapter from reservoir.

k. Check level of fluid in reservoir and reinstall original filler hole plug.

NOTE: Fluid level should be within 1/4 inch of lower edge of filler plug hole.

FABRIC ROOF COVER

ROOF PANEL FABRIC COVER ALL STYLES EXCEPT 68069

DESCRIPTION

The roof panel fabric cover is a vinyl coated fabric covering applied to the roof panel. The fabric covering is made in sections which are dielectrically joined at the seams.

On 25-26000 Series "39" styles and all 68000 Series a felt pad is located between the fabric cover and roof panel. The felt pad is cemented to the roof panel with nitrile type non-staining cement. The roof panel fabric is cemented around the perimeter only and not to the felt pad.

On all other styles the roof panel fabric is cemented to the entire surface of the roof panel with nitrile type non-staining cement.

The roof panel cover is attached at the windshield and back window opening by drive nails or staples. Drive nails are used at the belt line of the rear quarter area. A flexible retainer secures the fabric cover inside the right and left drip moldings.

Removal

1. The following parts must be removed prior to removing the roof panel fabric cover:

a. Windshield assembly.

b. Back window assembly.

c. Roof drip molding scalps.

d. Rear quarter belt reveal moldings.

e. Roof extension panel emblem and/or plate assembly.

f. Roof panel molding rear of quarter window or rear door (68339-57).

2. Clean off all excess adhesive caulking material from windshield and back window openings.

3. Remove drive nails and/or staples from edge of fabric cover at windshield, back window openings, and at roof panel extension (at belt.)

NOTE: Drive nails can best be removed by first driving a screwdriver or suitable tool under the heads of the nails to loosen them. Diagonal cutters or similar tool can then be used to grasp nails and twist them out. Unnecessary enlargement of holes in roof panel should be avoided.

4. Remove flexible retainers securing fabric cover inside right and left drip moldings. (See View A, Fig. 1J1). The retainers may be removed by inserting tip of screwdriver or similar tool under retainer at front of drip molding. While exerting slight outward force on drip molding with pliers, disengage fingers of retainer from drip molding flange. Do not damage drip molding.

NOTE: New flexible retainers should be used when replacing fabric cover.

5. Prior to removing fabric cover, application of heat to cemented areas will permit easier loosening of cemented edges.

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

6. Loosen cemented edges of fabric roof cover at windshield, side roof rails, back window, and rear quarter areas; then, carefully remove fabric cover from remaining cemented area of roof panel.

IMPORTANT: On 25-26000 Series "39" styles and 68000 Series, exercise care when removing fabric cover so felt pad will not be damaged.

7. Inspect felt padding and, if necessary, replace damaged area. Felt padding (1/16") should be used for replacement. Padding may be removed by applying xylol solvent such as 3M Adhesive Cleaner, or equivalent to affected area. Allow solvent to dissolve adhesive and remove padding. Exercise care to avoid excessive softening to roof panel paint finish.

8. Replace felt pad by cementing felt pad to roof panel with nitrile vinyl trim adhesive.

Installation

1. Check all cementing surfaces on body to insure a smooth surface. Cementing surface must be smooth to prevent "highlighting" of excess cement through fabric cover after new cover has been installed. Clean off old cement as required.

NOTE: A xylol solvent such as 3M Adhesive Cleaner or equivalent, should be used to remove or smooth out excess old cement. Apply solvent and allow to soak before rubbing.

CAUTION: Be certain to follow manufacturer's directions when using cleaner.

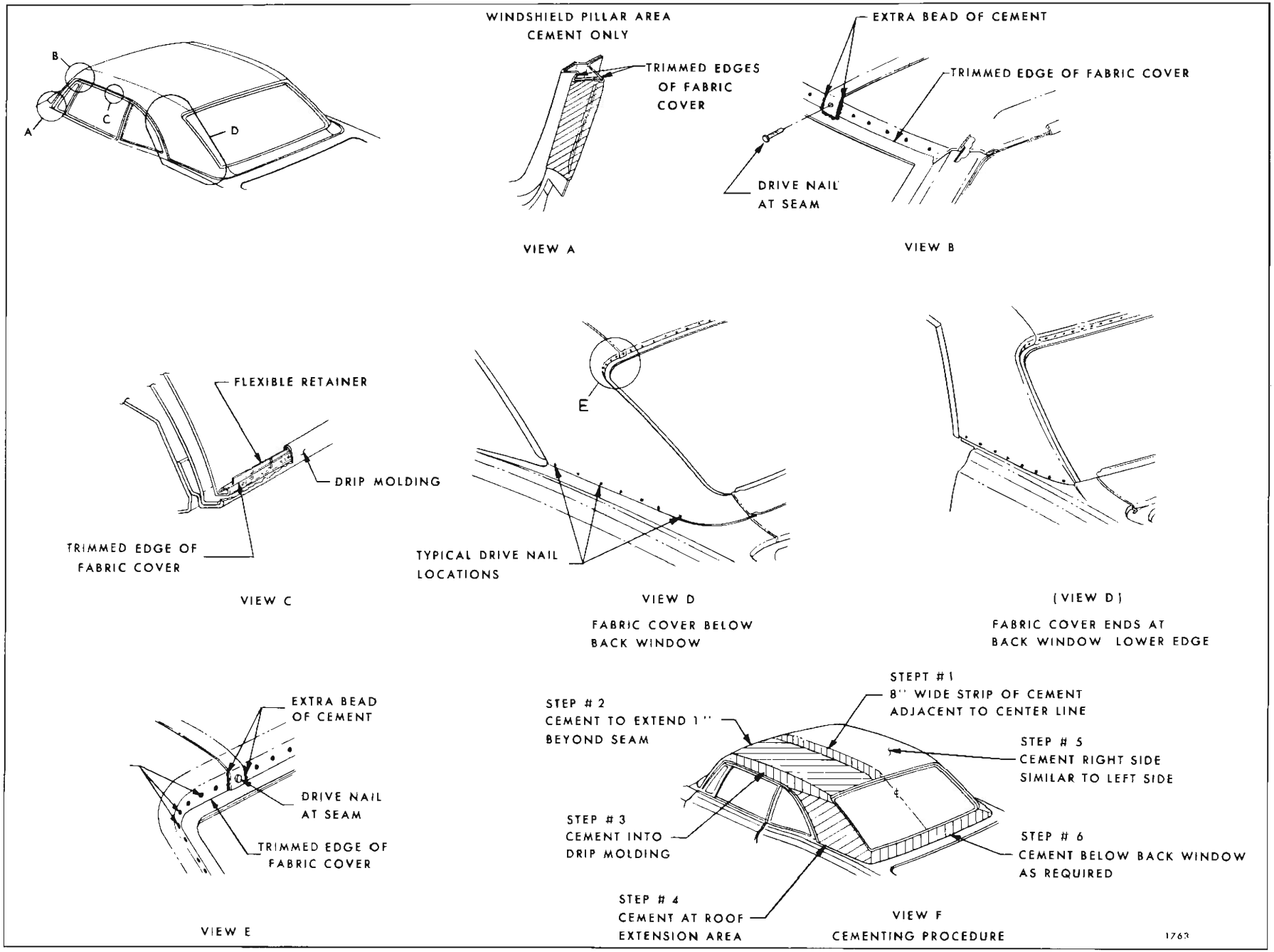


Fig. 1J1—Fabric Roof Cover Installation

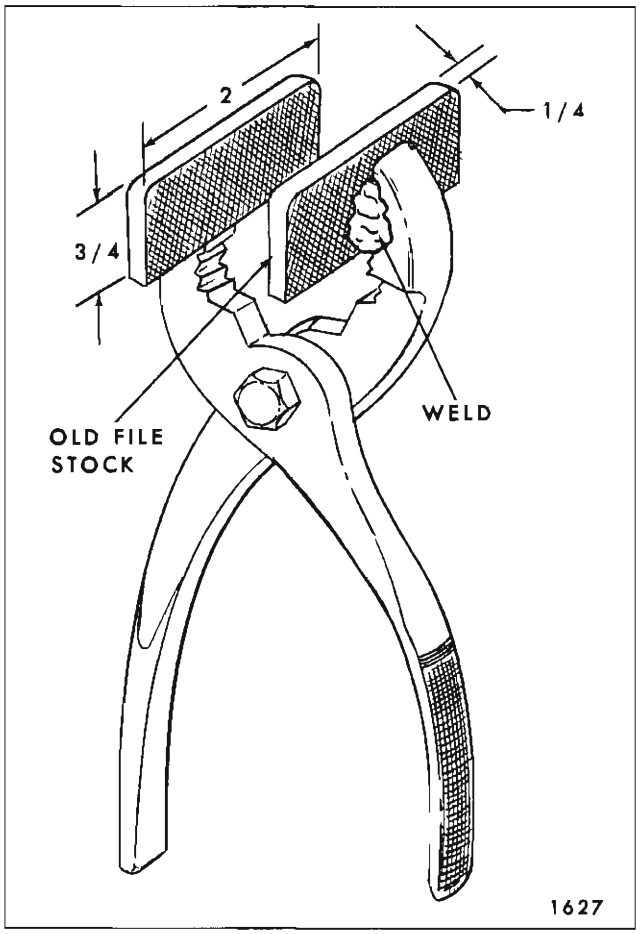


Fig. 1J2—Fabric Cover Pliers

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

NOTE: Where new cover is installed at temperatures below 72°, pliers fabricated as shown in Figure 1J2 will aid in removing wrinkles.

3. Determine center line of roof panel by marking center points on windshield and back window opening with chalk or equivalent.

4. Fold cover lengthwise, precisely at center location. Mark center location at front and rear of cover.

5. Lay cover on roof panel and align to correspond with center line of roof panel. Determine proper material overhang at windshield and back window openings.

6. On styles with felt pad position and install fabric cover as follows:

a. Apply nitrile vinyl trim adhesive to inner perimeter of fabric cover and the exposed areas

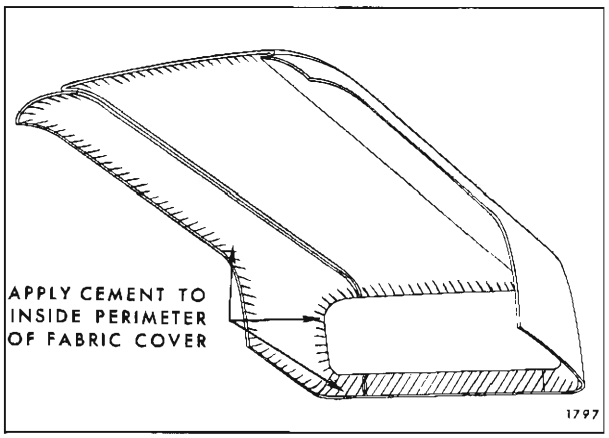


Fig. 1J3—Cementing Fabric Cover With Pad

of the roof panel where fabric cover is attached (See Fig. 1J3). (3M Vinyl Trim Adhesive, Permalastic Vinyl Trim Adhesive, or equivalent.) Allow to dry for fifteen minutes.

NOTE: If nitrile adhesive is not available, use neoprene type non-staining weatherstrip cement. (3M Super Weatherstrip Cement or equivalent.) Do not allow drying period.

IMPORTANT: No cement should come in contact with felt pad.

b. At back window opening, install a drive nail at each seam location. View "E" in Figure 1J1 is typical of both seam locations at back window opening.

NOTE: When installing drive nails, it is best to first use an awl or similar tool to start a hole in metal. Drive nails at seam locations should be installed only far enough to hold cover, since repositioning of the cover may be necessary. Installation of drive nails should also be as low as possible in windshield and back window opening to prevent cutting edge of fabric cover by hammer blows.

c. Apply extra bead of cement to each side of dielectric seams between fabric cover and roof panel at back window opening. (View E, Fig. 1J1).

d. At front of body, carefully stretch fabric cover forward and install a drive nail in windshield opening at each seam location. (View "B", Fig. 1J1).

e. Carefully smooth out cover to each side roof rail and attach cover (cement only). Check fit of cover.

f. At right roof extension, pull fabric cover down and rearward and fasten cover (cement only) into back window opening. Also stretch and fasten cover (cement only) at belt area. When operation is completed, fabric cover should be free of all wrinkles and draws in this area.

g. Repeat step F at left rear quarter area.

h. Position fabric cover around back window where required.

i. Cement fabric cover to rear compartment front and shelf panel below back window opening. Be certain dielectric seams are straight.

j. Install and cement fabric cover at windshield pillar area in same manner as original installation (See View "A", Fig. 1J1).

k. Check fabric cover center to side section seams. Seams should be straight. Where necessary, adjust cover along side roof rails.

l. Install cover into roof drip moldings. Be sure center to side section seams are straight after cover has been installed.

NOTE: When installing fabric cover to inside of drip molding, a small thin-edged piece of plastic or similar material may be used to insert cover in place inside drip rails. Exercise care so damage will not occur to cover when performing this operation.

7. On styles without felt pad; position and install the fabric cover as follows:

a. Place fabric cover on protected surface with inner layer of material exposed.

b. Apply nitrile non-staining vinyl trim adhesive such as 3M Vinyl Trim Adhesive, Permalastic Vinyl Trim Adhesive, or the equivalent to entire inner layer of fabric cover. Allow to dry for minimum of fifteen minutes.

If nitrile non-staining cement is not available, neoprene type non-staining weatherstrip cement (3M Super Weatherstrip Cement or equivalent) may be used. Instead of apply neoprene cement to entire inner layer of cover in one application, a step procedure is used. Begin by applying an 8" wide strip of cement adjacent to center line of fabric cover (See View "F", Fig. 1J1).

IMPORTANT: Application of nitrile vinyl trim adhesive should be as thin as possible, as an excess amount of cement may result in trapped solvents (blisters) between fabric cover and roof panel. Application of neoprene type adhesive should also be as thin as possible as an excess amount of cement may result in "highlights" (cement build-up). For these reasons, a mohair roller or equivalent should be used to apply a thin coat of cement to fabric cover and roof panel; however, if necessary, a brush may be used. Exercise care when applying cement on inner layer of cover to prevent cement from contacting outer layer.

c. Fold cover on center line with inner layer of cover exposed and place on roof panel adjacent to center line. Apply an 8" wide strip of cement (nitrile or neoprene) on roof panel adjacent to center line of roof panel. (See View "F", Fig. 1J1).

d. With aid of helper, slide folded cover to center line of roof panel. Holding fabric cover securely at windshield and back window opening, turn over folded half of fabric cover and fasten to cemented portion of roof panel.

NOTE: This operation should center fabric cover on roof panel. Center marks on windshield and back window openings must correspond to center marks on fabric cover.

e. Once 8" strip of fabric cover is cemented to roof panel, fold over side portion of fabric cover. Apply nitrile cement to roof panel to extend approximately 1" beyond dielectric seam location. If neoprene type weatherstrip cement is used, apply cement to fabric cover and roof panel to extend 1" beyond dielectric seam location. (See View "F", Fig. 1J1).

IMPORTANT: Application of cement should not overlap with previously cemented area, as "highlighting" of excess cement through fabric cover will result.

f. Cement prepared portion of fabric cover to roof panel making certain dielectric seam is straight.

g. Cement fabric cover to side portion of roof panel (except rear quarter area) and drip molding.

NOTE: When installing fabric cover to inside of drip molding, a small thin edged piece of plastic, or similar material, may be used to insert cover in place inside drip molding. Exercise care to prevent damage to cover when performing this operation.

h. Cement fabric cover in rear quarter area.

i. Repeat steps, E, F, G and H on right side.

j. At windshield and back window openings cement cover into opening. Apply extra bead of cement to each side of dielectric seam between fabric cover and roof panel at windshield and back window openings. (View "B & E", Fig. 1J1).

k. Position fabric cover around back window where required.

l. Cement fabric cover to rear compartment front and shelf below back window opening. Be certain dielectric seams are straight. (See View "A" Fig. 1J1).

8. Using hammer and flat end punch install drive nails at windshield and back window openings. (View "E", Fig. 1J1 shows typical drive nail installation).

NOTE: When installing drive nails it is best to first use an awl or similar tool to initiate a hole in metal. Drive nails should be spaced approximately 2" apart on styles with felt pad and 3" apart for other styles in a straight area, and 1" apart at a radius. Strike drive nails only hard enough to seat them. Installation of drive nails should also be as low as possible in windshield and back window opening. This will aid in preventing cutting edge of fabric cover due to a missed hammer blow when drive nails are installed.

9. Install drive nails at belt line of roof extension area.

10. Trim off material at windshield, back window, and roof extension area (belt).

NOTE: Install fabric cover at windshield pillar area in same manner as original installation. (See View "A", Fig. 1J1).

11. Using fabric cover trimming tool (J-21092), or suitable small knife, trim fabric cover just under lip of roof drip molding. (View "C", Fig. 1J1). A tool may be fabricated to trim material along side roof rail moldings as illustrated in Figure 1J4.

12. Prior to installing flexible retainers in side roof rail drip moldings, spread them slightly to insure a tight fit.

13. Install flexible retainer starting at radius area above rear door or quarter window. Working toward rear of body, carefully insert retainer into drip molding so that fingers are under drip molding flange. (See View "C", Fig. 1J1). Use fibre or wood block with slight concave end to push retainer downward. DO NOT DAMAGE RETAINER.

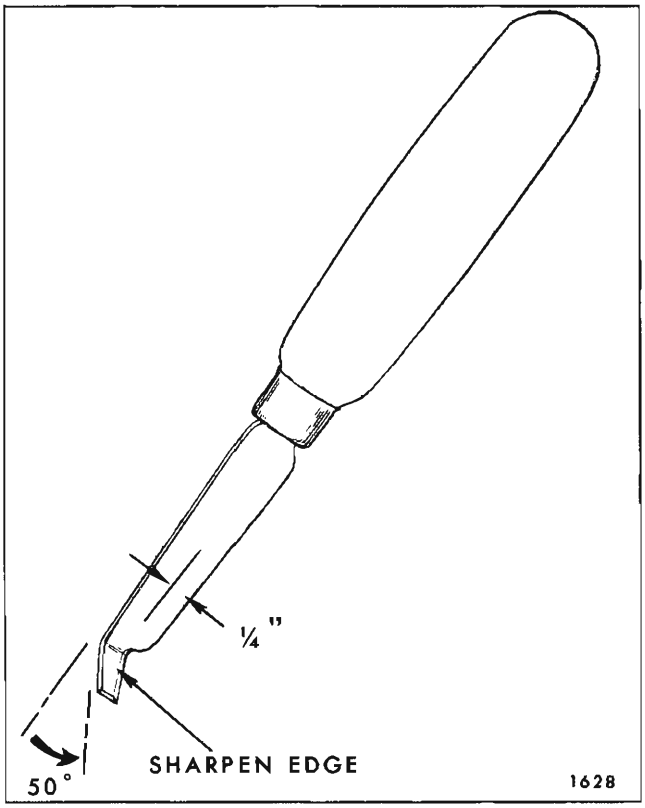


Fig. 1J4—Fabric Cover Trimming Knife

14. On styles with screw on rear roof drip molding, compress rear of retainer to insure a tight fit and install on rear drip molding.

15. Install all previously removed moldings and assemblies.

NOTE: Normally minor creases or fold marks will gradually disappear after cover assembly has been in service.

IMPORTANT: If nitrile adhesive is used, fabric cover should be allowed to dry approximately four hours after installation. If fabric cover is subjected to extreme direct sunlight or heat immediately after installation, blistering due to trapped solvents may occur.

16. Use mineral spirits, kerosene or equivalent to remove windshield and back window adhesive caulking material from fabric cover.

IMPORTANT: Do not apply excessive pressure when wiping cover as damage may occur to fabric cover.

ROOF PANEL FABRIC COVER ASSEMBLY—68069 STYLE

DESCRIPTION

The roof panel fabric cover is a vinyl coated fabric covering applied to the roof panel. A felt pad is located between the fabric cover and roof panel. The roof cover is cemented to the roof panel around the perimeter, adjacent to the felt pad and below the back window. Roof panel cover retainers are also used to secure the cover at the front, right and left sides.

Removal

1. The following parts must be removed prior to removing the roof panel fabric cover:

a. Roof Panel Cover Front Finishing Molding

b. Roof Panel Cover Front Finishing Escutcheon

c. Roof Panel Cover Side Front Finishing Molding

d. Roof Panel Cover Side Rear Finishing Molding

e. Rear End Belt Cover Finishing Molding

f. Back Window Assembly

g. Roof Panel Extension Emblem

2. Clean off all adhesive caulking material from back window opening.

3. With tape or other suitable method of marking, mark the fabric cover seams at the front and at back window pinchweld to insure proper location of new cover during installation.

4. Remove drive nails and/or staples from edge of fabric cover at back window opening and roof panel extension (belt).

NOTE: Drive nails can best be removed by first driving a screwdriver or suitable tool under the heads of the nails to loosen them. Diagonal cutters or similar tool can then be used to grasp nails and twist them out. Unnecessary enlargement of holes in roof panel should be avoided.

5. Remove roof panel cover front and side retainers by removing spring clips from weld-on studs. (See View B Fig. 1J5).

6. Prior to removing fabric cover, application of heat will permit easier loosening of cemented area.

7. Loosen cemented edges of fabric roof cover and carefully remove fabric cover from remaining cemented area of roof panel.

IMPORTANT: Exercise care when removing fabric cover so felt pad will not be damaged.

8. Inspect felt padding and, if necessary, replace damaged areas. Felt padding (1/16") should be used for replacement. Padding may be removed by applying xylol solvent such as 3M Adhesive Cleaner or equivalent to affected area. Allow solvent to dissolve adhesive and remove padding. Exercise care to avoid excessive damage to paint finish.

9. Replace felt pad by cementing felt pad to roof panel with nitrile vinyl trim adhesive.

Installation

1. Completely mask off area of roof panel which is not covered by fabric cover. Extend tape over windshield upper reveal molding so solvent will not contact paint or adhesive caulking material.

2. Check all cementing surfaces on body to insure a smooth surface. Cementing surface must be smooth to prevent "highlighting" of excess cement through fabric cover after new cover has been installed.

NOTE: A xylol solvent such as 3M Adhesive Cleaner or equivalent, should be used to remove or smooth out excess old cement. Apply solvent and allow to soak before rubbing.

CAUTION: Be certain to follow manufacturer's directions when using cleaner.

3. To permit easier fitting and removing of wrinkels from new cover assembly, where possible, install new cover at room temperature (approximately 72°).

NOTE: Where new cover is installed at temperatures below 72°, pliers fabricated as shown in Figure 1J2 will aid in removing wrinkles.

4. Lay out new fabric cover on clean protected surface with inner layer of material exposed.

5. Apply nitrile vinyl trim adhesive to inner perimeter of fabric cover. (3M Vinyl Trim Adhesive, Permalastic Vinyl Trim Adhesive, or equivalent). Allow to dry for fifteen minutes. (See Fig. 1J3).

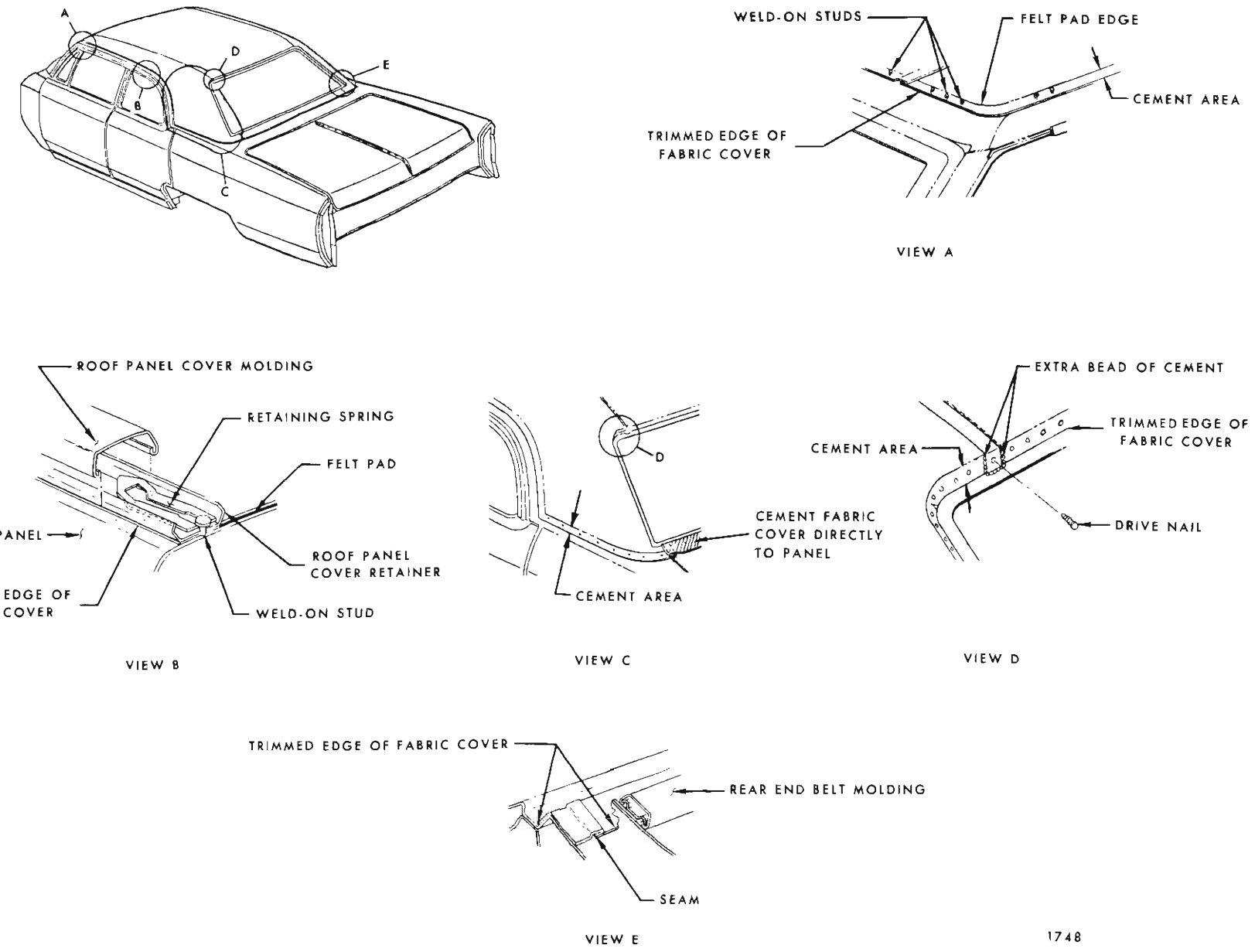


Fig. 1J5—Fabric Roof Cover Installation

NOTE: If nitrile adhesive is not available, use neoprene type non-staining weatherstrip cement. (3M Super Weatherstrip Cement or equivalent). Do not allow drying period.

IMPORTANT: Application of nitrile vinyl trim adhesive should be as thin as possible, as an excess amount of cement may result in trapped solvents (blisters) between fabric cover and roof panel. Application of neoprene type adhesive should also be as thin as possible as an excess amount of cement may result in "highlights" (cement build-up). Exercise care when applying cement on inner layer of cover to prevent cement from contacting outer layer.

6. With the aid of a helper position fabric cover over roof panel and align seams at locating marks previously made at front edge and at back window pinchweld during removal.

7. Apply cement to exposed attaching surface of roof panel and back window pinchweld flange.

IMPORTANT: No cement should contact the felt pad or uncovered portion of paint surface. (See Fig. 1J5).

8. As fabric cover is cemented to prepared portion of roof panel cut relief notches in fabric cover at weld-on stud locations.

9. At back window opening, install a drive nail at each seam location. View "D" in Figure 1J5.

NOTE: When installing drive nails, it is best to first use an awl or similar tool to start a hole in metal. Drive nails at seam locations should be installed only far enough to hold cover, since repositioning of the cover may be necessary. Installation of drive nails should also be as low as possible in back window opening to prevent cutting edge of fabric cover by hammer blows.

10. Apply extra bead of cement to each side of dielectric seams between fabric cover and roof panel at back window opening. (View "D", Fig. 1J5).

11. Cement fabric at left roof extension area. (See View C & D, Fig. 1J5). Pull fabric down and rearward and fasten (cement only) into back window opening. When operation is completed, fabric cover should be free of all wrinkles and draws in this area.

12. Repeat step 11 on right side.

13. Position and install fabric cover below back window opening (See View C, Fig. 1J5).

14. Cement fabric cover to rear compartment front and shelf panel below back window opening. Be certain dielectric seams are straight.

15. Make sure that fabric cover is completely cemented around back window opening.

16. Using flat end punch and hammer, install drive nails at back window opening and roof extension area (belt).

NOTE: When installing drive nails it is best to first use an awl or similar tool to initiate a hole in metal. Nails should be spaced approximately 2" apart on the straight and 1" in the radius. Strike drive nails only hard enough to seat them. Installation of drive nails should also be as low as possible in back window opening. This will aid in preventing cutting edge of fabric cover due to a missed hammer blow when drive nails are installed.

17. Position roof panel cover retainers over weld-on studs and install retaining clips.

18. Trim fabric cover along roof panel molding retainers. (See Fig. 1J6). Trimming tool (J-21092) or suitable small knife may be used to trim cover. (See Fig. 1J4). Do Not Damage Paint Finish. At front corners, raise cemented edge of cover and using scissors or sharp knife cut radius so roof panel moldings cover cut edge. Recement fabric cover to roof panel. (See View A, Fig. 1J5).

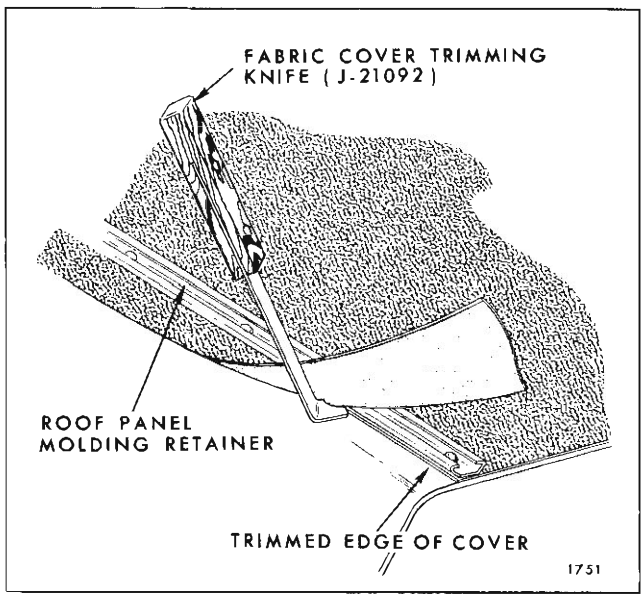


Fig. 1J6—Trimming Fabric Roof Cover

If it is necessary to trim material from outer edge of fabric cover around back window opening, raise cemented edge and cut as required. Edge of fabric cover should exist as shown in View F, Fig. 1J5. Do Not Damage Paint Finish. Remove masking from roof panel.

19. Install all previously removed moldings and assemblies.

NOTE: Normally, minor creases or fold marks will gradually disappear after cover assembly has been in service.

IMPORTANT: If nitrile adhesive is used, fabric cover should be allowed to dry approximately four hours after installation. If fabric cover is subjected to extreme direct sunlight or heat immediately after installation, blistering due to trapped solvents may occur.

20. When installing back window be certain to protect fabric cover from coming in contact with adhesive caulking material. Adhesive caulking material will permanently damage fabric cover material. Masking tape should be applied around back window opening. Tape may extend 1/4" into openings.

21. Use mineral spirits, kerosene or equivalent to remove back window adhesive caulking material from fabric cover.

IMPORTANT: Do not apply excessive pressure when wiping cover as damage may occur to fabric cover.

22. When installing roof extension panel emblems, be certain to apply adequate sealer between fabric cover and emblems.

EXTERIOR MOLDINGS

EXTERIOR MOLDINGS

The exterior moldings for Body Series 15000 - 16000, 25000 - 26000, 35000 - 36000 - 38000, 45000 - 46000 - 48000 and 68000 are illustrated in Figures 1K3 thru 1K5; 1K6 thru 1K9; 1K10 thru 1K13; 1K14 thru 1K16; 1K17 thru 1K19. These figures illustrate moldings common to body types (2 door, 4 door and Station Wagons) and not specific body series, except when indicated. The molding charts identify the moldings to specific body styles and or body series.

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 1K2 illustrates typical attachments for body moldings. The moldings shown in this figure are for illustrations only and are not necessarily identified to a specific body series.

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

1. 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.

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.

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

Drip moldings require a 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 1/8" x 1/4" x 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 require waterproof tape over the entire pinchweld, prior to clip installation.

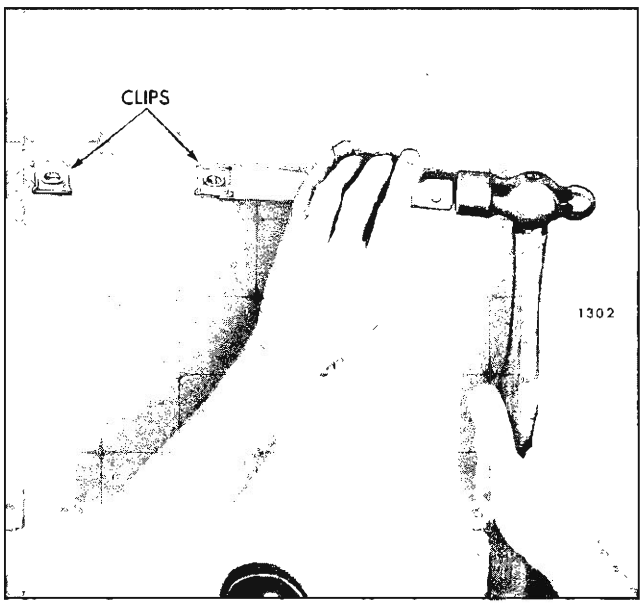


Fig. 1K1—Removal of Bath-Tub Type Clip

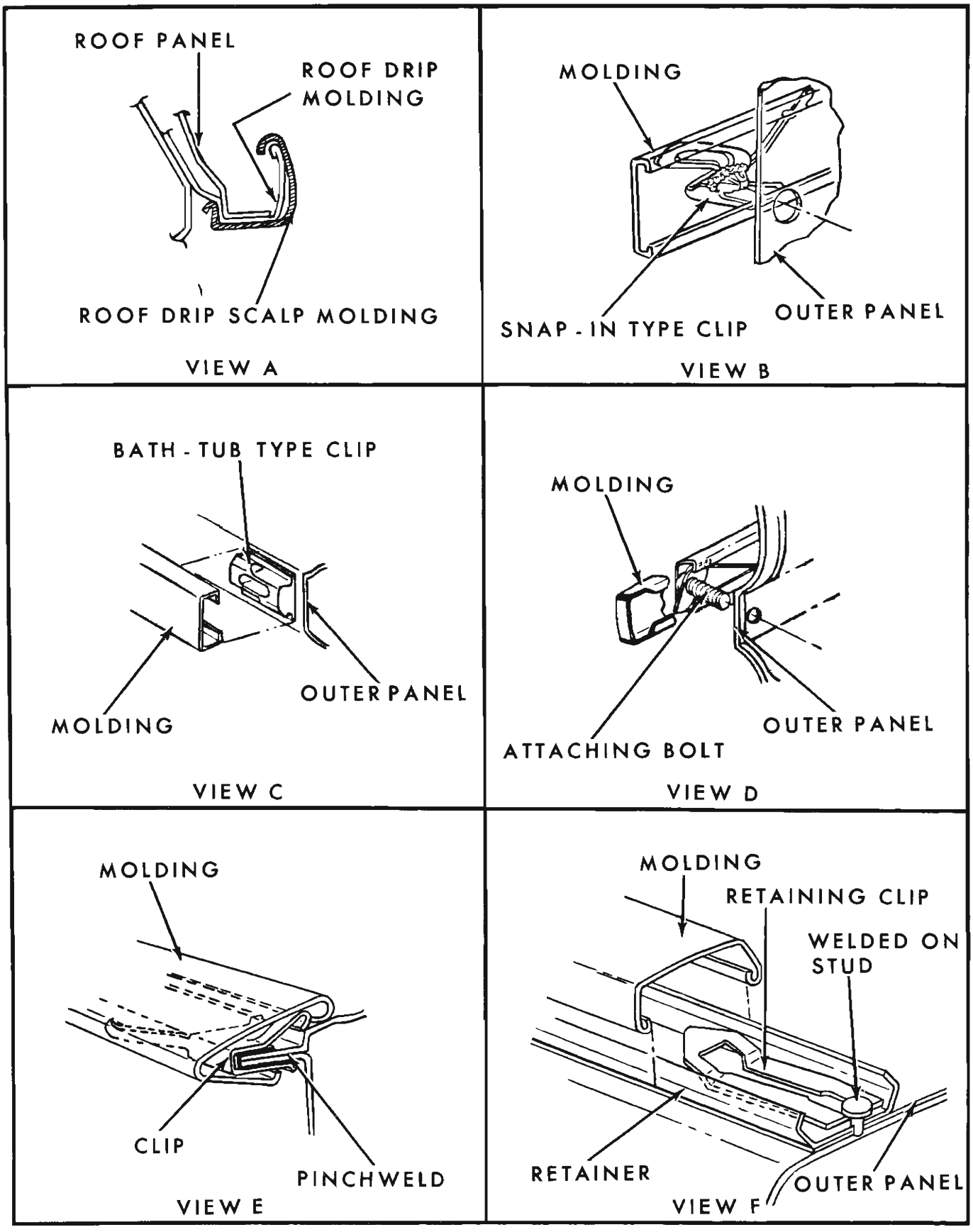


Fig. 1K2—Typical Molding Attachments

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

Roof Drip Scalps - pointed hook tool

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

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. 1K1) then disengage clip from hole.

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

2. Special tool J-21214 is required when installing metal bath-tub type clips.

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

If it is necessary to replace a damaged or broken welded on stud to panel, use the following removal and installation procedure:

1. Drill out broken stud.

2. Insert self sealing screw thru bath-tub type clip and into outer panel.

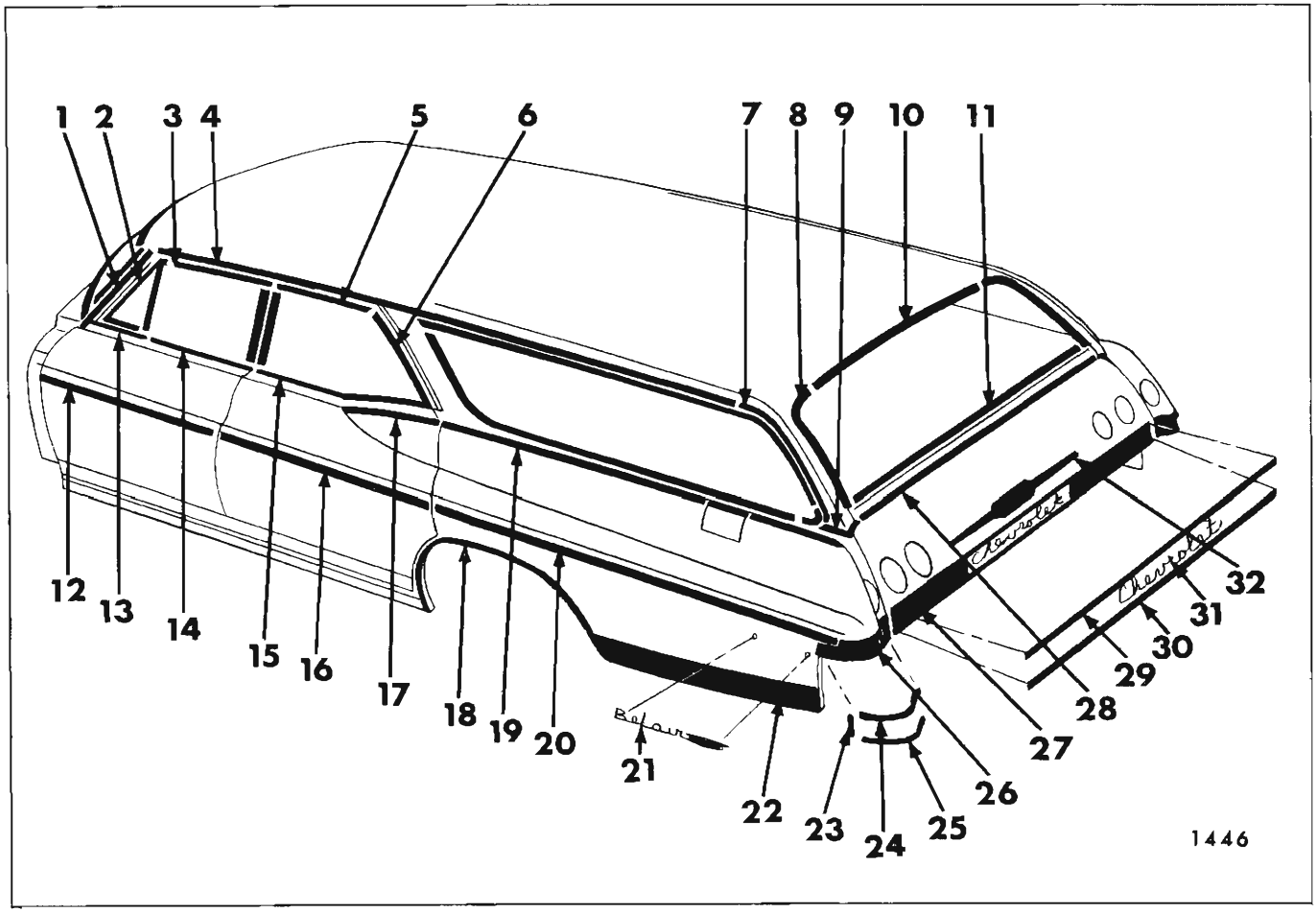


Fig. 1K3—15000-16000 Series "35"-"45" Styles

1. Windshield Pillar Drip Molding
2. Front Door Window Frame Front Scalp Molding
3. Front Door Window Frame Upper Scalp Molding
4. Roof Drip Molding Front Scalp
5. Rear Door Window Frame Upper Scalp Molding
6. Rear Door Window Frame Rear Scalp Molding
7. Roof Drip Molding Rear Scalp
8. Back Body Opening Side Reveal Molding
9. Back Body Pillar Belt Reveal Molding
10. Back Body Opening Upper Reveal Molding
11. Tail Gate Window Reveal Molding
12. Front Door Outer Panel Lower Molding
13. Front Door Window Reveal Molding (at Vent)
14. Front Door Window Reveal Molding
15. Rear Door Window Reveal Molding
16. Rear Door Outer Panel Lower Molding
17. Rear Door Outer Panel Peak Molding
18. Rear Wheel Opening Molding
19. Rear Fender Outer Panel Peak Molding
20. Rear Fender Outer Panel Lower Molding
21. Rear Fender Outer Panel Name Plate
22. Rear of Rear Wheel Opening Molding
23. Rear of Rear Fender Outer Panel Lower Vertical Molding
24. Rear of Rear Fender Outer Panel Upper Molding
25. Rear of Rear Fender Outer Panel Lower Molding
26. Rear of Rear Fender Outer Panel Molding
27. Tail Gate Outer Panel Lower Molding
28. Tail Gate Outer Panel Lower Belt Reveal Molding
29. Tail Gate Outer Panel Upper Molding
30. Tail Gate Outer Panel Lower Molding
31. Tail Gate Outer Panel Name Plate
32. Tail Gate Outer Panel Emblem

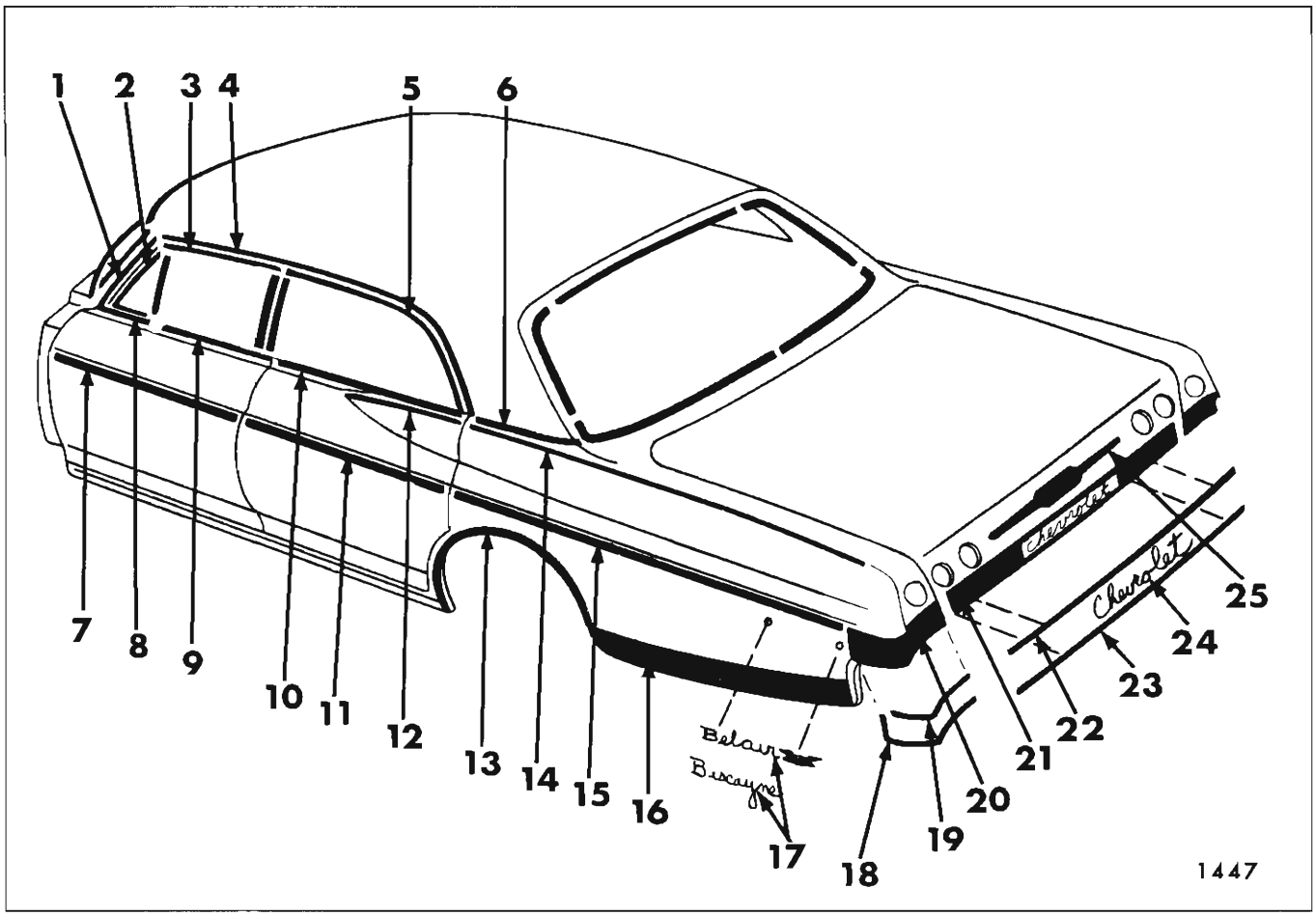


Fig. 1K4—15000-16000 Series "69" Styles

1. Windshield Pillar Drip Molding
2. Front Door Window Frame Front Scalp Molding
3. Front Door Window Frame Upper Scalp Molding
4. Roof Drip Molding Front Scalp
5. Rear Door Window Frame Upper Scalp Molding
6. Quarter Belt Reveal Molding
7. Front Door Outer Panel Lower Molding
8. Front Door Window Reveal Molding (at Vent)
9. Front Door Window Reveal Molding
10. Rear Door Window Reveal Molding
11. Rear Door Outer Panel Lower Molding
12. Rear Door Outer Panel Peak Molding
13. Rear Wheel Opening Molding
14. Rear Fender Outer Panel Peak Molding
15. Rear Fender Outer Panel Lower Molding
16. Rear of Rear Wheel Opening Molding
17. Rear Fender Outer Panel Name Plate
18. Rear of Rear Fender Outer Panel Lower Molding
19. Rear of Rear Fender Outer Panel Upper Molding
20. Rear of Rear Fender Outer Panel Molding
21. Rear End Outer Panel Molding Assembly
22. Compt. Lid Outer Panel Lower Molding
23. Rear End Outer Panel Lower Molding
24. Rear End Outer Panel Name Plate
25. Rear Compartment Lid Emblem

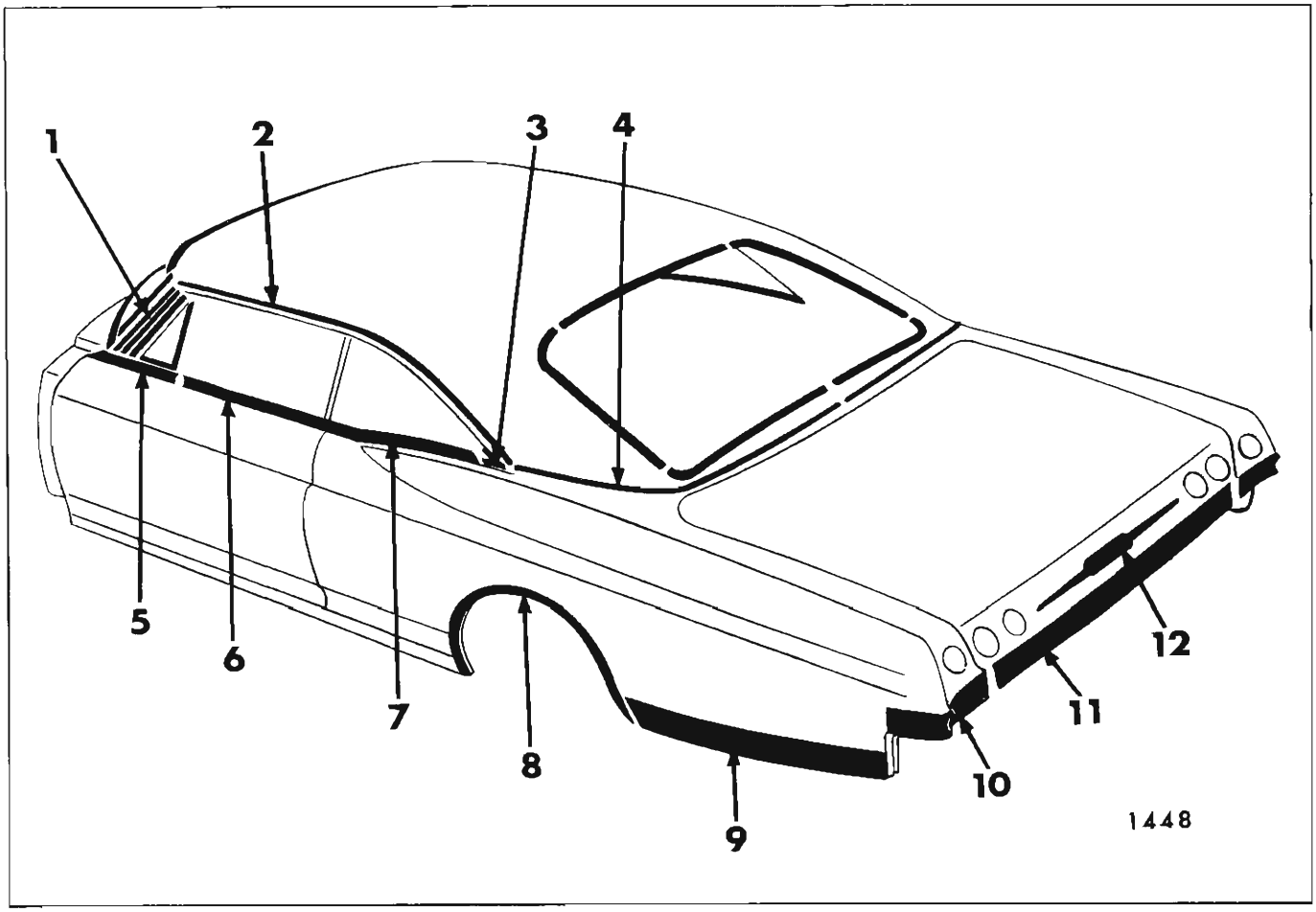


Fig. 1K5—16000 Series "37" Styles

1. Windshield Pillar Drip Molding
2. Roof Drip Molding Scalp
3. Quarter Window Lower Reveal Molding Escutcheon
4. Quarter Belt Reveal Molding
5. Front Door Window Reveal Molding (at Vent)
6. Front Door Window Reveal Molding
7. Rear Quarter Window Reveal Molding
8. Rear Wheel Opening Molding
9. Rear of Rear Wheel Opening Molding
10. Rear of Rear Fender Outer Panel Molding
11. Rear End Outer Panel Molding Assembly
12. Rear Compartment Lid Emblem

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Windshield Pillar Drip	All (except 67)	X						Weatherstrip and Weatherstrip Retainer at Windshield Pillar
Windshield Pillar Finishing	67	X						Windshield Pillar Weatherstrip and Weatherstrip Retainer Windshield side reveal Molding
Roof Drip Scalp	11, 37, 69		X View A				Windshield Pillar Drip	
Roof Drip Molding Front Scalp	35, 45, 39		X View A				Windshield Pillar Drip	
Roof Drip Molding Rear Scalp	35, 45, 39		X View A				Roof Drip Molding Front Scalp	
Front Door Window Frame Front Scalp	35, 45, 69		X				Front Door Window Frame Upper Scalp	
Front Door Window Frame Upper Scalp	35, 45, 69		X				Front Door Window Frame Rear Scalp	
Front Door Window Reveal (at vent)	All (except 11)		X					Front Door Vent Assembly (35, 45, 69 Styles) Front Door Trim Pad (37, 39, 67 Style)
Front Door Window Reveal	All (except 11)		X				Front Door Window Reveal (at vent)	Rubber Bumper on Front Door Window Lower Stop

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Rear Door Window Frame Upper Scalp	35, 45, 69		X				Rear Door Window Frame Rear Scalp (35, 45 Styles only)	
Rear Door Window Frame Rear Scalp	35, 45		X					
Rear Door Window Reveal	35, 39, 45, 69	X						Rubber Bumper on Rear Door Window Lower Stop
Quarter Window Front Reveal	11		X				Quarter Window Upper Reveal	
Quarter Window Upper Reveal	11		X					
Quarter Window Lower Reveal	37, 67	X						Quarter Window Lower Stop
Quarter Window Lower Reveal Escutcheon	37	X					Quarter Window Lower Reveal Roof Drip Molding Scalp	
NOTE: Quarter Window Reveal Moldings on 35, 45 Styles are Covered in Rear Quarter Section due to Glass Installation.								
Quarter Belt Reveal	11, 69, 39			X	X View B			
Quarter Belt Reveal	37				X View B	X View D	Right Side Overlaps Left Side	
Quarter Pinchweld Finishing	67	X			X View E		Right Side Overlaps Left Side Quarter Window Lower Reveal	

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Front Door Outer Panel Lower	11, 35, 45 69	X		X View C				
Rear Door Outer Panel Peak	35, 69	X		X View C	X View B			
Rear Door Outer Panel Lower	35, 45, 69	X		X View C				
Rear Fender Outer Panel Peak	35 Right Side 11, 69 Right & Left Side			X View C	X (11 Styles only) View B	X View D		Spare Tire Cover (35 Styles only)
Rear Fender Outer Panel Front Peak	35 (Left Side)			X View C	X View B			
Rear Fender Outer Panel Rear Peak	35 (Left Side)			X View C	X View B			
Gas Tank Filler Door Outer Panel Peak	35	X						
Rear Fender Outer Panel Lower	11, 69, 35 45			X View C	X (Right Side on 35, 45 Styles only) View B	X View D		Quarter Trim Left Side (35, 45 Styles only)
Rear Wheel Opening	All except 11 Styles	X						
Rear of Rear Wheel Opening	All except 11 Styles	X		X View C				

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Rear Fender Outer Panel Name Plate	35, 45 (Left Side)			X				
Rear Fender Outer Panel Name Plate	35, 45 Right Side, 11, 69 Right & Left					X		Spare Tire Cover (35, 45 Style only)
Rear of Rear Fender Outer Panel	16400, 16600 except 35, 45 Style	X				X	Rear End Outer Panel Molding Assembly	Rear Quarter Outer Panel Extension
Rear of Rear Fender Outer Panel	16435, 45	X			X View B			
Rear of Rear Fender Outer Panel Lower	15600	X			X (35, 45 Style only) View B	X (11, 69 Style only)	Rear of Rear Fender Outer Panel Lower Vertical (35, 45 Styles only) Rear End Outer Panel (11, 69 Styles only)	Rear Quarter Outer Panel Extension (11, 69 Styles only)
Rear of Rear Fender Outer Panel Lower Vertical	15635, 45	X			X View B		Rear Fender Outer Panel Lower	
Rear of Rear Fender Outer Panel Upper	15600	X (35, 45 Styles only)			X (35, 45 Styles only) View B	X (11, 69 Styles only)	Rear Fender Outer Panel Lower (35, 45 Styles only)	Rear Quarter Outer Panel Extension (11, 69 Styles only)
Rear Compartment Lid Outer Panel	all except 35, 45	X						
Rear Compartment Lid Outer Panel Emblem Assembly	all except 35, 45					X		

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Rear End Outer Panel Molding Assembly	16400,16600 (except 35, 45)					X		
Rear End Outer Panel	15611, 69					X		
Rear End Outer Panel Name Plate	11, 69					X		
Back Body Opening Upper Reveal	35, 45	X					Back Body Opening Side Reveal	
Back Body Opening Side Reveal	35, 45	X					Back Body Opening Upper Reveal	
Tail Gate Window Reveal	35, 45	X			X			Tail Gate Window and Regulator
Tail Gate Outer Panel Belt Reveal	35, 45	X			X View B			
Tail Gate Outer Panel Name Plate	35, 45					X		
Tail Gate Outer Panel Upper	15634,45	X			X View B			
Tail Gate Outer Panel Lower	15634,45				X View B			
Tail Gate Outer Panel Lower Molding Assembly	16435,45					X		
Back Body Pillar Belt Reveal	35, 45	X			X View B			

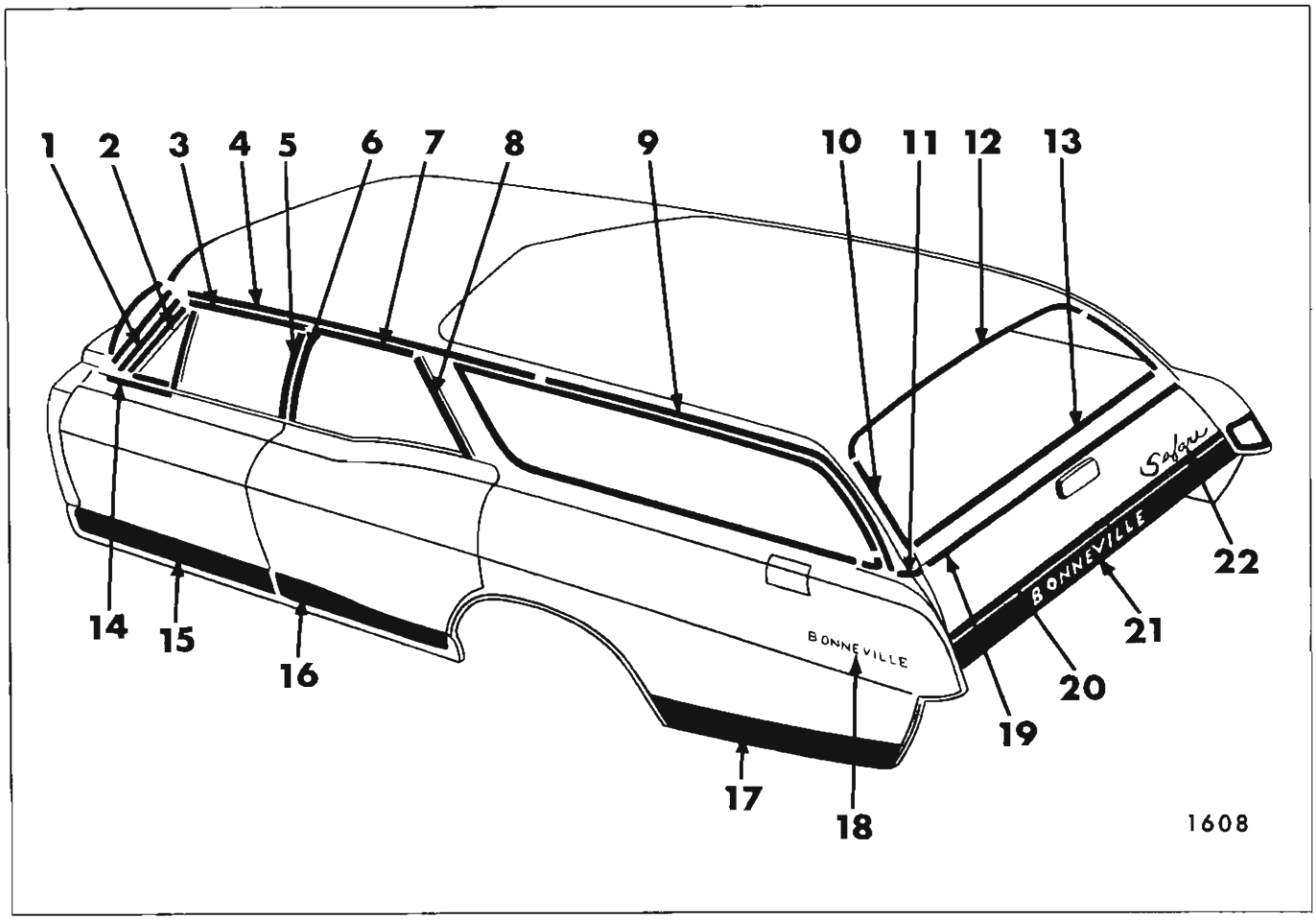


Fig. 1K6—25000-26000 Series "35"-"45" Styles

1. Windshield Pillar Drip Molding
2. Front Door Window Frame Front Scalp Molding
3. Front Door Window Frame Upper Scalp Molding
4. Roof Drip Molding Front Scalp
5. Front Door Window Frame Rear Scalp Molding
6. Rear Door Window Frame Front Scalp Molding
7. Rear Door Window Frame Upper Scalp Molding
8. Rear Door Window Frame Rear Scalp Molding
9. Roof Drip Molding Rear Scalp
10. Back Body Opening Side Reveal Molding
11. Back Body Pillar Belt Reveal Molding
12. Back Body Opening Upper Reveal Molding
13. Tail Gate Window Lower Reveal Molding
14. Front Door Window Reveal Molding (at Vent)
15. Front Door Outer Panel Lower Molding
16. Rear Door Outer Panel Lower Molding
17. Rear of Rear Wheel Opening Molding
18. Rear Fender Outer Panel Name Plate
19. Tail Gate Outer Panel Belt Reveal Molding
20. Tail Gate Outer Panel Upper Molding
21. Tail Gate Outer Panel Lower Molding Assembly
22. Tail Gate Outer Panel Name Plate

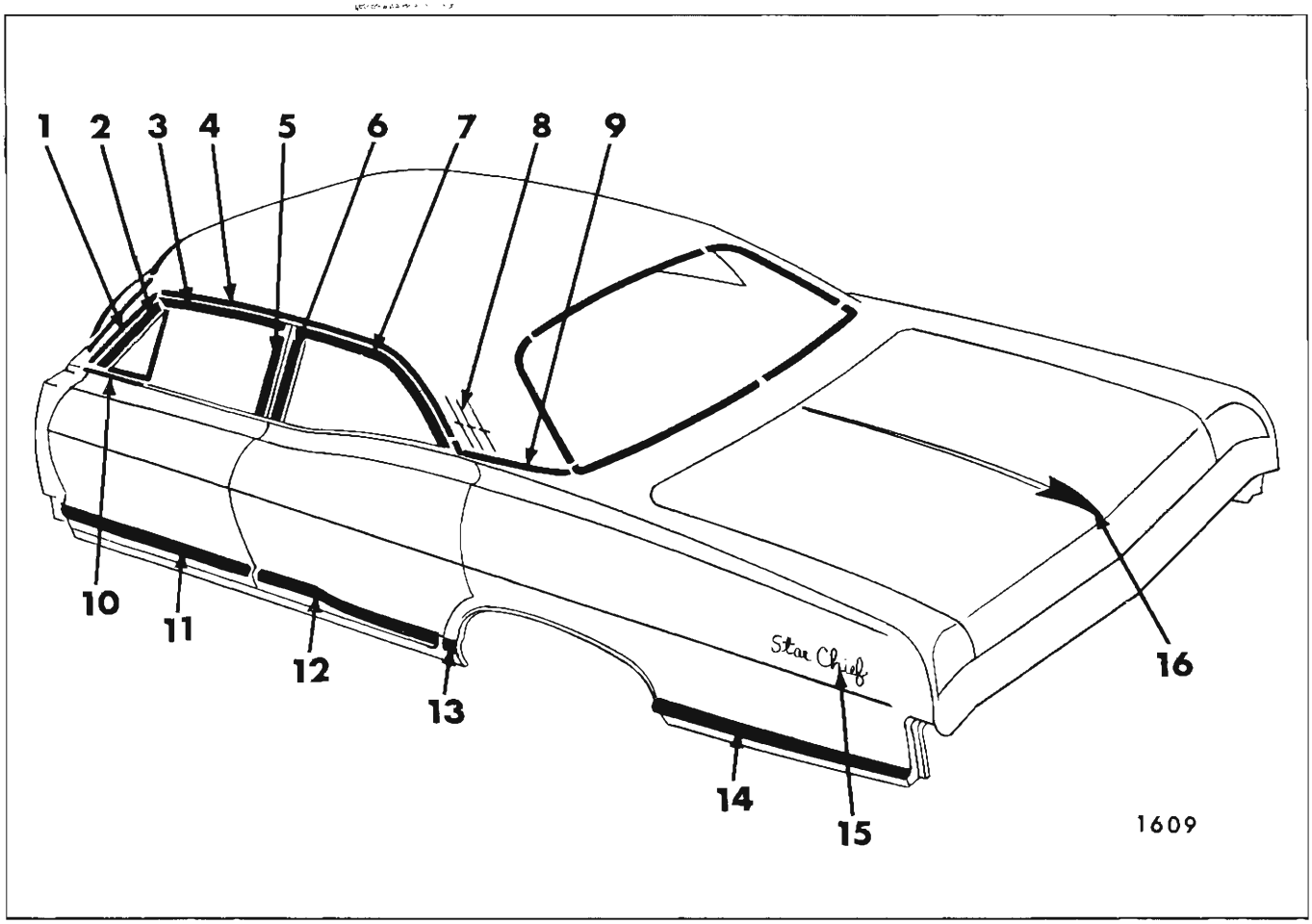


Fig. 1K7—25000 Series "69" Styles

1. Windshield Pillar Drip Molding
2. Front Door Window Frame Front Scalp Molding
3. Front Door Window Frame Upper Scalp Molding
4. Roof Drip Molding Scalp
5. Front Door Window Frame Rear Scalp Molding
6. Rear Door Window Frame Front Scalp Molding
7. Rear Door Window Frame Upper Scalp Molding
8. Roof Panel Ornament
9. Quarter Belt Reveal Molding
10. Front Door Window Reveal Molding (at Vent)
11. Front Door Outer Panel Lower Molding
12. Rear Door Outer Panel Lower Molding
13. Front of Rear Wheel Opening Molding
14. Rear of Rear Wheel Opening Molding
15. Rear Fender Outer Panel Name Plate
16. Rear Compartment Lid Outer Panel Emblem

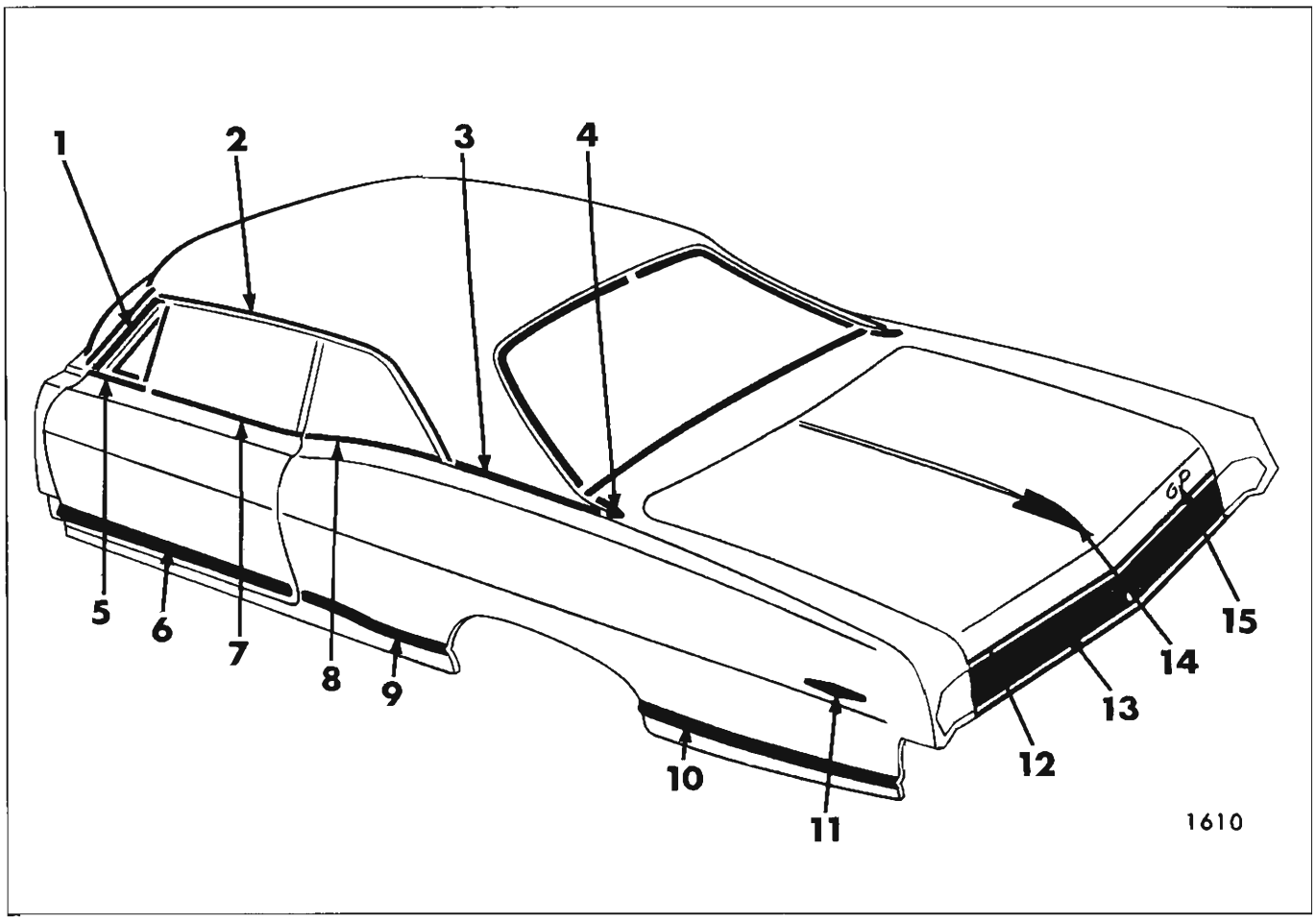


Fig. 1K8—26657 Style

1. Windshield Pillar Drip Molding
2. Roof Drip Molding Scalp
3. Quarter Belt Reveal Front Molding
4. Quarter Belt Reveal Rear Molding
5. Front Door Window Reveal Molding (at Vent)
6. Front Door Outer Panel Lower Molding
7. Front Door Window Reveal Molding
8. Quarter Window Lower Reveal Molding
9. Front of Rear Wheel Opening Molding
10. Rear of Rear Wheel Opening Molding
11. Rear Fender Outer Panel Emblem
12. Rear Compartment Lid Outer Panel Molding
13. Rear End Outer Panel Molding
14. Rear Compartment Lid Outer Panel Emblem
15. Rear Compartment Lid Outer Panel Name Plate

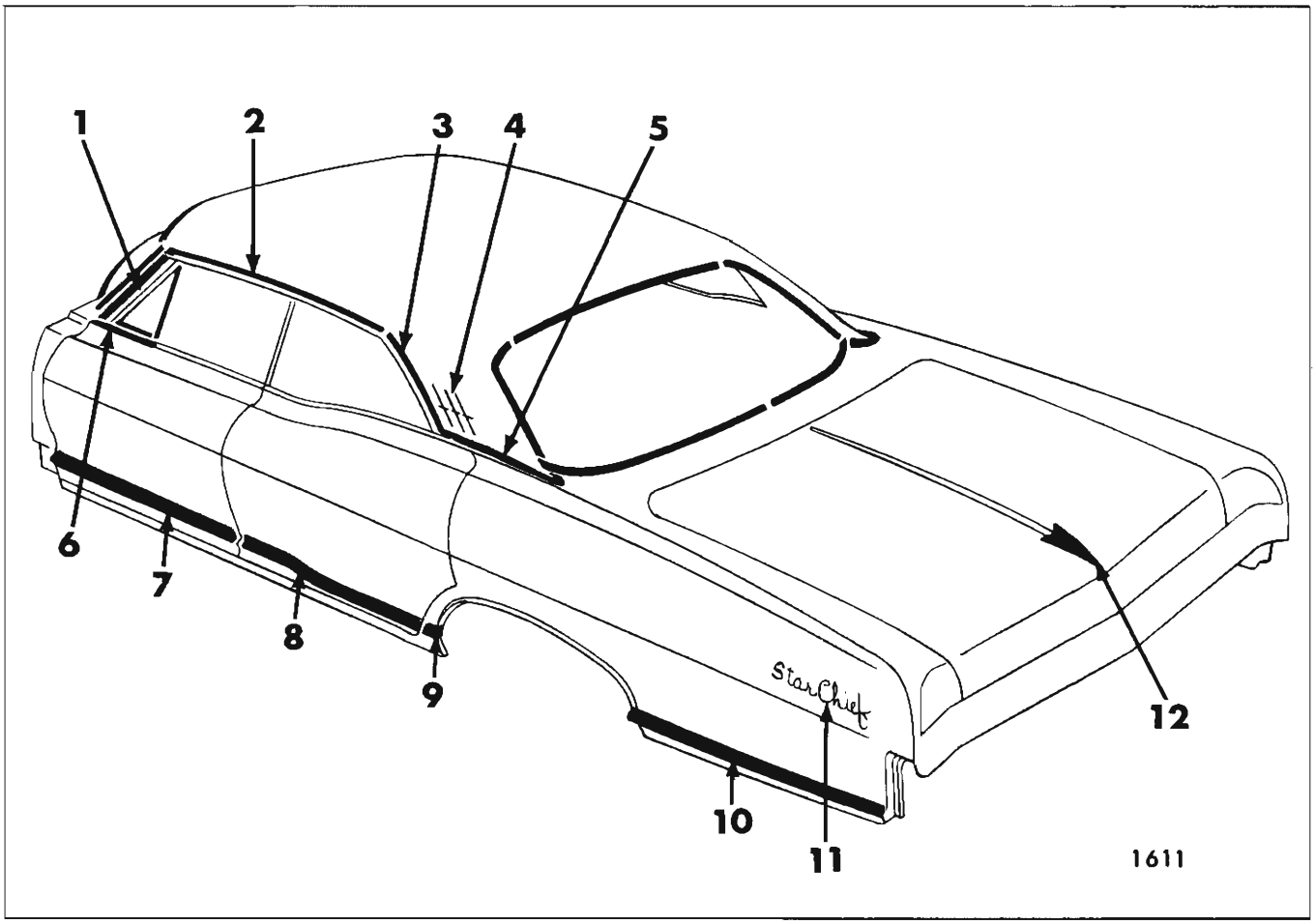


Fig. 1K9—25000 Series "39" Styles

1. Windshield Pillar Drip Molding
2. Roof Drip Molding Front Scalp
3. Roof Drip Molding Rear Scalp
4. Roof Panel Ornament
5. Quarter Belt Reveal Molding
6. Front Door Window Reveal Molding (at Vent)
7. Front Door Outer Panel Lower Molding
8. Rear Door Outer Panel Lower Molding
9. Front of Rear Wheel Opening Molding
10. Rear of Rear Wheel Opening Molding
11. Rear Fender Outer Panel Name Plate
12. Rear Compartment Lid Outer Panel Emblem

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Windshield Pillar Drip	35, 37, 39, 69 57	X						Windshield Pillar Weatherstrip and Weatherstrip Retainer (37, 39, 57 styles only)
Windshield Pillar Finishing	67	X					Windshield Side Reveal	Windshield Pillar Weatherstrip and Weatherstrip Retainer
Roof Drip Molding Scalp	37, 69		X View A				Windshield Pillar Drip Molding	
Roof Drip Molding Scalp Front	35, 39, 57		X View A				Windshield Pillar Drip Molding	
Roof Drip Molding Scalp Rear	35, 39, 57	X (57 only)	X View A				Roof Drip Molding Scalp Front	
Roof Panel Ornament	39					X		Headlining Rear Quarter Trim
Roof Panel Name Plate	39, 69					X		Headlining Rear Quarter Trim
Front Door Window Frame Front Scalp	11, 35, 45, 69		X					
Front Door Window Frame Upper Scalp	11, 35, 45, 69		X				Front Door Window Frame Front Scalp	
Front Door Window Frame Rear Scalp	11, 35, 45, 69		X				Front Door Window Frame Upper Scalp	

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Front Door Window Reveal (at vent)	All	X						Front Door Vent Assembly (11, 35, 45, 69 Styles only) Door Trim Pad (37, 57, 39, 67 Styles)
Front Door Window Reveal	57	X					Front Door Window Reveal (at vent)	Rubber Bumper on Door Glass Lower Stop
Rear Door Window Frame Front Scalp	35, 45, 69		X				Rear Door Window Frame Upper Scalp	
Rear Door Window Frame Upper Scalp	35, 45, 69		X				Rear Door Window Frame Rear Scalp	
Rear Door Window Frame Rear Scalp	35, 45		X					
Quarter Window Upper Reveal	11			X				
Quarter Window Front Reveal	11 Style.			X			Quarter Window Upper Reveal	
Quarter Window Lower Reveal	57	X						Quarter Window Glass Lower Stop
Quarter Window Lower Reveal Escutcheon	57	X					Roof Drip Molding Rear Scalp Quarter Window Lower Reveal	

25000 - 26000 SERIES (Cont'd.)

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Quarter Belt Reveal Front	57				X View B	X View D	Quarter Belt Reveal Rear	Headlining Rear Quarter Trim Panel
Quarter Belt Reveal Rear	57	X				X View D	Quarter Belt Reveal Front	
Quarter Belt Reveal	11, 39, 69			X	X View B			
Quarter Belt Reveal	37				X View B	X View D	Right Side Overlaps Left Side	Headlining Rear Quarter Trim Panel
Quarter Pinchweld Finishing Molding	67	X		X View E			Right Side Overlaps Left Side	
NOTE: Quarter Window Reveal Moldings on 35, 45 Styles are Covered in Rear Quarter Section due to Glass Installation.								
Front Door Outer Panel Lower Insert	26200	X					Front Door Outer Panel Lower	
Front Door Outer Panel Lower	All	X			X View B			
Rear Door Outer Panel Lower Insert	26200	X					Rear Door Outer Panel Lower	
Rear Door Outer Panel Lower	35, 39, 45, 69	X			X View B			
Front of Rear Wheel Opening	25639,25669				X View B	X		

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Front of Rear Wheel Opening	25235,25245 25239,25269	X			X View B			
Front of Rear Wheel Opening	25211,25237 25267,26657				X View B	X		Rear Quarter Trim Pad
Rear of Rear Wheel Opening Insert	26200	X						
Rear of Rear Wheel Opening	35, 45	X (Right & Left Side)			X (Left Side only) View B	X (Right Side only)		Spare Tire Cover (Right Side)
Rear of Rear Wheel Opening	All (except 35, 45)				X View B	X		Rear Compartment Side Trim Panel (on Styles equipped)
Rear Fender Outer Panel Name Plate	26200			X		X		Spare Tire Cover Right Side (35 only) Rear Compartment Side Trim Panel (on Styles equipped)
Rear Fender Outer Panel Emblem	57, 67, 37					X		Rear Compartment Side Trim Panel (on Styles equipped)
Rear Fender Outer Panel Name Plate	25200,25600			X Left Side only(35,45)		X		Spare Tire Cover (35, 45)

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Rear Compartment Lid Lower	All	X						
Rear Compartment Lid Emblems	All except (35, 45)					X		
Rear End Outer Panel	57					X		Tail Lamp Assembly Rear Compartment Lid Lock Cylinder and Retainer
Tailgate Outer Panel Name Plate	35, 45			X		X		Tail Gate Window and Regulator
Tailgate Outer Panel Lower Molding Assembly	26235					X		
Tailgate Outer Panel Upper	25235,25245	X			X View B			
Tailgate Outer Panel Lower	25235,25245	X				X		Tail Gate Inner Panel
Tailgate Outer Panel Belt Reveal	35, 45	X			X View B			
Back Body Opening Upper Reveal	35, 45	X					Back Body Opening Side Reveal	
Back Body Opening Side Reveal	35, 45	X					Back Body Opening Upper Reveal	
Tailgate Window Lower Reveal	35, 45	X			X			Tail Gate Window
Back Body Pillar Belt Reveal	35, 45	X			X View B			

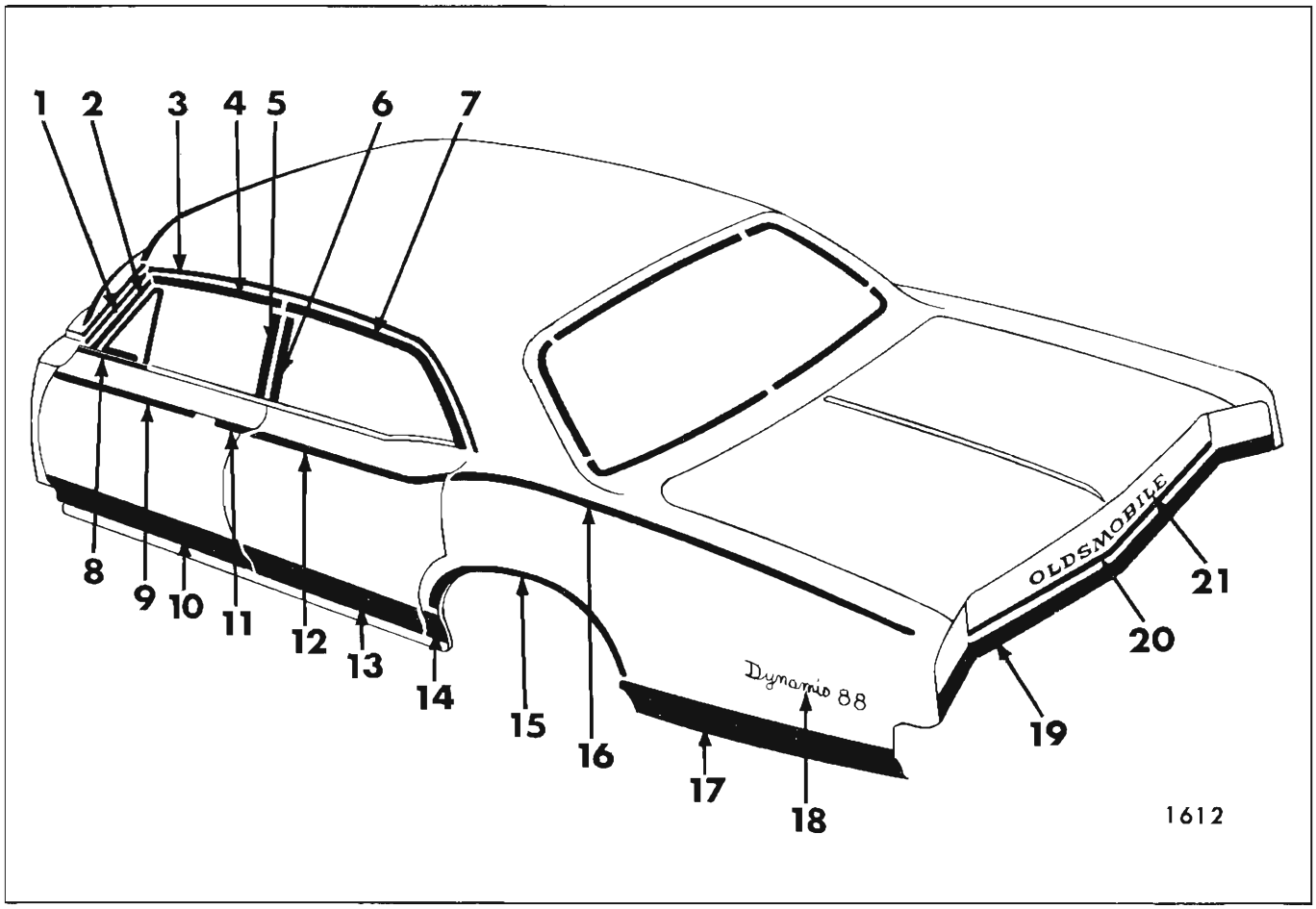


Fig. 1K10—35000 Series "69" Styles

1. Windshield Pillar Drip Molding
2. Front Door Window Frame Front Scalp Molding
3. Roof Drip Molding Scalp
4. Front Door Window Frame Upper Scalp Molding
5. Front Door Window Frame Rear Scalp Molding
6. Rear Door Window Frame Front Scalp Molding
7. Rear Door Window Frame Upper Scalp Molding
8. Front Door Window Reveal (at Vent)
9. Front Door Outer Panel Front Peak Molding
10. Front Door Outer Panel Lower Molding
11. Front Door Outer Panel Rear Peak Molding
12. Rear Door Outer Panel Peak Molding
13. Rear Door Outer Panel Lower Molding
14. Front of Rear Wheel Opening Molding
15. Rear Wheel Opening Molding
16. Rear Fender Outer Panel Peak Molding
17. Rear of Rear Wheel Opening Molding
18. Rear Fender Outer Panel Name Plate
19. Rear End Outer Panel Molding
20. Rear Compartment Lid Outer Panel Molding
21. Rear Compartment Lid Outer Panel Name Plate

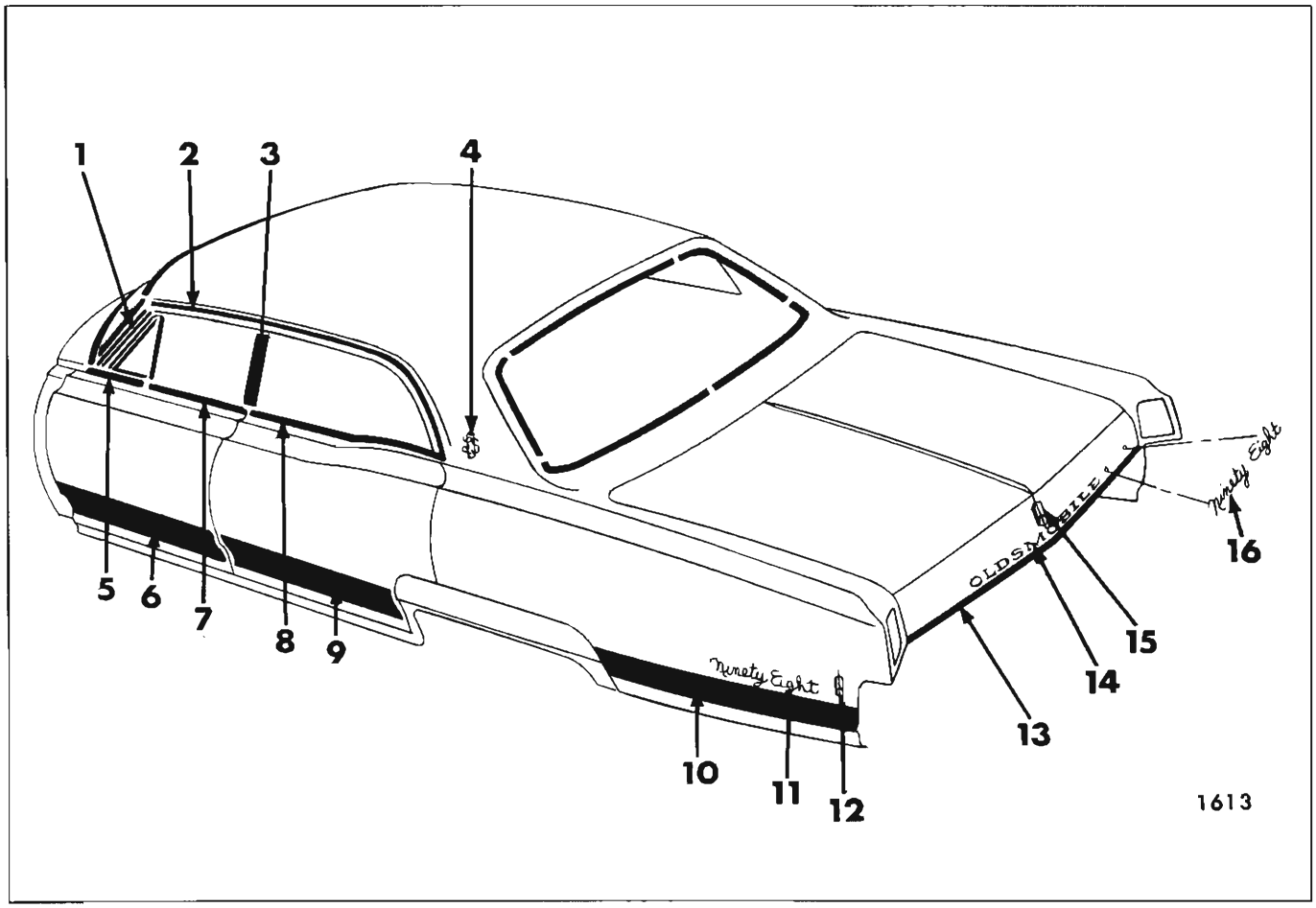


Fig. 1K11—38000 Series "69" Styles

1. Windshield Pillar Drip Molding
2. Roof Drip Molding Scalp
3. Center Pillar Scalp Molding
4. Roof Panel Emblem
5. Front Door Window Reveal Molding (at Vent)
6. Front Door Outer Panel Lower Molding
7. Front Door Window Reveal Molding
8. Rear Door Window Reveal Molding
9. Rear Door Outer Panel Lower Molding
10. Rear of Rear Wheel Opening Molding
11. Rear Fender Outer Panel Name Plate
12. Rear Fender Outer Panel Emblem
13. Rear Compartment Lid Outer Panel Molding
14. Rear Compartment Lid Outer Panel Name Plate
15. Rear Compartment Lid Outer Panel Emblem
16. Rear Compartment Lid Outer Panel Name Plate

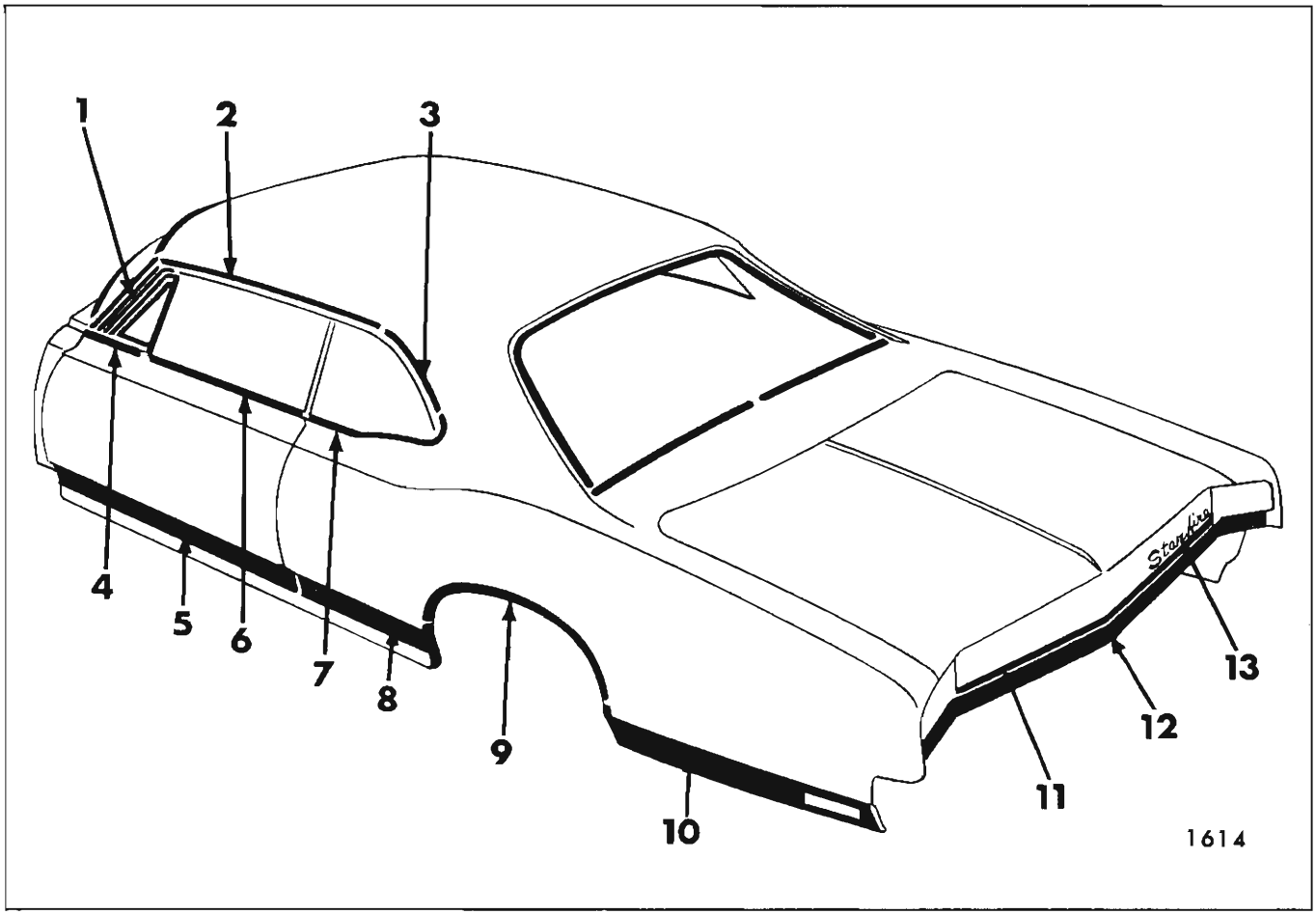


Fig. 1K12—36000 Series "57" Styles

1. Windshield Pillar Drip Molding
2. Roof Drip Molding Front Scalp
3. Roof Drip Molding Rear Scalp
4. Front Door Window Reveal Molding (at Vent)
5. Front Door Outer Panel Lower Molding
6. Front Door Window Reveal Molding
7. Quarter Window Lower Reveal Molding
8. Front of Rear Wheel Opening Molding
9. Rear Wheel Opening Molding
10. Rear of Rear Wheel Opening Molding
11. Rear Compartment Lid Outer Panel Molding
12. Rear End Outer Panel Molding
13. Rear Compartment Lid Outer Panel Name Plate

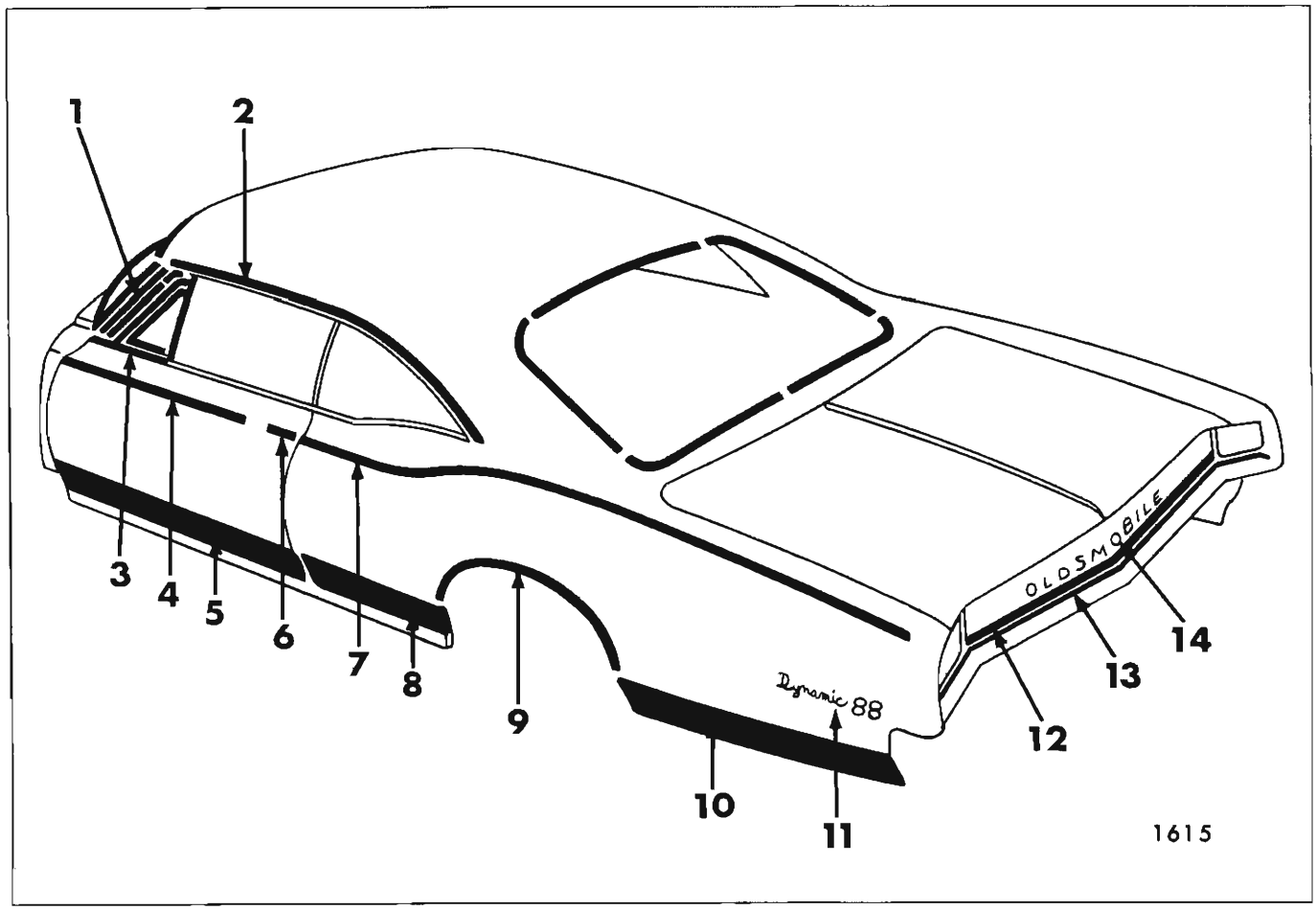


Fig. 1K13—35000 Series "37" Styles

1. Windshield Pillar Drip Molding
2. Roof Drip Molding Scalp
3. Front Door Window Reveal Molding (at Vent)
4. Front Door Outer Panel Front Peak Molding
5. Front Door Outer Panel Lower Molding
6. Front Door Outer Panel Rear Peak Molding
7. Rear Fender Outer Panel Peak Molding
8. Front of Rear Wheel Opening Molding
9. Rear Wheel Opening Molding
10. Rear of Rear Wheel Opening Molding
11. Rear Fender Outer Panel Name Plate
12. Rear Compartment Lid Outer Panel Molding
13. Rear End Outer Panel Molding
14. Rear Compartment Lid Outer Panel Name Plate

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Windshield Pillar Drip	All except 67	X						Weatherstrip and Weatherstrip Retainer at Windshield Pillar
Windshield Pillar Finishing	67	X					Windshield Side Reveal	Windshield Pillar Weatherstrip and Weatherstrip Retainer
Roof Drip Molding Scalp	All 69 35237, 35637 35837		X View A				Windshield Pillar Drip	
Roof Drip Molding Front Scalp	39, 57		X View A				Windshield Pillar Drip	
Roof Drip Molding Rear Scalp	39, 57	X 57 style only	X View A				Roof Drip Molding Front Scalp	
Roof Drip Molding Front Scalp	38437		X View A				Windshield Pillar Drip	
Roof Drip Molding Rear Scalp	38437	X					Roof Drip Molding Front Scalp	
Roof Panel Emblem	38669					X		Headlining Rear Quarter Trim Panel
Front Door Window Frame Front Scalp	69		X					

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Front Door Window Frame Upper Scalp	69		X				Front Door Window Frame Front Scalp	
Front Door Window Frame Rear Scalp	69		X				Front Door Window Frame Upper Scalp	
Front Door Window Reveal (at vent)	All except 35000 69 styles	X						Front Door Trim Pad
Front Door Window Reveal (at vent)	35000 69 styles	X						Front Door Vent Assembly
Front Door Window Reveal	All	X						Rubber Bumper On Front Door Window Lower Stop
Center Pillar Scalp	38469, 38669	X						Front and Rear Side Roof Rail Weatherstrip at Center Pillar
Rear Door Window Frame Front Scalp	69		X				Rear Door Window Frame Upper Scalp	
Rear Door Window Frame Upper Scalp	69		X					
Rear Door Window Reveal	39, 69	X						Rubber Bumper On Rear Door Window Lower Stop

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws		Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Quarter Window Reveal	37, 67	X					Quarter Window Reveal Escutcheon	Quarter Window Lower Stop
Quarter Window Reveal Escutcheon	37	X					Quarter Window Reveal Roof Drip Molding Scalp	
Quarter Belt Reveal	37 Except 38000 Series	X		X	X View B			
Quarter Belt Reveal	38000, 37 & 39				X View B	X View D		Headlining Rear Quarter Trim Panel (37 Styles Only)
Rear End Belt Reveal	38000, 37 & 39					X View D	Quarter Belt Reveal	
Quarter Pinchweld Finishing Molding	67	X		X View E			Right Side Overlaps Left Side	
Front Door Outer Panel Front Peak	35200	X		X View C				
Front Door Outer Panel Rear Peak	35200	X						
Front Door Outer Panel Lower	35600	X		X View C				
Front Door Outer Panel Lower	35800, 36600 38400, 38600	X				X		Front Door Trim

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Rear Door Outer Panel Peak	35200	X		X View C				
Rear Door Outer Panel Lower	35600	X		X View C		X View D		
Rear Door Outer Panel Lower	35800, 38400 38600	X				X		Rear Door Trim
Rear Fender Outer Panel Peak	35600			X View C		X View D		
Front of Rear Wheel Opening	35800					X	Rear Wheel Opening	Quarter Trim Pad (37 Styles Only)
Front of Rear Wheel Opening	38437, 67					X		Quarter Trim Pad
Front of Rear Wheel Opening	36600					X	Rear Wheel Opening	Quarter Trim Pad
Front of Rear Wheel Opening	35637, 67					X	Rear Wheel Opening	Quarter Trim Pad
Front of Rear Wheel Opening Escutcheon	35600					X	Front of Rear Wheel Opening (37, 67 Styles Only)	
Rear Wheel Opening	35600, 35800 36600	X						

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Rear of Rear Wheel Opening Escutcheon	35600					X	Rear of Rear Wheel Opening	
Rear of Rear Wheel Opening	35600			X View C		X	Rear Wheel Opening	
Rear of Rear Wheel Opening	38400, 38600					X		
Rear of Rear Wheel Opening	35800					X	Rear Wheel Opening	
Rear of Rear Wheel Opening	36600					X	Rear Wheel Opening	Rear Compartment Side Trim
Rear Fender Outer Panel Name Plate	35400, 35600, 35800, 38400, 38600					X		Rear Compartment Side Trim
Rear Fender Outer Panel Emblem	35400, 38400, 38600					X		Rear Compartment Side Trim
Rear Compartment Lid Outer Panel	All	X						
Rear Compartment Lid Outer Panel Name Plate	All					X		
Rear End Outer Panel	All Except 38000 Series					X		

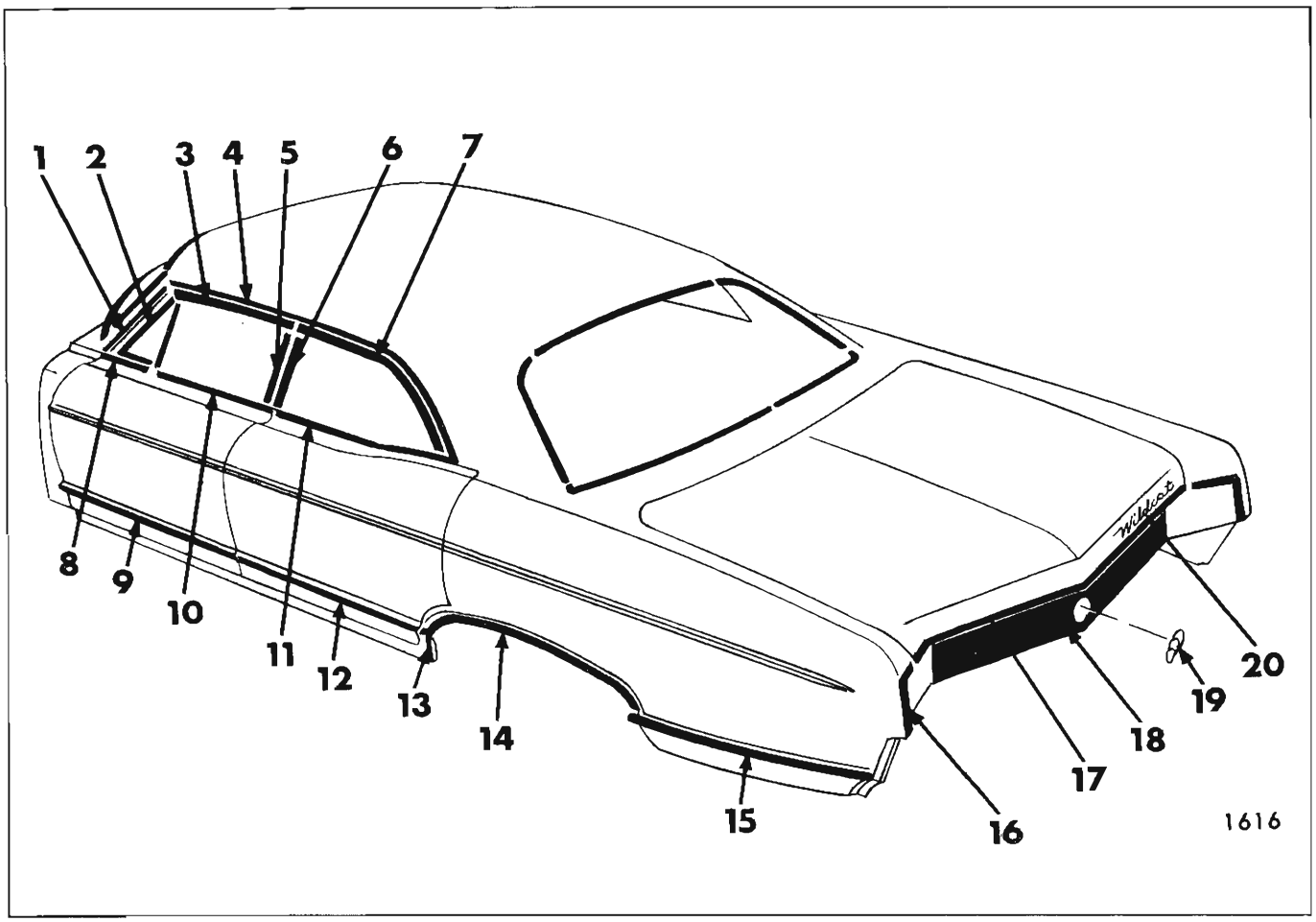


Fig. 1K14—45000-46000 Series "69" Styles

1. Windshield Pillar Drip Molding
2. Front Door Window Frame Front Scalp Molding
3. Front Door Window Frame Upper Scalp Molding
4. Roof Drip Molding Scalp
5. Front Door Window Frame Rear Scalp Molding
6. Rear Door Window Frame Front Scalp Molding
7. Rear Door Window Frame Upper Scalp Molding
8. Front Door Window Reveal Molding (at Vent)
9. Front Door Outer Panel Lower Molding
10. Front Door Window Reveal Molding
11. Rear Door Window Reveal Molding
12. Rear Door Outer Panel Lower Molding
13. Front of Rear Wheel Opening Molding
14. Rear Wheel Opening Molding
15. Rear of Rear Wheel Opening Molding
16. Rear of Rear Fender Outer Panel Molding
17. Rear Compartment Lid Outer Panel Molding
18. Rear End Outer Panel Molding
19. Gas Tank Filler Emblem
20. Rear Compartment Lid Outer Panel Name Plate

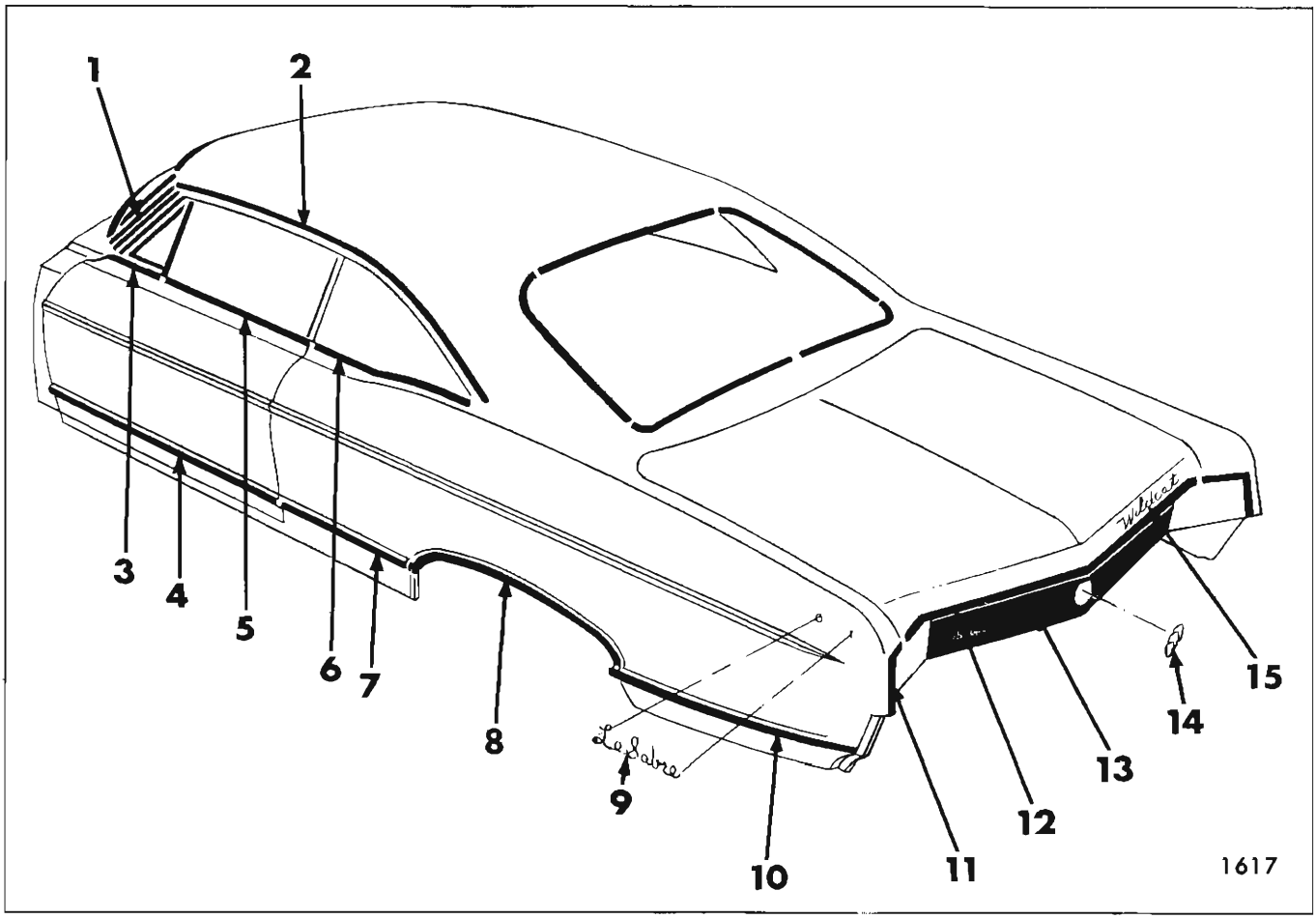


Fig. 1K15—45000-46000 Series "37" Styles

1. Windshield Pillar Drip Molding
2. Roof Drip Molding Scalp
3. Front Door Window Reveal Molding (at Vent)
4. Front Door Outer Panel Lower Molding
5. Front Door Window Reveal Molding
6. Quarter Window Lower Reveal Molding
7. Front of Rear Wheel Opening Molding
8. Rear Wheel Opening Molding
9. Rear Fender Outer Panel Name Plate
10. Rear of Rear Wheel Opening Molding
11. Rear of Rear Fender Outer Panel Molding
12. Rear Compartment Lid Outer Panel Molding
13. Rear End Outer Panel Molding
14. Gas Tank Filler Emblem
15. Rear Compartment Lid Outer Panel Name Plate

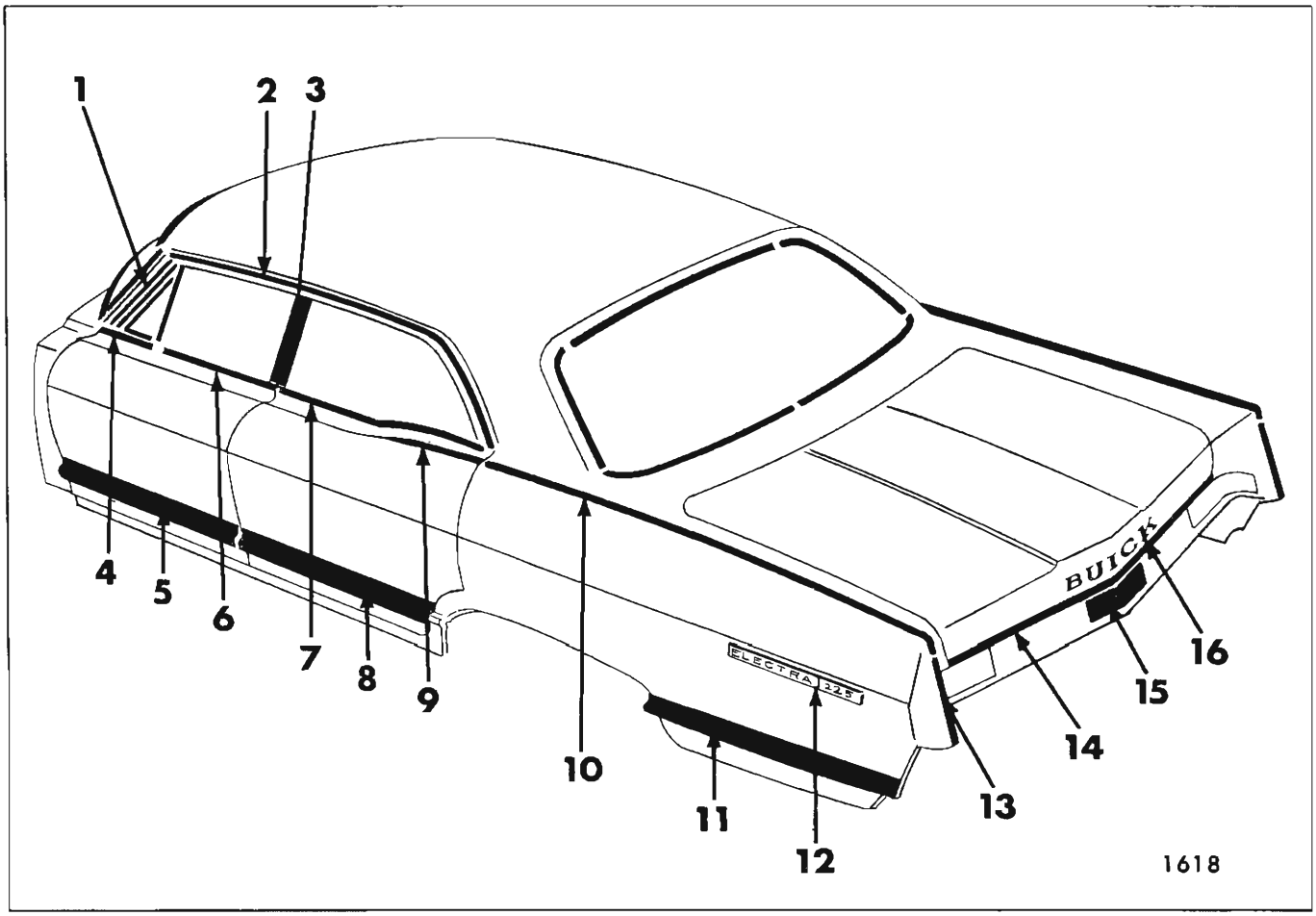


Fig. 1K16—48000 Series "69" Styles

1. Windshield Pillar Drip Molding
2. Roof Drip Molding Scalp
3. Center Pillar Scalp Molding
4. Front Door Window Reveal Molding (at Vent)
5. Front Door Outer Panel Lower Molding
6. Front Door Window Reveal Molding
7. Rear Door Window Reveal Molding
8. Rear Door Outer Panel Lower Molding
9. Rear Door Outer Panel Crown Molding
10. Rear Fender Outer Panel Crown Molding
11. Rear of Rear Wheel Opening Molding
12. Rear Fender Outer Panel Name Plate
13. Rear of Rear Fender Outer Panel Crown Molding
14. Rear Compartment Lid Outer Panel Molding
15. Gas Tank Filler Door Assembly
16. Rear Compartment Lid Outer Panel Name Plate

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Windshield Pillar Drip	All except 67	X						Weatherstrip and Weatherstrip Retainer at Windshield Pillar
Windshield Pillar Finishing Molding	67	X					Windshield Side Reveal	Windshield Pillar Weather-strip and Weatherstrip Retainer
Roof Drip Molding Front Scalp	39		X View A				Windshield Pillar Drip	
Roof Drip Molding Rear Scalp	39	X (48239 48439 only)	X View A				Roof Drip Molding Front Scalp	
Roof Drip Molding Scalp	37, 69 (except 48237,48437		X View A				Windshield Pillar Drip	
Roof Drip Molding Front Scalp	48237,48437		X View A				Windshield Pillar Drip	
Roof Drip Molding Rear Scalp	48237,48437	X	X View A				Roof Drip Molding Front Scalp	
Front Door Window Frame Front Scalp	69 except 48000 Series		X					
Front Door Window Frame Upper Scalp	69 except 48000 Series		X				Front Door Window Frame Front Scalp	

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Front Door Window Frame Rear Scalp	69 except 48000 Series		X				Front Door Window Front Upper Scalp	
Front Door Window Reveal (at vent)	All except 45000 & 46000, 69 Styles	X						Front Door Trim Pad
Front Door Window Reveal	All	X					Front Door Window Reveal (at vent)	Rubber Bumper on Door Window Lower Stop
Front Door Window Reveal (at vent)	45000,46000 69 Styles	X						Front Door Vent Assembly
Center Pillar Scalp	48269,48469	X						Side Roof Rail Weatherstrip Front and Rear at Center Pillar
Rear Door Window Frame Front Scalp	69 (except 48000 Series		X				Rear Door Window Frame Upper Scalp	
Rear Door Window Frame Upper Scalp	69 (except 48000 Series		X					
Rear Door Window Reveal	39, 69	X						Rubber Bumper on Rear Door Window Lower Stop
Quarter Window Reveal	37, 67	X						Quarter Window Lower Stop
Quarter Window Reveal Escutcheon	37	X						Quarter Window Reveal. Roof Drip Molding Rear Scalp

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Quarter Belt Reveal	48239, 69 48439, 69			X	X View B	X View D		
Rear End Belt	48239, 69 48439, 69					X View D	Quarter Belt Reveal	
Quarter Belt Reveal	39 (except 48000 Series)			X	X View B	X View D		
Rear End Belt Reveal	39 (except 48000 Series					X View D	Quarter Belt Reveal	
Quarter Belt Reveal	48237,48437				X View B	X View D		Headlining Rear Quarter Trim Panel
Rear End Belt Reveal	48237,48437					X View D	Quarter Belt Reveal	
Quarter Belt Reveal	37 (except 48000 Series)			X	X View B	X View D	Right Side Overlaps Left Side	
Quarter Belt Reveal	69 (except 48000 Series)			X	X View B			
Quarter Belt Pinchweld Finishing	67	X		X View E			Right Side Overlaps Left Side	
Front Door Outer Panel Lower	45200,45400 46200,46400 46600	X		X View C				
Front Door Outer Panel Lower	48200,48400	X				X		Front Door Trim Pad

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Rear Door Outer Panel Crown	48200,48400	X				X		Rear Door Trim
Rear Door Outer Panel Lower	45200,45400 46200,46400 46600	X		X View C				
Rear Door Outer Panel Lower	48200,48400	X				X		Rear Door Trim
Rear Fender Outer Panel Crown	48200,48400	X		X		X	Rear of Rear Fender Outer Panel Crown	Quarter Trim on (37, 67 Styles) Rear Compartment Side Trim
Rear of Rear Fender Outer Panel Crown	48200,48400					X		
Rear of Rear Fender Outer Panel	45200,45400 46200,46400 46600					X		Rear Quarter Extension
Front of Rear Wheel Opening	48237,48437, 67					X		Quarter Trim
Rear of Rear Wheel Opening	48237,48437, 67					X		Rear Compartment Side Trim Panel Compartment to Quarter Panel Filler Plug
Rear of Rear Wheel Opening	48239, 69 48439, 69					X		Rear Compartment Side Trim Panel Compartment to Quarter Panel Filler Plug

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Front of Rear Wheel Opening	37, 67 except (48000 Series)			X View C		X	Rear Wheel Opening	Quarter Trim Pad
Rear Wheel Opening	All (except 48000 Series)	X				X	Front and Rear of Rear Wheel Opening (except Front on 39, 69 Styles)	Quarter Trim Pad Rear
Rear of Rear Wheel Opening	All (except 48000 Series			X View C		X	Rear Wheel Opening	
Rear Fender Outer Name Plate	Al					X		Rear Compartment Side Trim on 48000 Series
Rear Compartment Lid Outer Panel	48200,48400					X		
Rear Compartment Lid Outer Panel	All (Except 48000 Series)	X				X		
Rear Compartment Lid Outer Panel Name Plate	All					X		
Rear End Outer Panel	46200,46400, 46600					X		
Gas Tank Filler Door Assembly	48200,48400	X						
Gas Tank Filler Emblem and Door Assembly	All (except 48000 Series)	X						Rear End Outer Panel Molding on 46000 Series

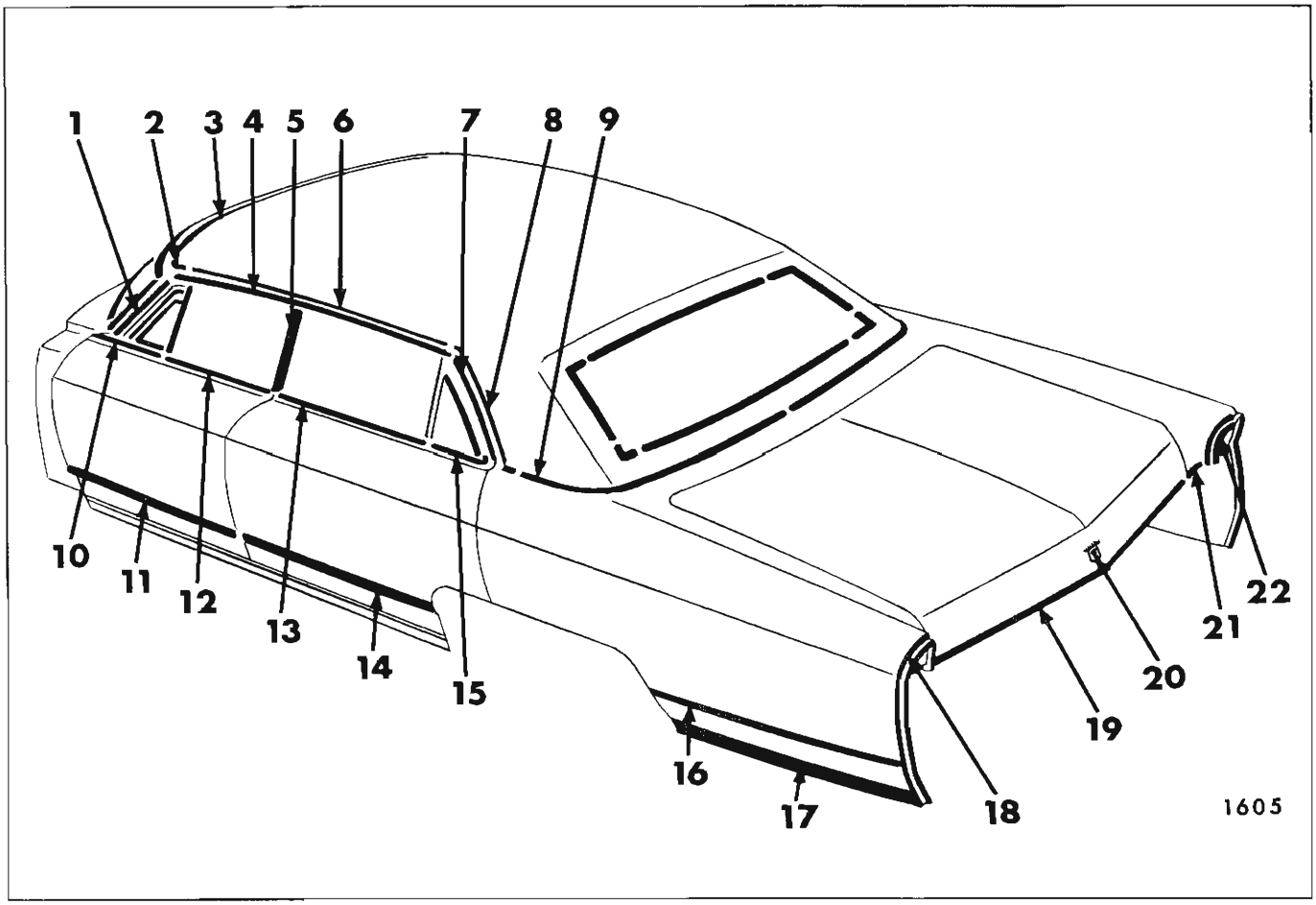


Fig. 1K17—68069 Style

1. Windshield Pillar Drip Molding
2. Roof Panel Cover Front Finish Escutcheon
3. Roof Panel Cover Front Finish Molding
4. Roof Drip Molding Front Scalp
5. Center Pillar Scalp Molding
6. Roof Panel Cover Side Front Finish Molding
7. Roof Drip Molding Rear Scalp
8. Roof Panel Cover Side Rear Finish Molding
9. Rear End Belt Cover Finish Molding
10. Front Door Window Reveal Molding (at Vent)
11. Front Door Outer Panel Lower Molding
12. Front Door Window Reveal Molding
13. Rear Door Window Front Reveal Molding
14. Rear Door Outer Panel Lower Molding
15. Rear Door Window Rear Reveal Molding
16. Rear of Rear Wheel Opening Upper Molding
17. Rear of Rear Wheel Opening Lower Molding
18. Rear of Rear Fender Outer Panel Outer at Tail Lamp Molding
19. Rear Compartment Lid Outer Panel Molding
20. Rear Compartment Lid Outer Panel Emblem
21. Rear of Rear Fender Outer Panel at Compartment Lid Molding
22. Rear of Rear Fender Outer Panel Inner at Tail Lamp Molding

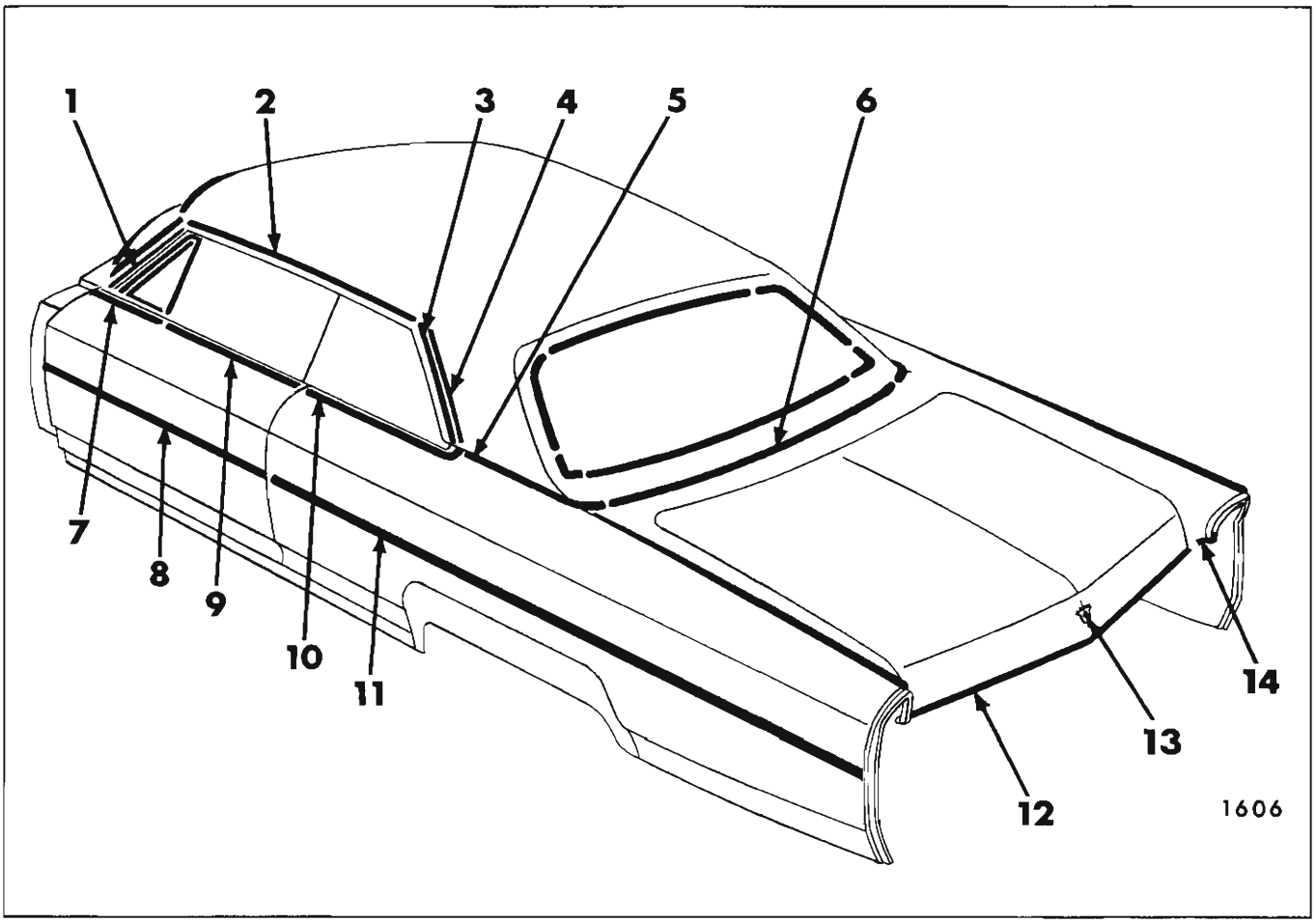


Fig. 1K18—68000 Series "57" Styles

1. Windshield Pillar Drip Molding
2. Roof Drip Molding Front Scalp
3. Roof Drip Molding Rear Scalp
4. Roof Panel Rear of Quarter Window Molding
5. Quarter Belt Cover Finish Molding
6. Rear End Belt Cover Finish Molding
7. Front Door Window Reveal Molding (at vent)
8. Front Door Outer Panel Lower Molding
9. Front Door Window Reveal Molding
10. Quarter Window Lower Reveal Molding
11. Rear Fender Outer Panel Lower Molding
12. Rear Compartment Lid Outer Panel Molding
13. Rear Compartment Lid Outer Panel Emblem
14. Rear of Rear Fender Outer Panel at Compartment Lid Molding

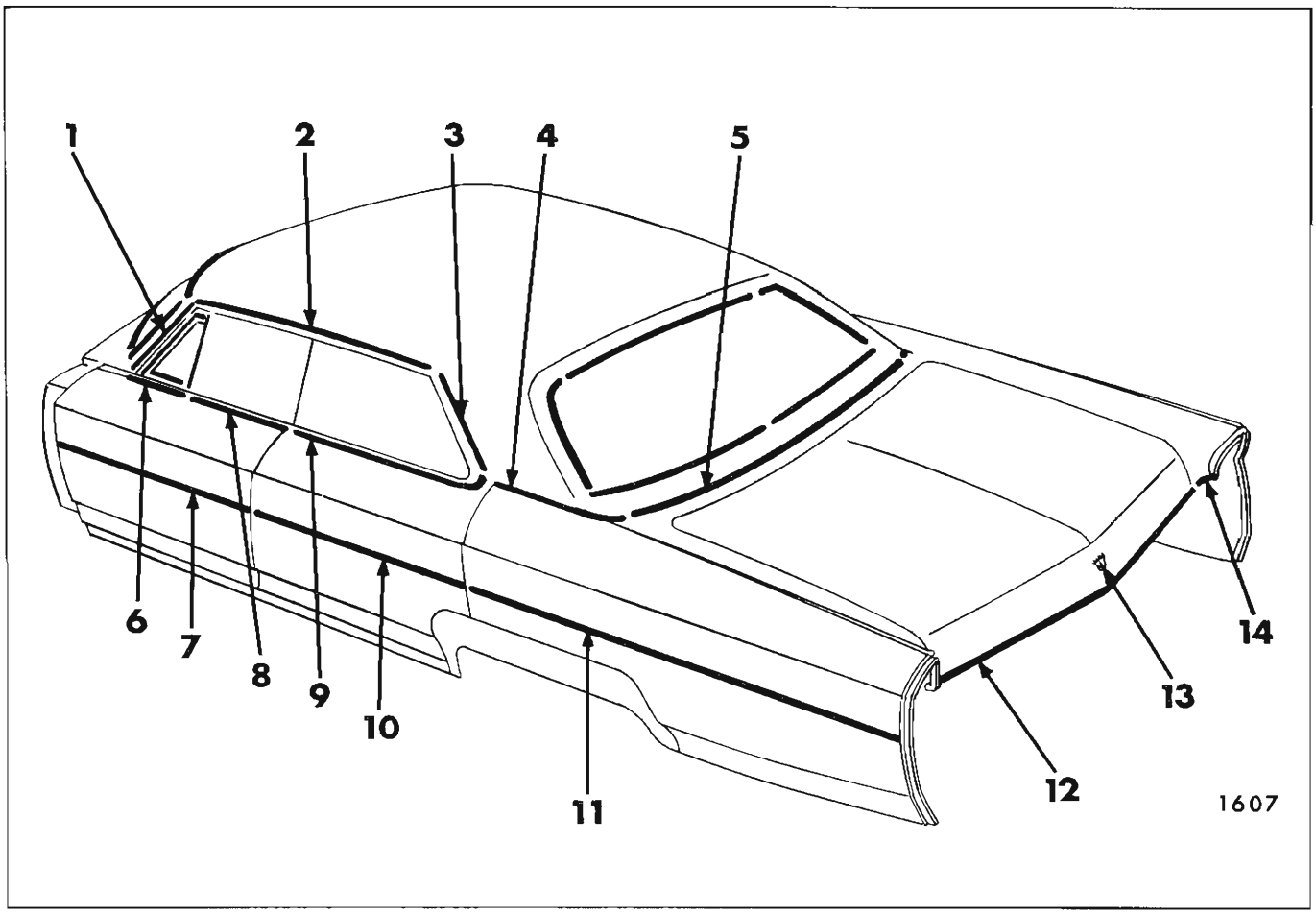


Fig. 1K19—68000 Series "39" Styles

1. Windshield Pillar Drip Molding
2. Roof Drip Molding Front Scalp
3. Roof Drip Molding Rear Scalp
4. Quarter Belt Cover Finish Molding
5. Rear End Belt Cover Finish Molding
6. Front Door Window Reveal Molding (at Vent)
7. Front Door Outer Panel Lower Molding
8. Front Door Window Reveal Molding
9. Rear Door Window Reveal Molding
10. Rear Door Outer Panel Lower Molding
11. Rear Fender Outer Panel Lower Molding
12. Rear Compartment Lid Outer Panel Molding
13. Rear Compartment Lid Outer Panel Emblem
14. Rear of Rear Fender Outer Panel at Compartment Lid Molding

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Windshield Pillar Drip	All (Except 67)	X						Weatherstrip and Weatherstrip Retainer at Windshield Pillar
Windshield Pillar Finishing	67	X					Windshield Side Reveal	Windshield Pillar Weatherstrip and Weatherstrip Retainer
Roof Drip Molding Scalp	68269, 68369		X View A				Windshield Pillar Drip	
Roof Drip Molding Front Scalp	68069		X View A				Windshield Pillar Drip	
Roof Drip Molding Rear Scalp	68069		X View A				Roof Drip Molding Front Scalp	
Roof Drip Molding Front Scalp	39, 57		X				Windshield Pillar Drip	
Roof Drip Molding Rear Scalp	39, 57		X				Roof Drip Molding Front Scalp	
Roof Panel Rear of Quarter Window	68357		X				Roof Drip Molding Rear Scalp	
Roof Panel Rear of Rear Door Window	68339		X				Roof Drip Molding Rear Scalp	
Roof Panel Cover Front Finish	68069	X		X View F			Roof Panel Cover Front Finish Escutcheon	Front Section of Headlining
Roof Panel Cover Front Finish Escutcheon	68069					X	Roof Panel Cover Side Front Finish	Front Section of Headlining

68000 SERIES (Cont'd.)

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Roof Panel Cover Side Front Finish	68069			X View F		X	Roof Panel Cover Front Finish Escutcheon Roof Panel Cover Side Rear Finish	Headlining at Side Area
Roof Panel Cover Side Rear Finish	68069					X	Rear End Belt Cover Finish	Headlining at Rear Quarter Area
Roof Panel Emblem Assembly	68069					X		Headlining at Rear Quarter Area
Roof Panel Name Plate	68069					X		Headlining at Rear Quarter Area
Front Door Window Reveal (at Vent)	68200, 68069	X					Front Door Window Reveal	Front Door Trim
Front Door Window Reveal (at Vent)	68300				X		Front Door Window Reveal	Front Door Vent Assembly
Front Door Window Reveal	All	X						Rubber Bumper On Door Window Lower Stop
Center Pillar Scalp	69	X						Weatherstrips and Weatherstrip Retainer at Center Pillar
Rear Door Window Reveal	68200, 68300	X						Rubber Bumper On Rear Door Window Lower Stop

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Rear Door Window Front Reveal	68069	X						Rubber Bumper On Rear Door Window Lower Stop
Rear Door Window Rear Reveal	68069	X					Rear Door Window Front Reveal	Rubber Bumper On Rear Door Window Lower Stop
Quarter Window Lower Reveal	57, 67	X						Quarter Window Lower Stop
Quarter Belt Cover Finish	68300				X View B	X View D		
Rear End Belt Cover Finish	68300					X View D	Quarter Belt Cover Finish	
Rear End Belt Cover Finish	68069					X View D	Right Side Overlaps Left Side Roof Panel Cover Side Rear Finish	Headlining at Rear Quarter Area
Quarter Pinchweld Finishing	67	X		X View E				
Rear End Pinchweld Finishing	67			X View E			Quarter Pinchweld Finishing	
Front Door Outer Panel Lower	All	X		X View C				
Rear Door Outer Panel Lower	39, 69	X		X View C				

68000 SERIES (Cont'd.)

Molding Name	Styles	Method of Retention					Engages With Other Moldings	Remove Hardware Or Trim
		Screws	Spring (Self-Retained)	Snap-On Clips Or Retainers On Panel	Snap-On Clips On Molding	Studs With Attaching Nuts		
Rear Fender Outer Panel Lower	68200, 68300				X View B	X		Rear Compartment Side Trim Quarter Window Glass (37, 67 Styles Only) Tail Lamp Assembly Compartment Pan To Quarter Panel Filler Plug
Front of Rear Wheel Opening	68467				X View B	X		Quarter Trim Pad
Rear of Rear Wheel Opening Upper	68069, 68467			X (68069 Only) View C	X (68467 Only) View B	X		Rear Compartment Side Trim
Rear of Rear Wheel Opening Lower	68069, 68467	X						
Rear of Rear Fender Outer Panel Inner at Tail Lamp	68069, 68467	X					Rear of Rear Fender Outer Panel Outer at Tail Lamp	
Rear of Rear Fender Outer Panel Outer at Tail Lamp	68069, 68467	X					Rear of Rear Wheel Opening	
Rear of Rear Fender Outer Panel at Compartment Lid	All	X				X	Rear of Rear Fender Outer Panel Inner at Tail Lamp (68069, 68467 Styles Only)	
Rear Compartment Lid Outer Panel Lower	All	X						

ELECTRICAL

POWER WINDOWS AND VENTILATORS

POWER OPERATED WINDOWS ALL SERIES

DESCRIPTION

The wiring harness for the electrically operated windows consists of four major sections.

1. Front Cross-Over Harness

2. Feed Harness to Rear Door or Quarter Window

3. 4 Left and Right Rear Door or Quarter Window Harnesses

Front Cross-Over Harness - this harness is installed beneath the instrument panel and completes the circuit from the right door to the left door windows on all styles except 68000 series. (See Figs. 1L1 for 15-16000 series; 1L3 for 25-26000 series; 1L5 for 35-36-38000 series; 1L2 for 45-46-48000 series). On 68000 series the cross-over harness is installed on the floor pan - see Figure 1L4.

Feed Harness for Rear Doors or Quarter Windows - this harness of flat wire construction connects to the front cross-over harness on the left side of the shroud (fire wall) and extends rearward under the flat body wire harness.

In two door styles the quarter window harness divides at the rear of the rear seat on all styles except 68000 series, see Figure 1L6, 7 and 8.

On 68000 series the harness divides at the rear of the front seat (see Fig. 1L9).

The rear door window harness divides at rear of the front seat (see Figs. 1L10 all styles except 68000 series and Fig. 1L11 for 68000 series).

It is to be noted that the flat body wiring harness is positioned on top of the power window wire harness and the front connector of the body wire harness is in a lower position.

Quarter Window Harness - The left and right round wire harness connects to the main flat feed harness behind the rear quarter arm rest foundation on convertible styles (See Fig. 1L6, 7 and 8) except on 68000 series and under the rear seat cushion on "27", "37" styles. On 68000, "57" and "67" styles the round wire harness connects to the flat wire at the forward end of the rear quarter arm rest assembly (See Fig. 1L11).

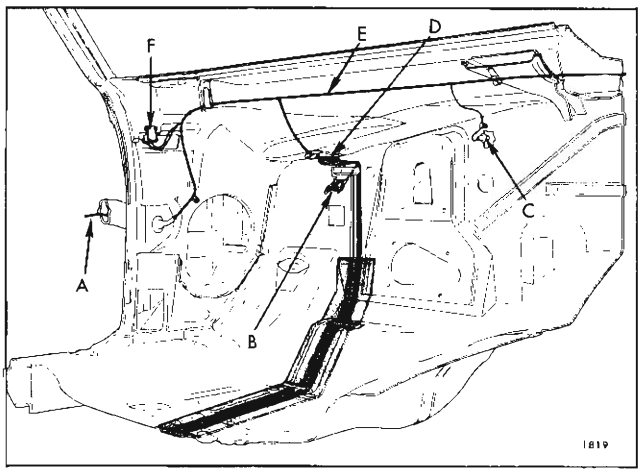


Fig. 1L1—Front End Power Window Wiring - 15-16000 Series

A. Front Door Wiring
B. Body Wiring Connector
C. Feed Wire
D. Power Window Wiring Connector
E. Cross-Over Harness
F. Circuit Breaker

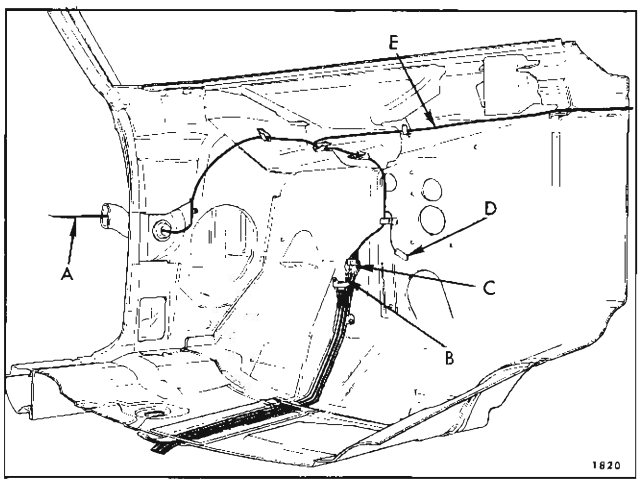


Fig. 1L2—Front End Power Window Wiring - 45-46-48000 Series

A. Front Door Wiring
B. Body Wiring Connector
C. Power Window Wiring Connector
D. To Fuse Block
E. Front Cross-Over Harness

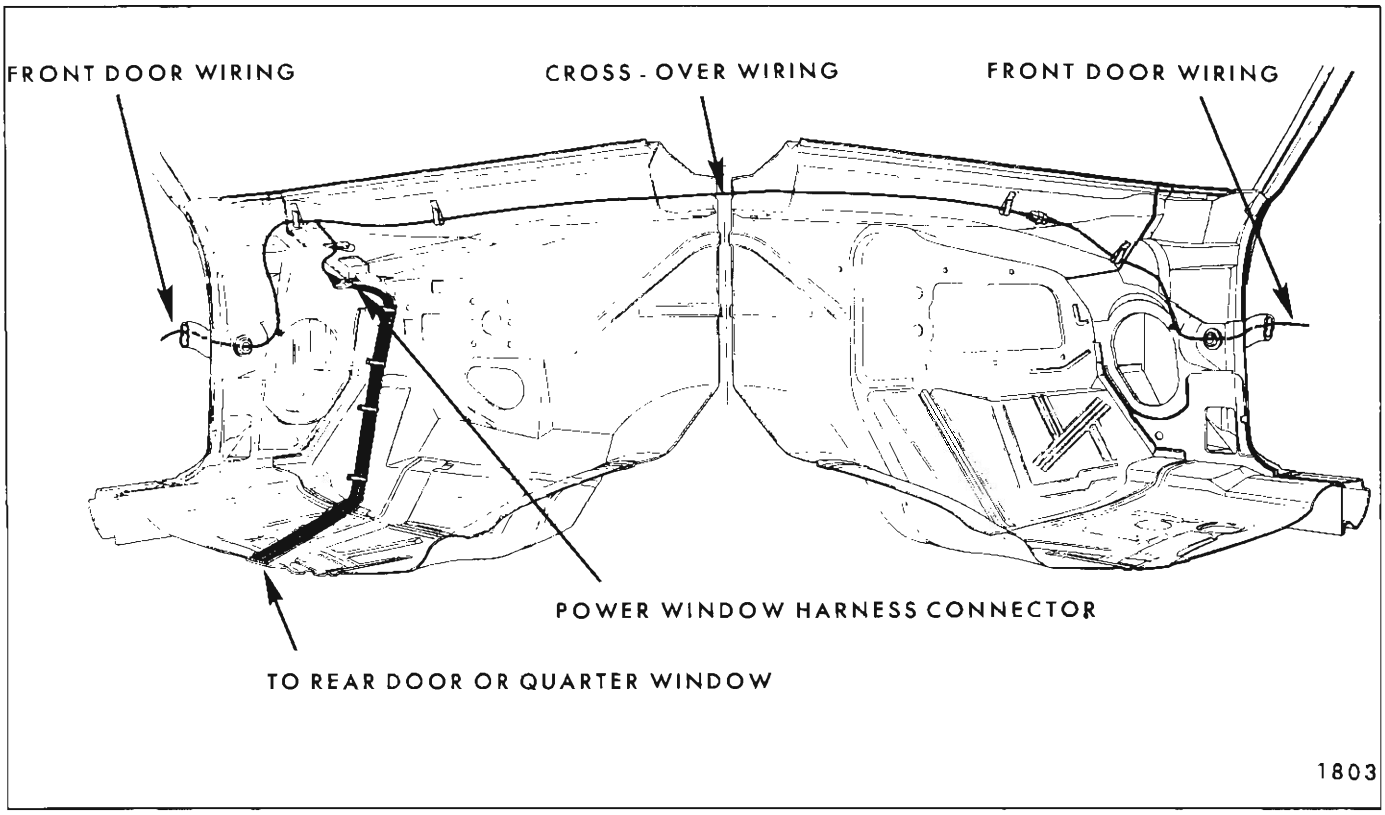


Fig. 1L3—Front End Power Window Wiring - 25-26000 Series

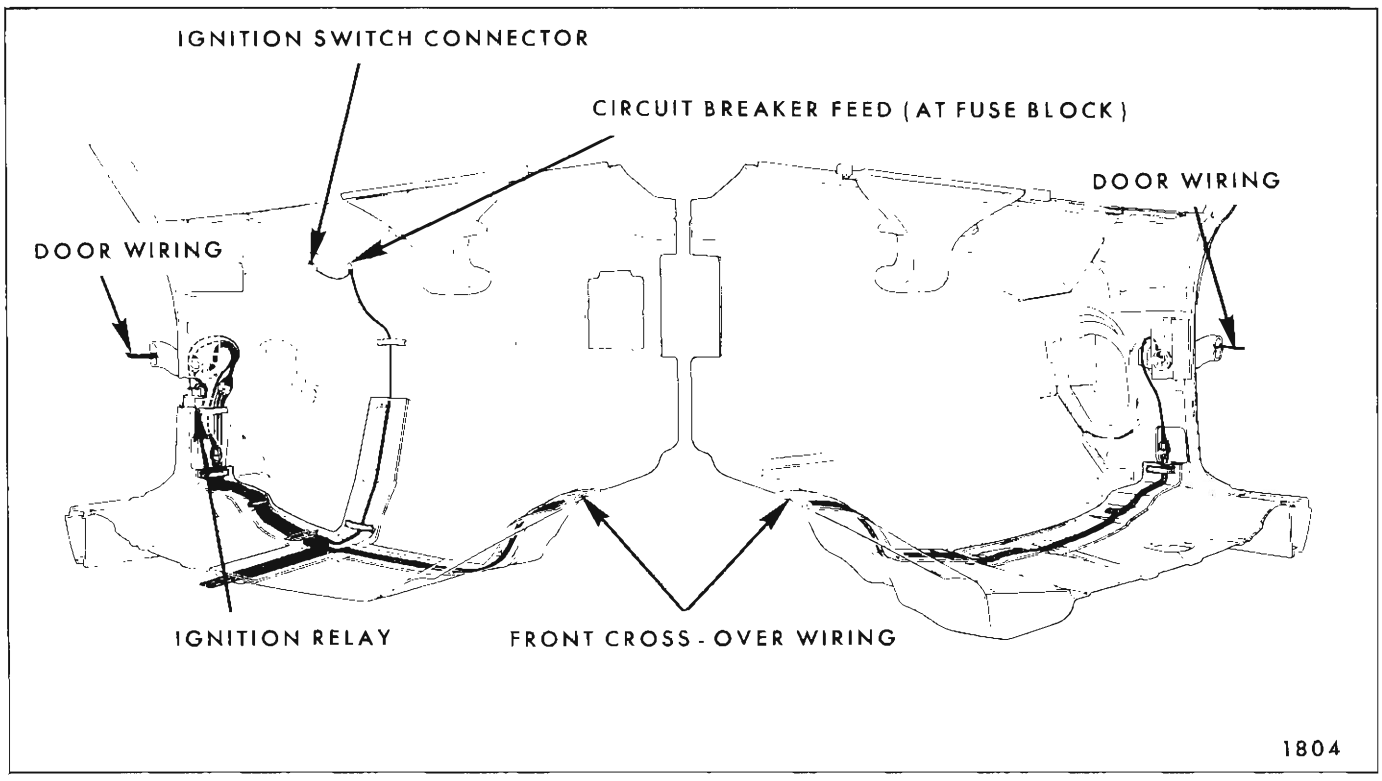


Fig. 1L4—Front End Power Window Wiring - 68200 Series

Rear Door Window Harness - The left and right rear door harness connects to the main flat feed harness in the base of the center pillar (See Figs. 1L10, 1L11). To disengage the connector, pull harness inboard at base of center pillar.

Power windows are operated by a rectangular shaped 12 volt series wound motor with an internal circuit breaker and a self-locking rubber coupled gear drive. The harness to the door window motor connector is designed with a locking embossment to insure a positive connection. When disengaging the harness connector from the door motor, it is necessary to depress the thumb release. When installing the harness, the thumb release must be held depressed until the embossment on the female connector is locked in the hole of the motor connector.

Some rear quarter window motors and the ventilator motors are designed with a locking type connector which should not be disengaged. When testing or removing the motor, the in-line connector located inboard of the inner panel should be disengaged. All tests are made at this location.

The current for the power window and ventilator circuit is obtained by a circuit breaker located: 15-16000 series - left cowl; 25-26000 series and

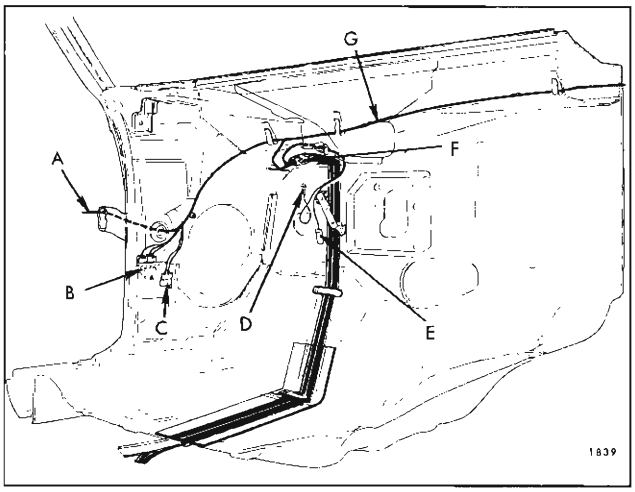


Fig. 1L5—Front End Power Window Wiring Typical for - 35-36-38000 Series

A. Front Door Wiring
B. Ignition Relay
C. Power Seat Feed on 38439-67 and 38669 Only
D. To Circuit Breaker
E. To Fuse Block
F. Power Window Wiring Connector
G. Cross-Over Harness

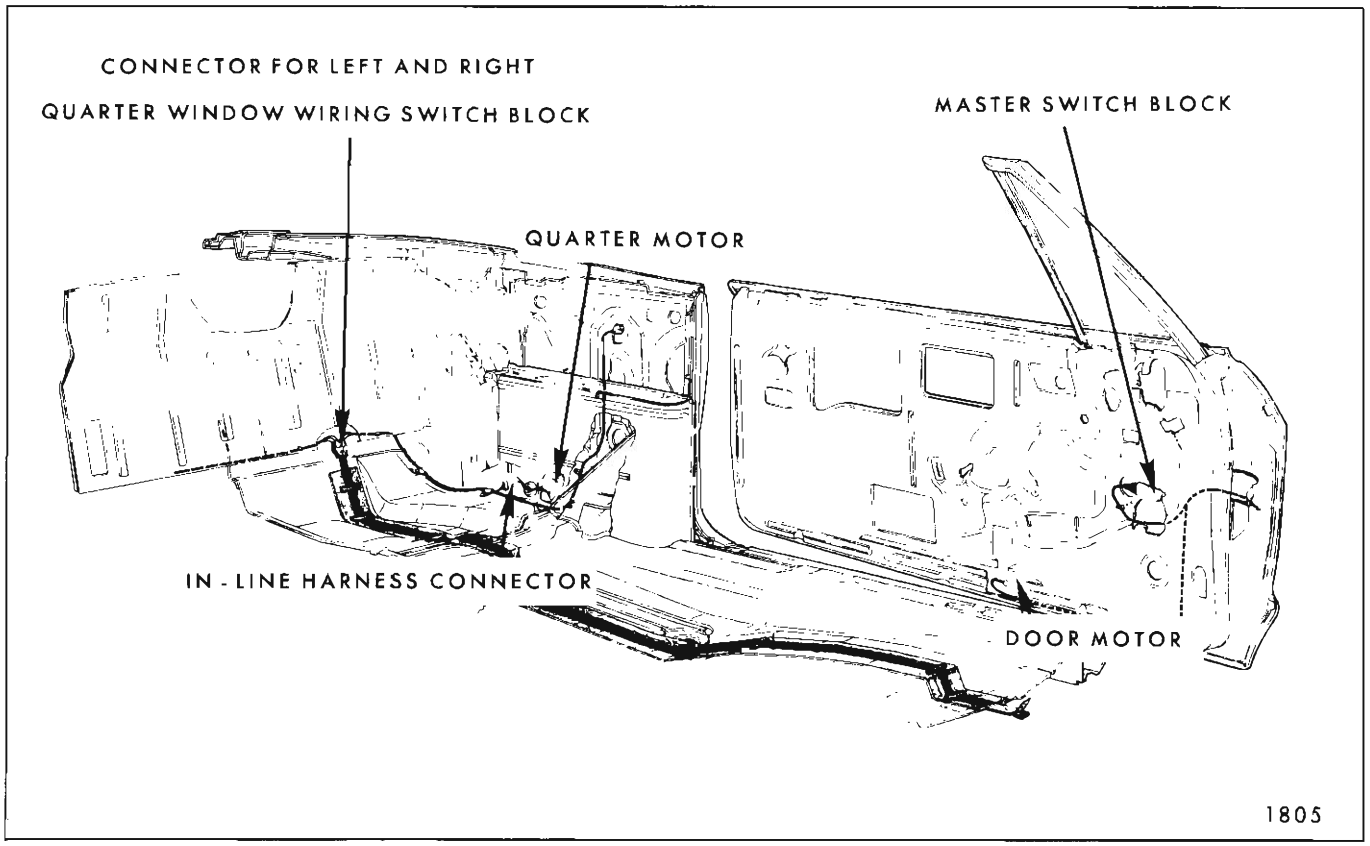


Fig. 1L6—Left Side Power Window Wiring - "67" Style

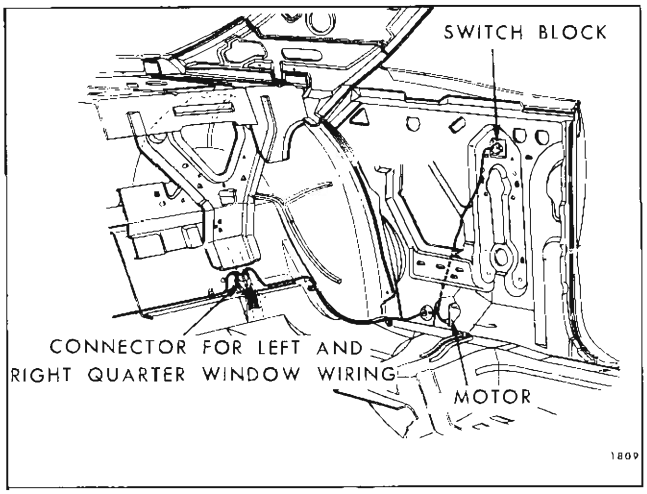


Fig. 1L7—Rear Quarter Power Window Wiring - "37" Style

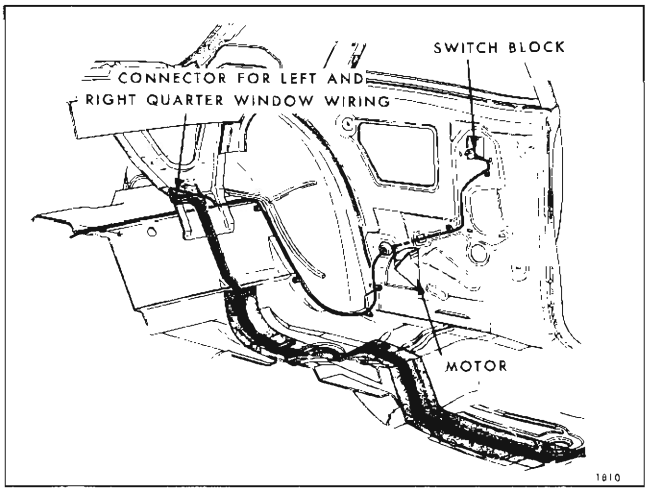


Fig. 1L8—Rear Quarter Power Window Wiring - "11" Style

35-36-38000 Series - engine compartment; 44-45-48000 Series and 68000 Series - plug-in type in fuse block.

35-36-38000 and 68000 Series: In addition to the circuit breaker, a relay is used in the circuit. The relay prevents the operation of the power windows until the ignition switch is turned "on".

68000 Series only CUT OUT SWITCH - A cut out switch installed on the left front door arm rest, is designed to temporarily by-pass the relay circuit so the windows may be operated only from the master control switch when the ignition is in the off position.

To perform this operation, the cut out switch control button is held in the "EMERG" position

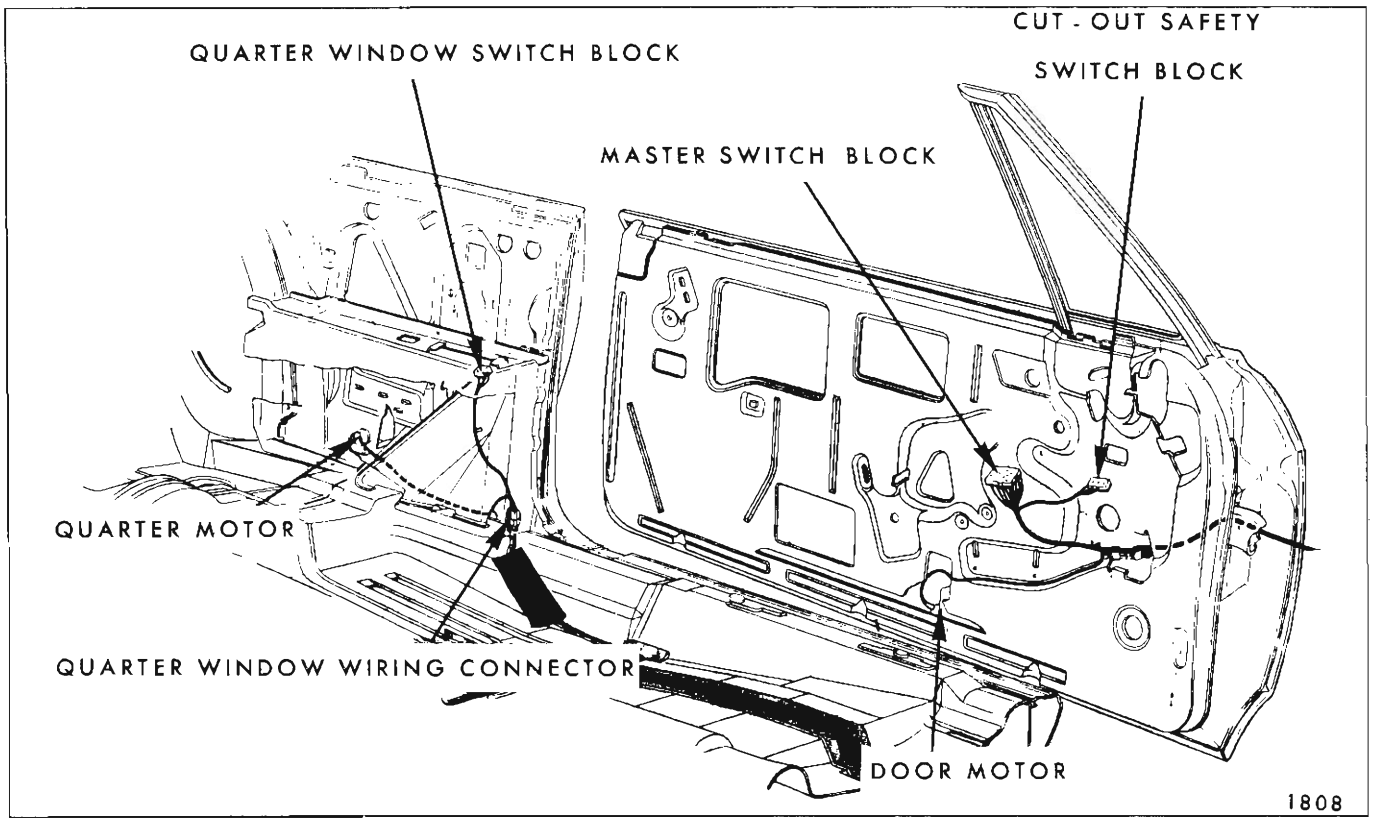


Fig. 1L9—Left Side Power Window Wiring - 68257

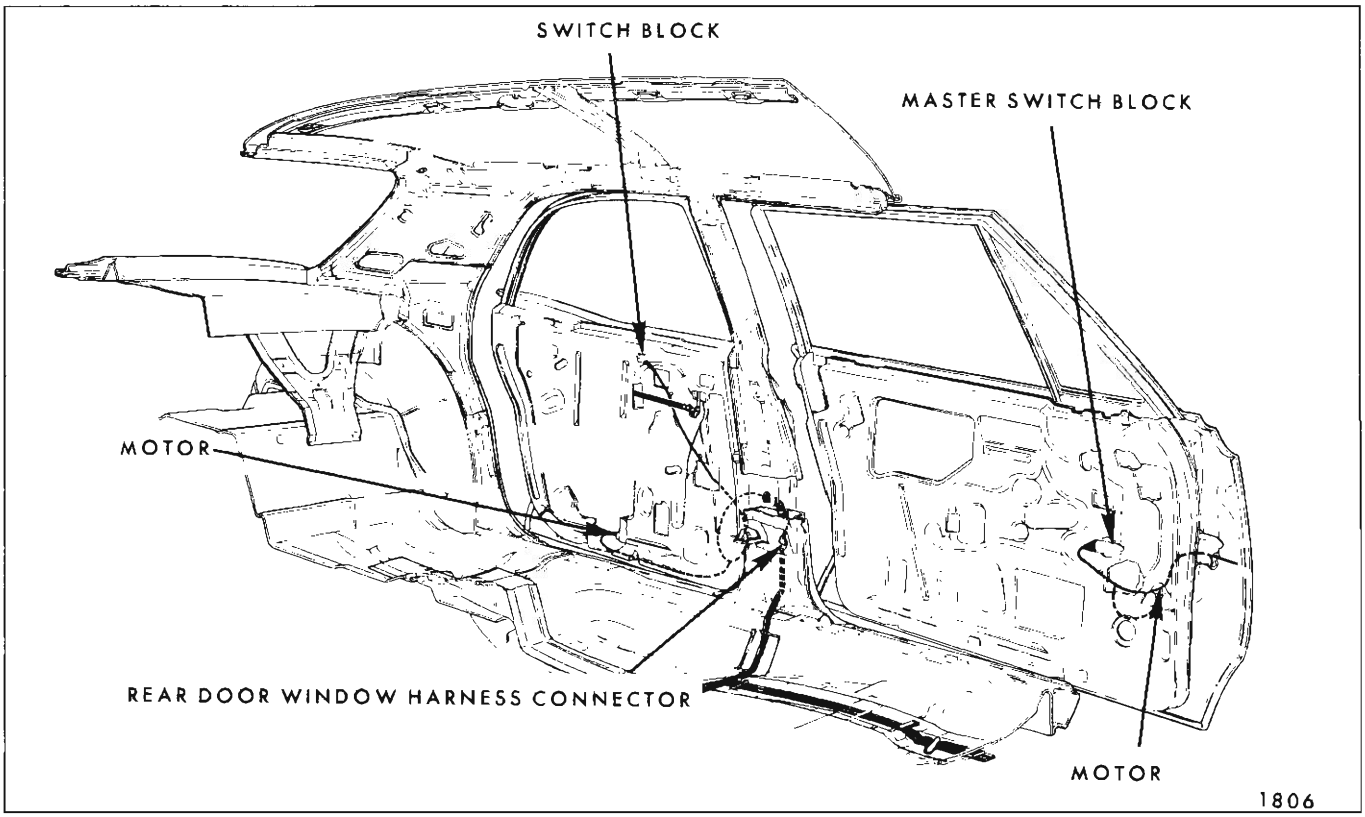


Fig. 1L10—Left Side Power Window Wiring - Four Door Styles

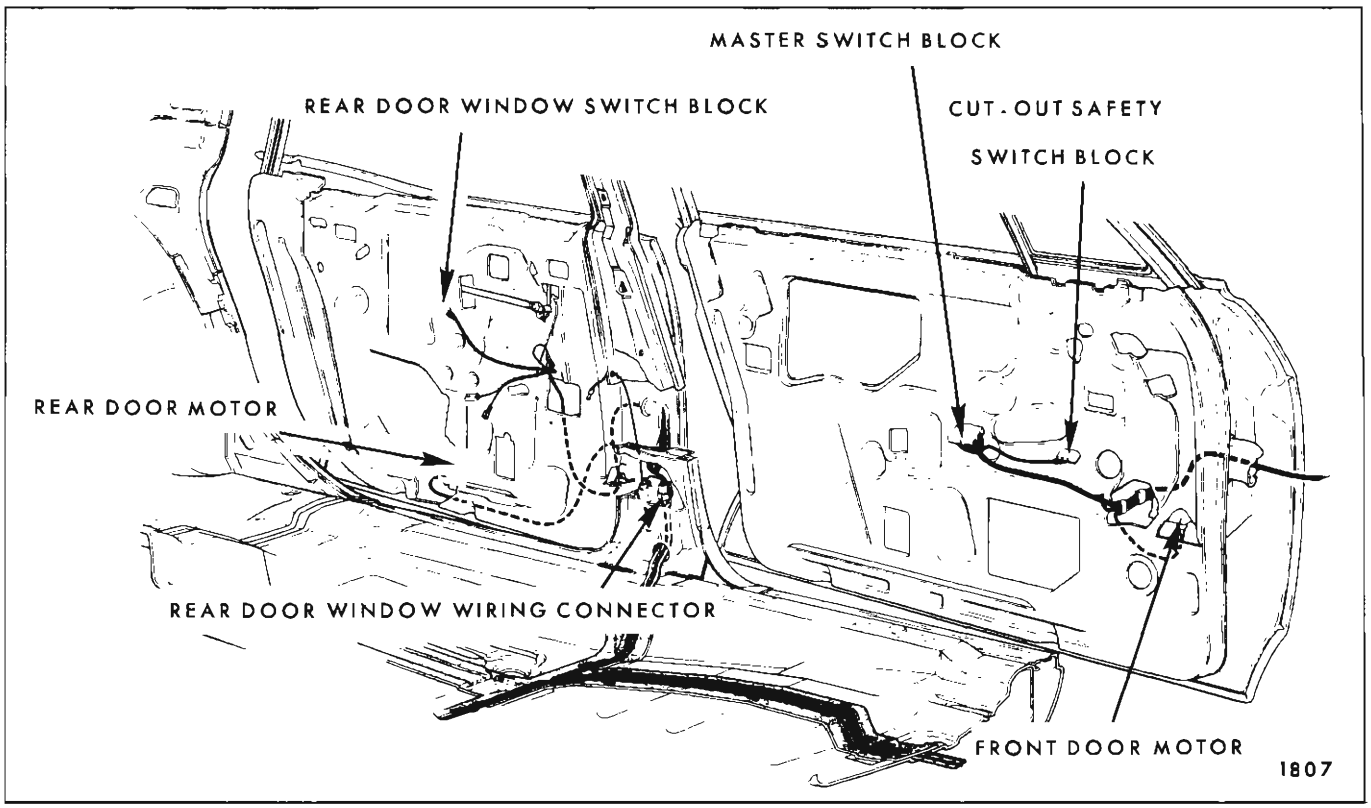


Fig. 1L11—Left Side Power Window Wiring - 68239-69

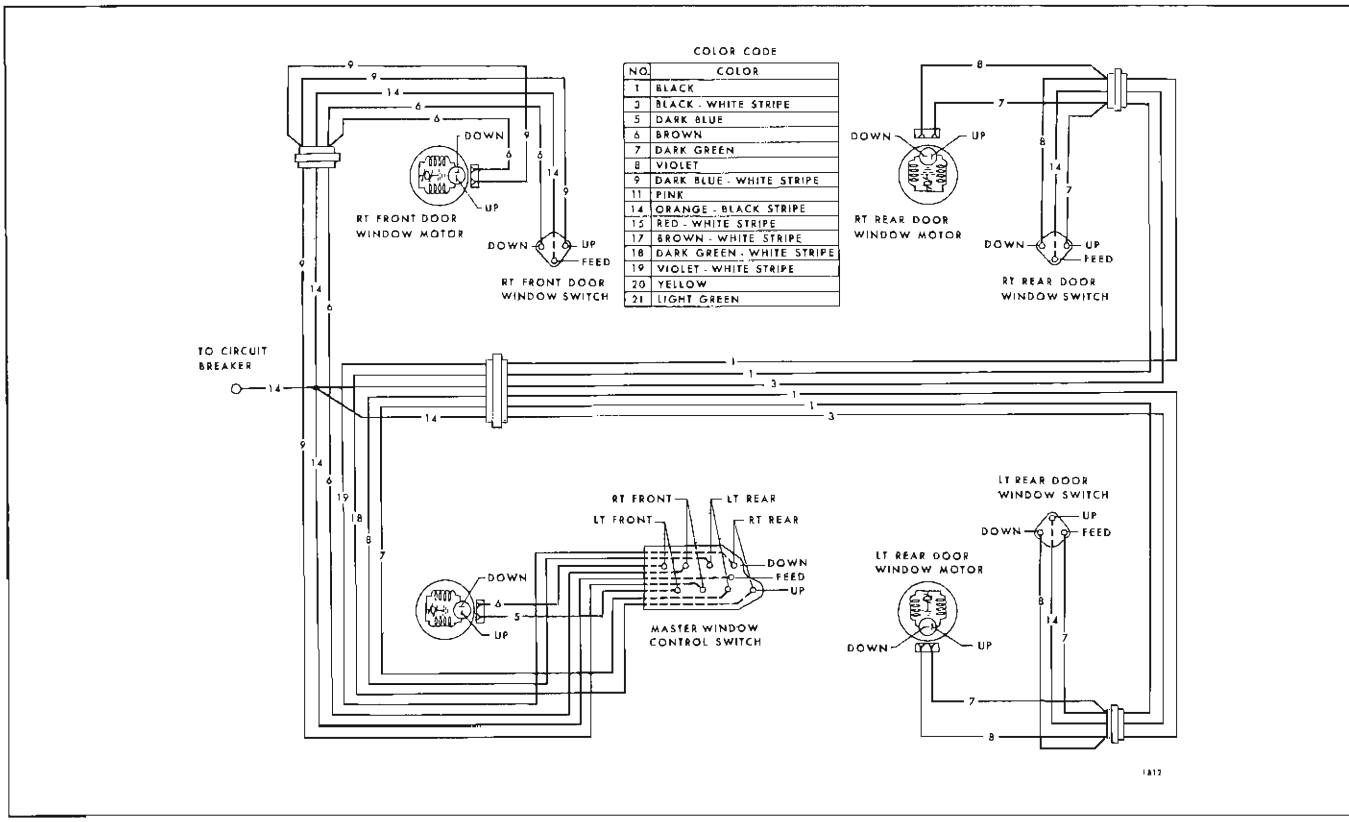


Fig. 1L12—Power Window Circuit Diagram - 15-16-25-26-45-46-48000 Series

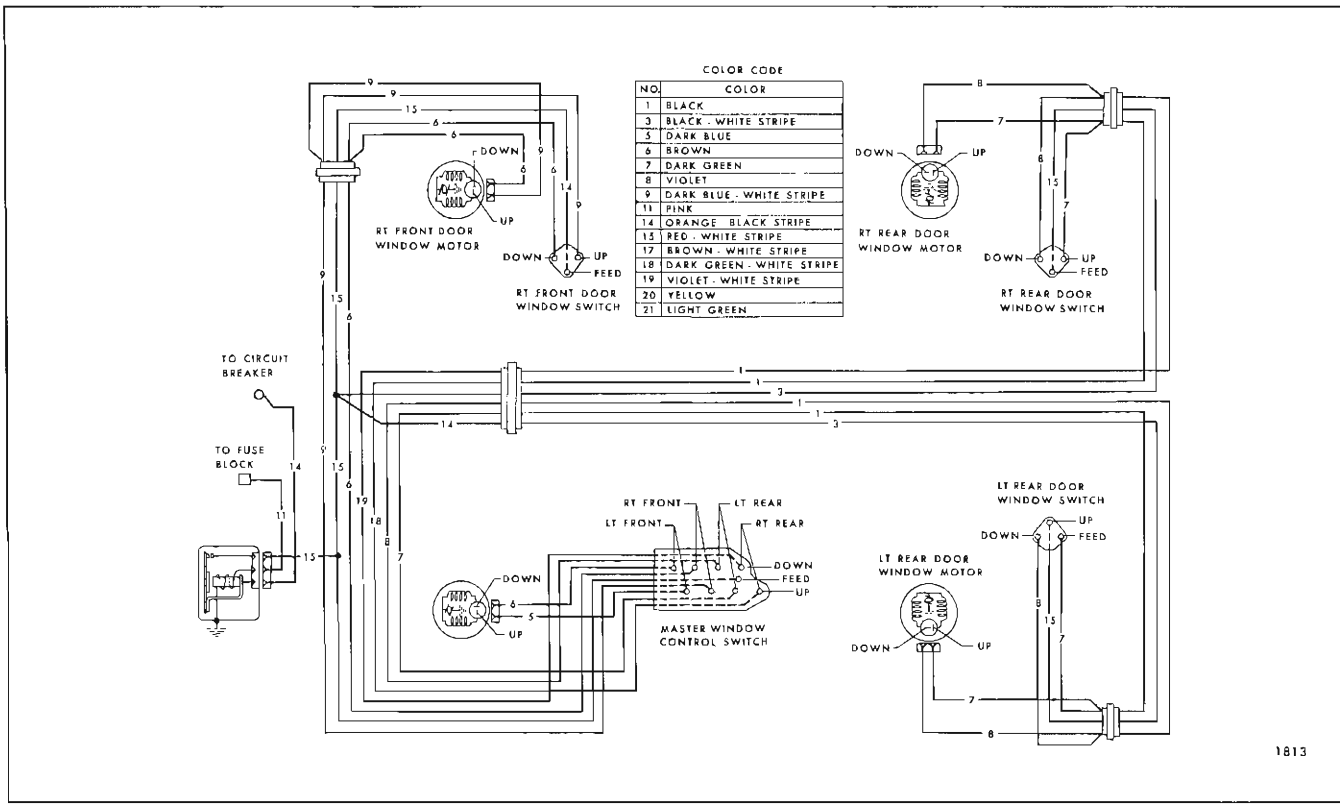


Fig. 1L13 Power Window Circuit Diagram - 35-36-38000 Series

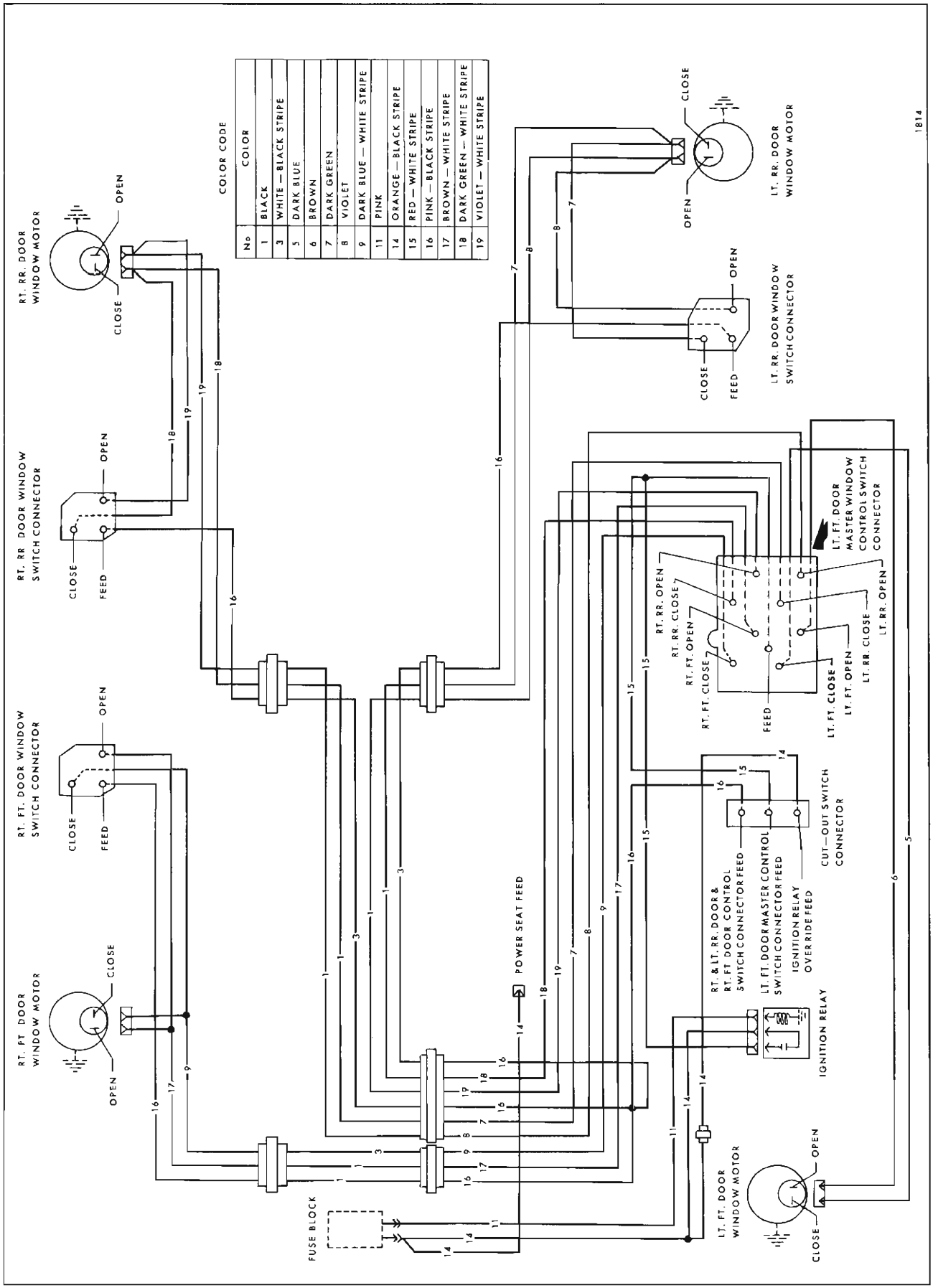


Fig. 1L14—Power Window Circuit Diagram - 68000 Series

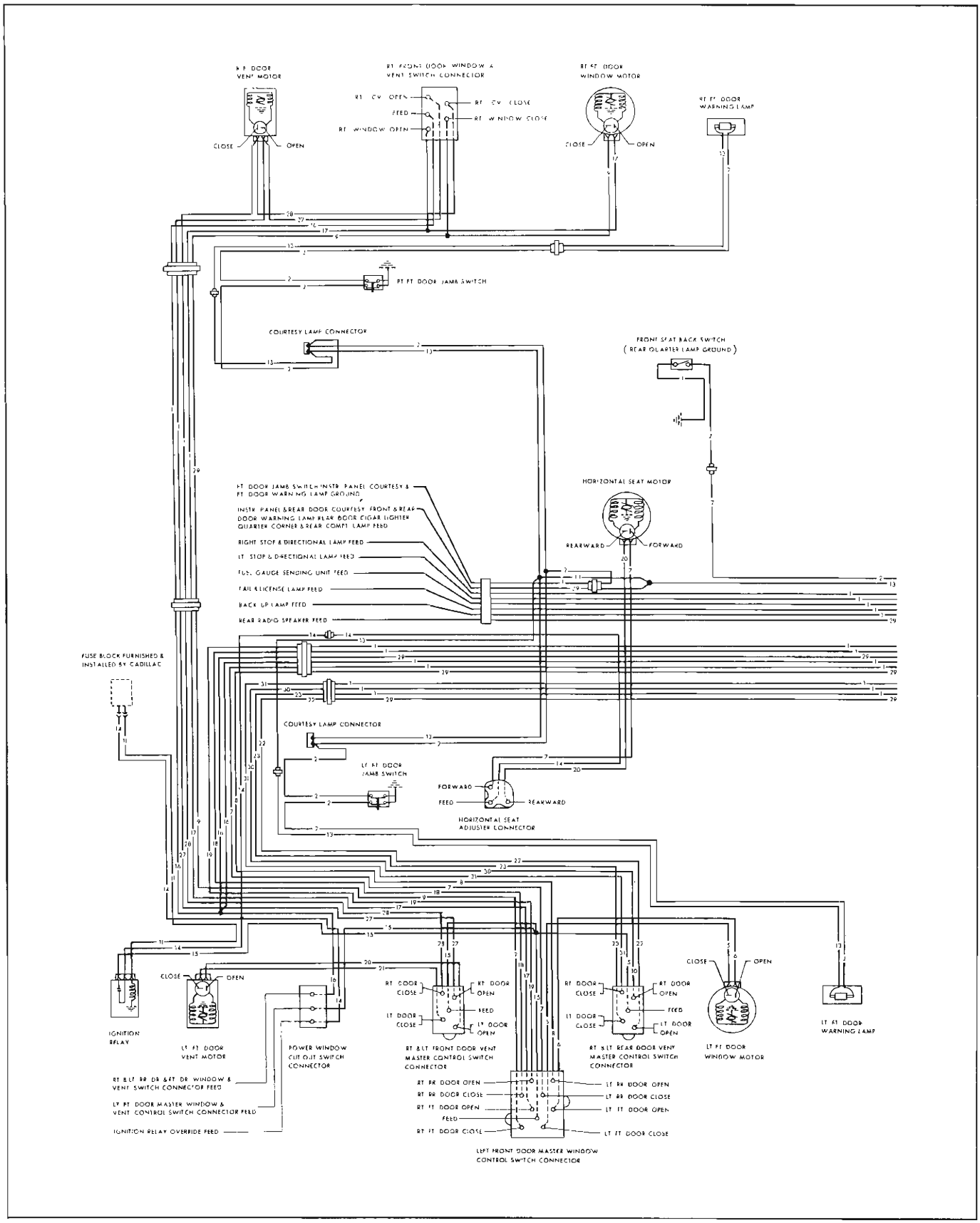
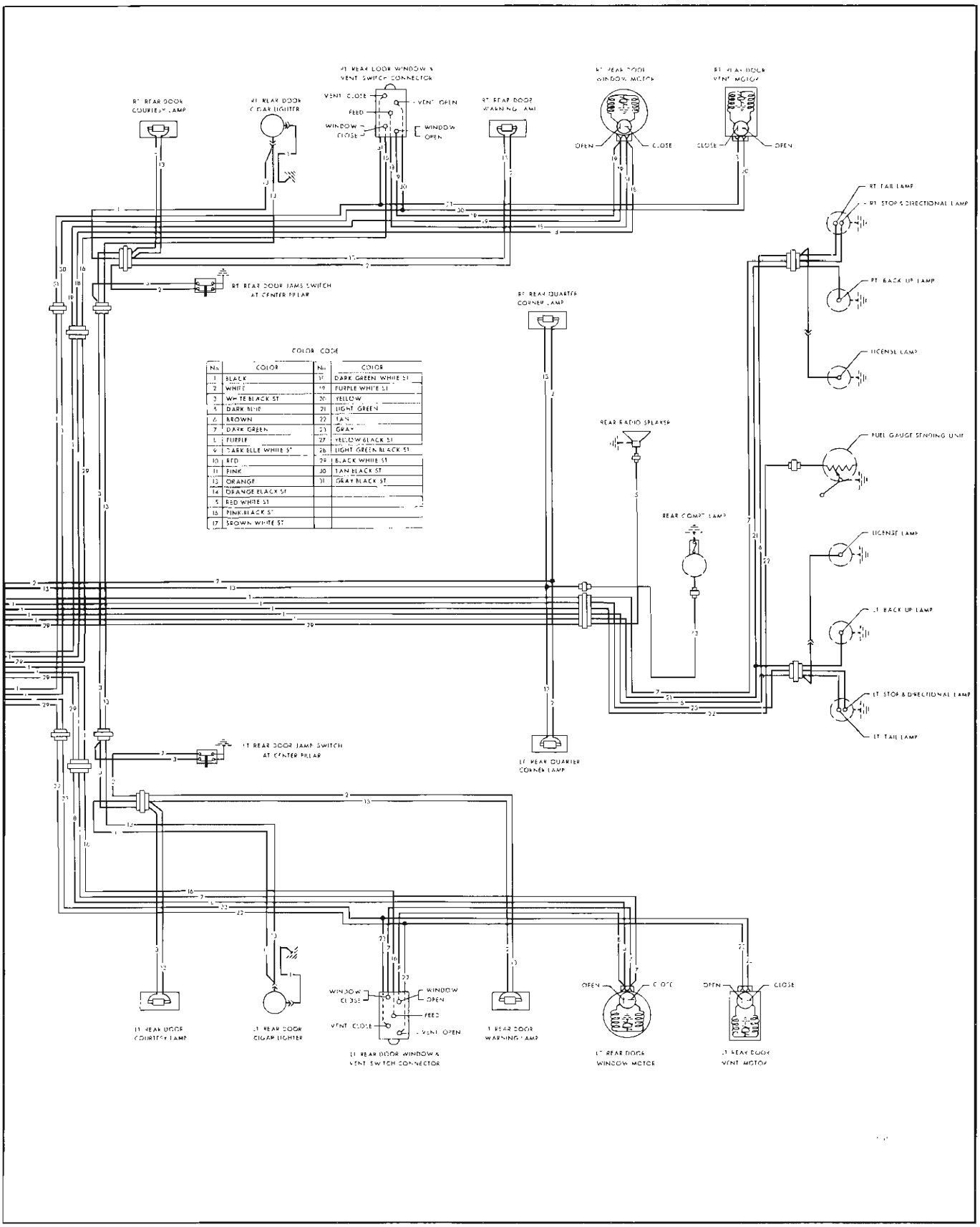


Fig. 1L15—Left Side Circuit Diagram – 68069



COLOR CODE

No.	COLOR	No.	COLOR
1	BLACK	19	DARK GREEN WHITE ST
2	WHITE	19	PURPLE WHITE ST
3	WHITE BLACK ST	20	YELLOW
5	DARK BLUE	21	LIGHT GREEN
6	BROWN	22	TAN
7	DARK GREEN	23	GRAY
8	PURPLE	27	YELLOW BLACK ST
9	DARK BLUE WHITE ST	28	LIGHT GREEN BLACK ST
10	RED	29	BLACK WHITE ST
11	PINK	30	TAN BLACK ST
12	ORANGE	31	GRAY BLACK ST
14	ORANGE BLACK ST		
15	RED WHITE ST		
16	PINK BLACK ST		
17	BROWN WHITE ST		

Fig 1L15—Left Side Circuit Diagram - 68069

while the master control switch buttons are actuated. When the cut out button is released, the button will return to the "LOCK" position.

The cut out switch button should be set in the "NORMAL" position when ignition switch is "on" to permit normal operation of power windows from all switch locations. If the control button is left in the "lock" position with the ignition switch on, the windows will operate only from the master control switch.

POWER WINDOW CIRCUIT CHECKING PROCEDURES

Failures in a circuit are usually caused by short circuits or open circuits. Open circuits are usually caused by breaks in the wiring, faulty connection or mechanical failure in a component such as a switch or circuit breaker. Short circuits are usually caused by wires from different components of the circuit contacting one another or by a wire or component grounding to the metal of the body due to a screw through the wire, insulation cut through by sharp metal edge, etc.

It may be necessary to use only one or all of the procedures outlined to locate an electrical failure in the circuit. If the location of the failure is evident follow only the steps required to check the affected wire or component. If the location of the failure is not evident, follow the procedure as outlined. Be sure to check the harness connectors for proper engagement and become familiar with the circuit diagram. (See Fig. 1L12 for 15-16000, 25-26000, 45-46-48000; 1L13 for 35-36-38000; 1L14 for 682-68300; and 1L15 for 68069.) Circuit diagram of 4 door styles is shown but basic circuitry and color code is similar on two door styles.

A. Checking Feed Circuit Continuity at Circuit Breaker

1. Connect one test light lead to battery side of circuit breaker and ground other lead. If tester does not light, there is an open or short circuit in feed circuit to breaker.

2. To check circuit breaker, disconnect the output feed wire (the wire opposite the power source feed to the breaker) from the breaker and with test light, check terminal from which wire was disconnected. If tester does not light, circuit breaker is inoperative.

B. Checking Relay Assembly at Shroud - 35-36-38000 and 68000 Series

1. With test light, check relay feed. If tester does not light, there is an open or short circuit between relay and circuit breaker.

2. Turn ignition switch on and with test light check output terminal of relay. If tester does not light, the relay is inoperative or there is a short or open circuit between ignition switch and relay assembly. (Check fuse at dash panel).

C. Checking for Current At Cut-Out Switch - 68000 Series only

1. Connect one test light lead to relay by-pass (over ride) terminal (orange-black stripe) of the switch block and ground other test lead.

2. If tester does not light, there is an open or short circuit between by-pass feed source and cut-out switch.

NOTE: Current should be present whether ignition is "on" or "off".

3. With ignition switch on, connect one test light lead to the master window control switch feed terminal (red-white stripe) of the switch block and ground other test lead.

4. If tester does not light, there is an open or short circuit between the relay and cut-out switch.

D. Checking Cut-Out Switch - 68000 Only

1. With ignition switch off, connect one end of a #12 gauge jumper wire to by-pass feed terminal (over-ride) (orange-black stripe) and the other end to the center terminal (master control switch feed - red-white stripe).

2. Operate master control switch. If windows operate with jumper wire but not with the cut-out switch, the by-pass side of the switch is defective.

3. With the ignition switch on, connect one end of a #12 gauge jumper wire to center terminal (master control switch feed - red-white stripe) and the other end in the right and left rear quarter or door and right front door feed terminal (pink-black stripe).

4. Operate control switches. If any of the windows operate with the jumper but not with the cut-out switch, the switch is defective.

E. Checking Feed Circuit Continuity at Window Control Switch

1. Connect one test light lead to feed terminal of switch block and ground other tester lead to body metal (See Fig. 1L16).

2. If tester does not light, there is an open or short circuit between switch and power source.

F. Checking Window Control Switch

1. Insert one end of a #12 gauge jumper wire to the switch feed terminal and the other end to one of the motor lead terminals in the switch block. Repeat this check on the remaining motor lead terminal (See Fig. 1L17).

2. If the window operates with the jumper wire, but does not operate with the switch, the switch is defective.

G. Checking Wires Between Door Window Switch and Door Window Motor

1. Disengage harness connector from window motor connector. The thumb release on the harness connector must be depressed before it can be disengaged from the motor.

2. Insert one end of a #12 gauge jumper wire to the switch feed terminal and the other end to one of the motor lead terminals in the switch block (See Fig. 1L17).

3. With test light check for current at terminal being tested. If tester does not light, there is an open or short circuit in the harness between the control switch and motor connector (See Fig. 1L18).

4. Check other terminal.

H. Checking Wires Between Quarter Window Switch and Quarter Window Motor

1. Disengage the in-line connector located inboard of the quarter inner panel as required.

2. Insert one end of a #12 gauge jumper wire in the switch feed terminal and the other end in one of the motor lead terminals of the switch block (See Fig. 1L18).

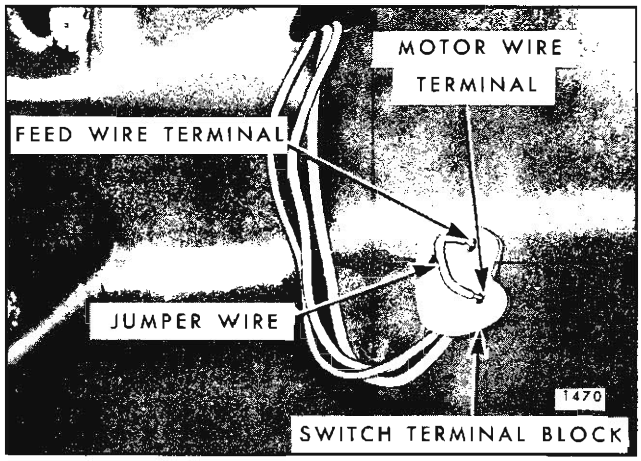


Fig. 1L17—Checking Window Control Switch

3. With a test light, check for current at the corresponding terminal at the in-line motor connector. If tester does not light, there is an open or short circuit between control switch and motor connector.

4. Check other terminal.

I. Checking Window Motor

1. Check window regulator and channels for possible mechanical bind of window.

2. Check attachment of window motor to insure an effective ground.

3. Connect one end of a #12 gauge jumper wire to the power source and the other end to one of the

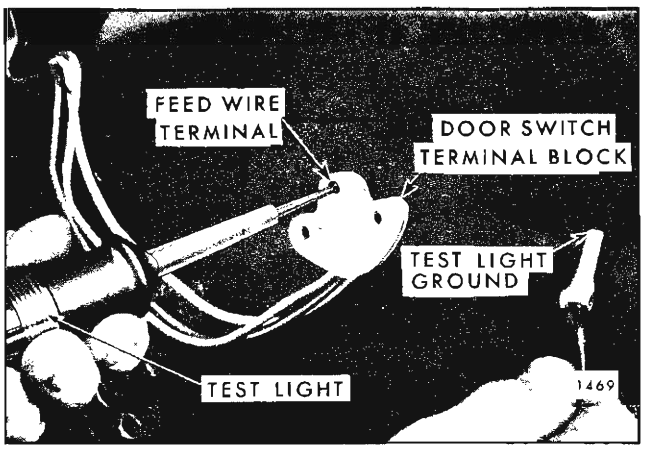


Fig. 1L16—Checking Feed Circuit

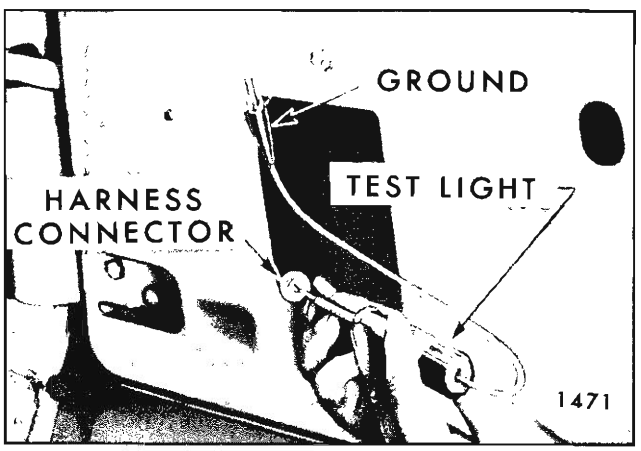


Fig. 1L18—Checking Circuit Between Switch and Motor

terminals on the door window motor or the in-line connector for the quarter window motor.

4. If the motor fails to operate with a jumper wire, the motor is defective and should be repaired or replaced as required. Check the other motor lead in the same manner.

J. Typical Failures of Power Windows

The following typical failures and corrections have been listed as an aid for eliminating electrical failures in the power window electrical circuit. It should be noted that multiple failures in the circuit may lead to a combination of conditions, each of which must be checked separately.

CONDITION	CAUSE	CORRECTION
1. None of the windows will operate with ignition switch on.	Short or open circuit in power feed circuit.	A. Check circuit breaker operation. B. Check relay operation at left cowl. C. Check feed connection to power harness beneath instrument panel. D. Check the feed circuit wires for possible short or open circuit. E. Check cut-out switch.
2. Right rear door window does not operate from master control switch on left door or from control switches on right rear door. Left door window operates.	A. Short or open circuit between right rear door harness and power window front harness. B. Short or open circuit in affected window control switch or window motor circuit. C. Possible mechanical failure or bind in window channels. D. Defective window motor.	A. Check harness connectors beneath outer ends of instrument panel for proper installation. B. Check wires in power window front harness for possible short or open circuit. C. Check operation of rear door window control switch. D. Check circuit from window control switch to window motor for short or open circuit. E. Check window regulator and channels for possible mechanical failure or bind. F. Check operation of motor.
3. Right door windows will operate from left door master control switch but will not operate from right door control switches. Left door windows operate.	Open or short circuit in front harness feed wire circuit.	Follow up feed wire in front harness for possible short or open circuit.

POWER OPERATED VENTILATORS ALL EXCEPT 15000-16000 SERIES

The power ventilators are operated by a rectangular shaped 12 volt series wound motor with an internal circuit breaker.

The power ventilator circuit is very similar to the power window circuit. The diagnosis outlined for the power windows may also be used in locating and correcting failures in the power ventilator circuit.

A typical illustration showing the ventilator installation is shown in Figure 1L19.

The harness for the ventilator circuit is separate in the 25-26000, 35000 and 45-46000 series. All other series the harness is an integral part of the power window harness. For typical installation see Figure 1L19.

The circuit for power ventilators on the 25-26000 and 45-46000 is shown in Figure 1L20 and for 68200 series see Figure 1L21.

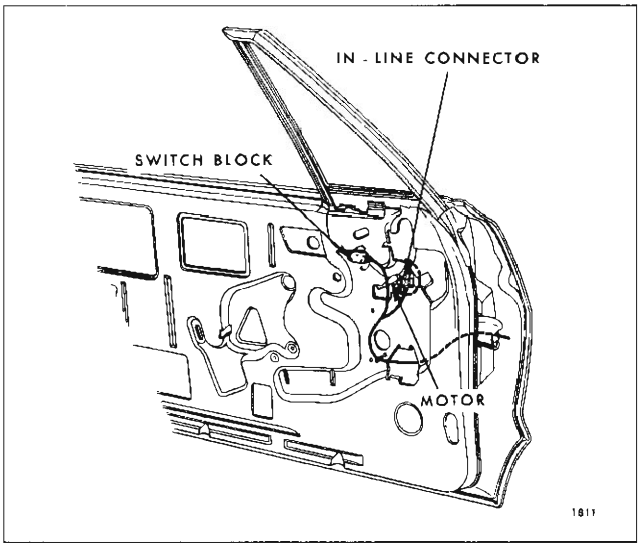


Fig. 1L19—Typical Power Ventilator Wiring

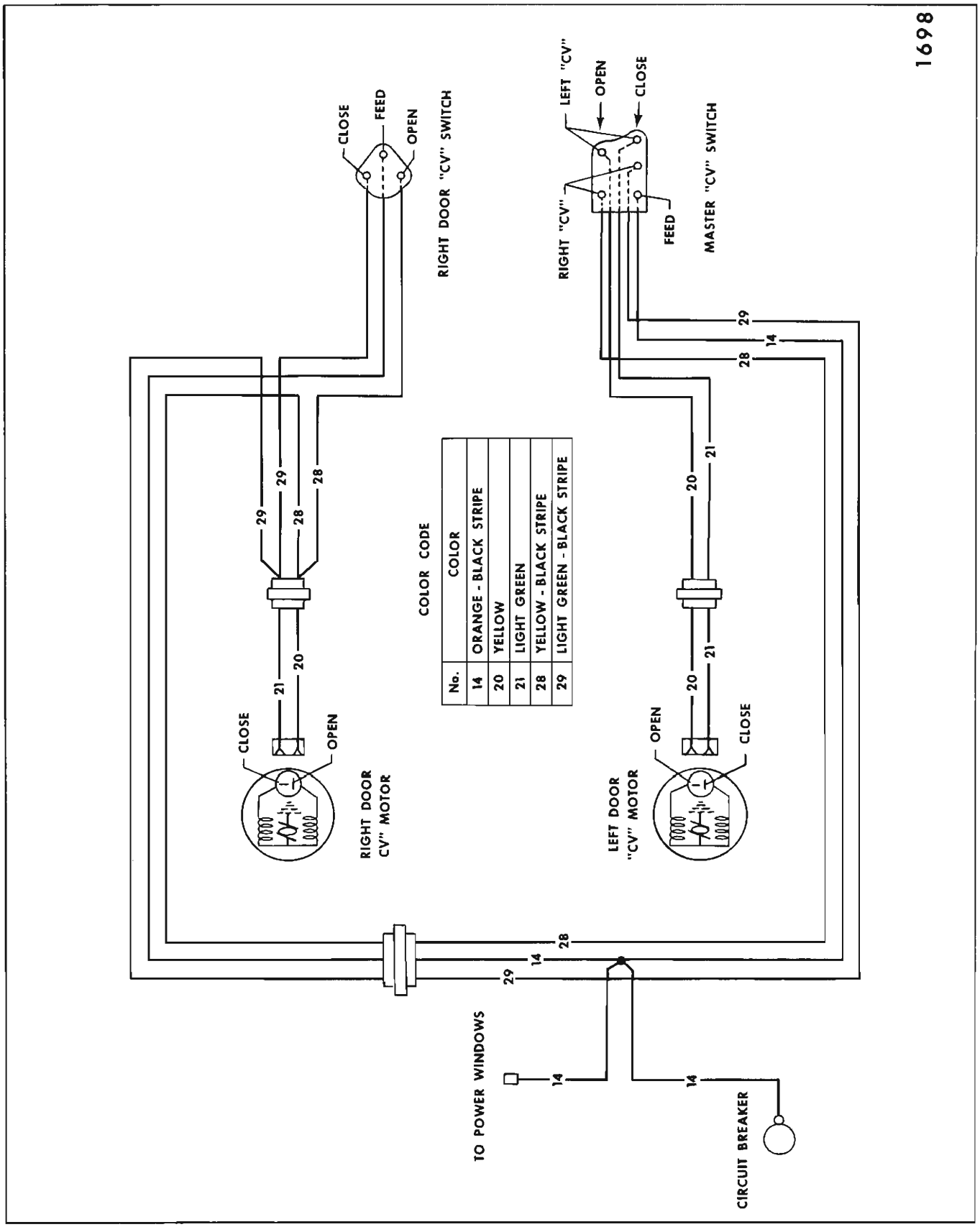


Fig. 1L20—Power Ventilator Circuit Diagram - 25-26-45-46-48000 Series

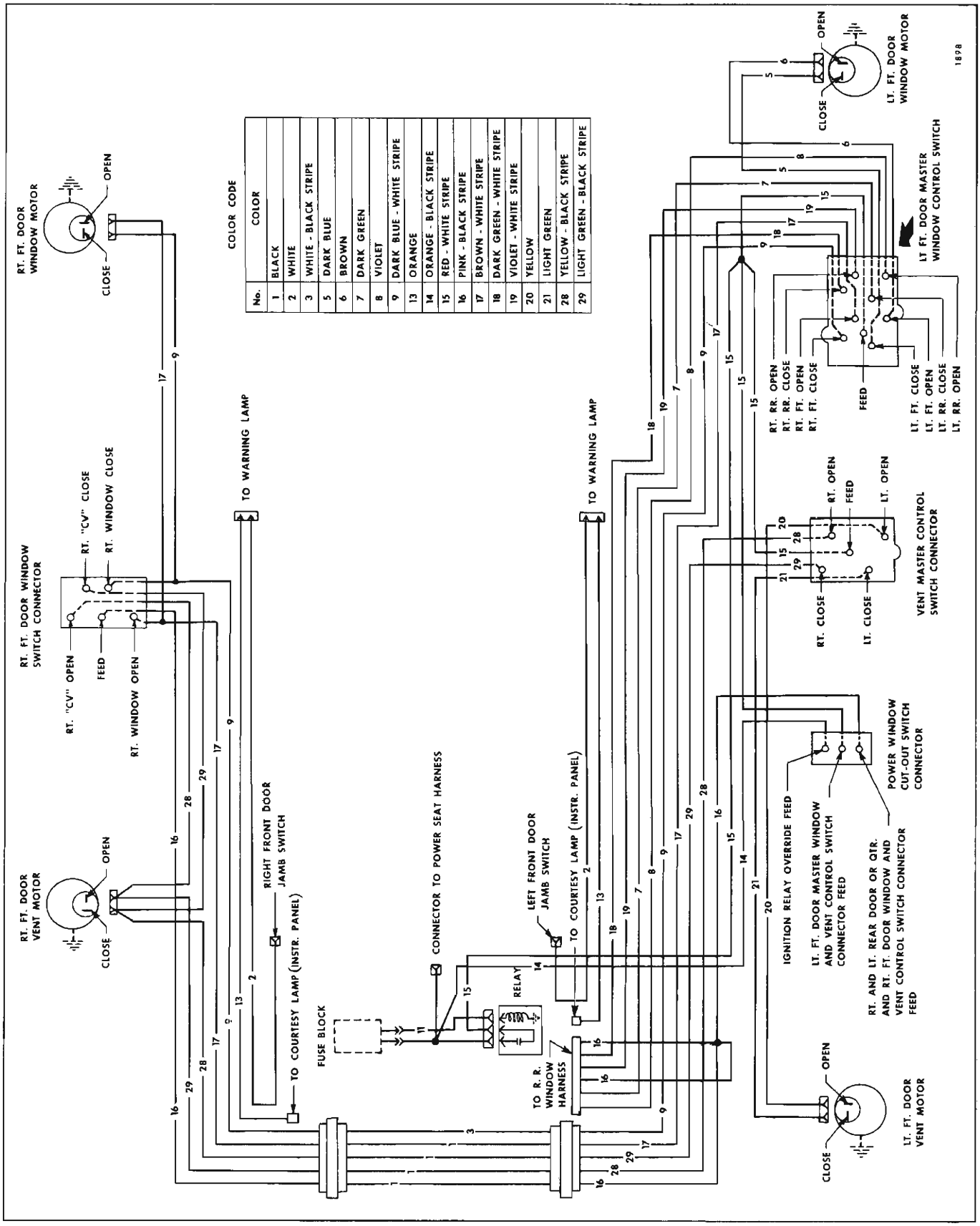


Fig. 1L21—Front Door Power Window and Ventilator Circuit Diagram - 68000 Series

POWER TAIL GATE WINDOW

15000-16000-25000 AND 26000 SERIES

ELECTRICAL TAIL GATE WINDOW CIRCUIT

The station wagon style power operated tail gate dropping window is controlled by a window regulator equipped with a rectangular shaped, 12 volt D.C., reversible direction motor with an internal circuit breaker and a self-locking gear drive. The current for the motor is obtained through the circuit breaker located at left shroud on 15-16000 styles, and in the engine compartment 25-26000 styles.

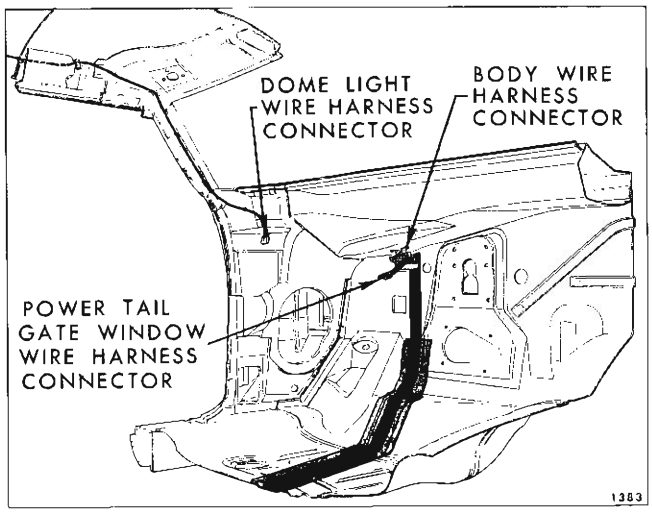


Fig. 1L22—Front End Wiring - 15-16-25-26000 Series

The window may be lowered from the instrument panel control switch, or from the tail gate window lock cylinder which rotates to open or lower the window.

15-16000 Series Only - On the nine passenger station wagon styles, a tail gate window control switch is located at the rear of the left rear quarter inner trim panel (See Fig. 1L23).

NOTE: The "up" cycle wire is not engaged in the switch block but may be connected upon owner request.

The tail gate window harness runs adjacent to the body wire harness and consists of two major sections. The front section of flat wire extends from the left side of the shroud (fire wall), rearward and connects to the rear harness at the right rear quarter area. See Figures 1L22, 24 and 26 for 15-16000 Series and Figures 1L22, 25 and 26 for 25-26000 Series.

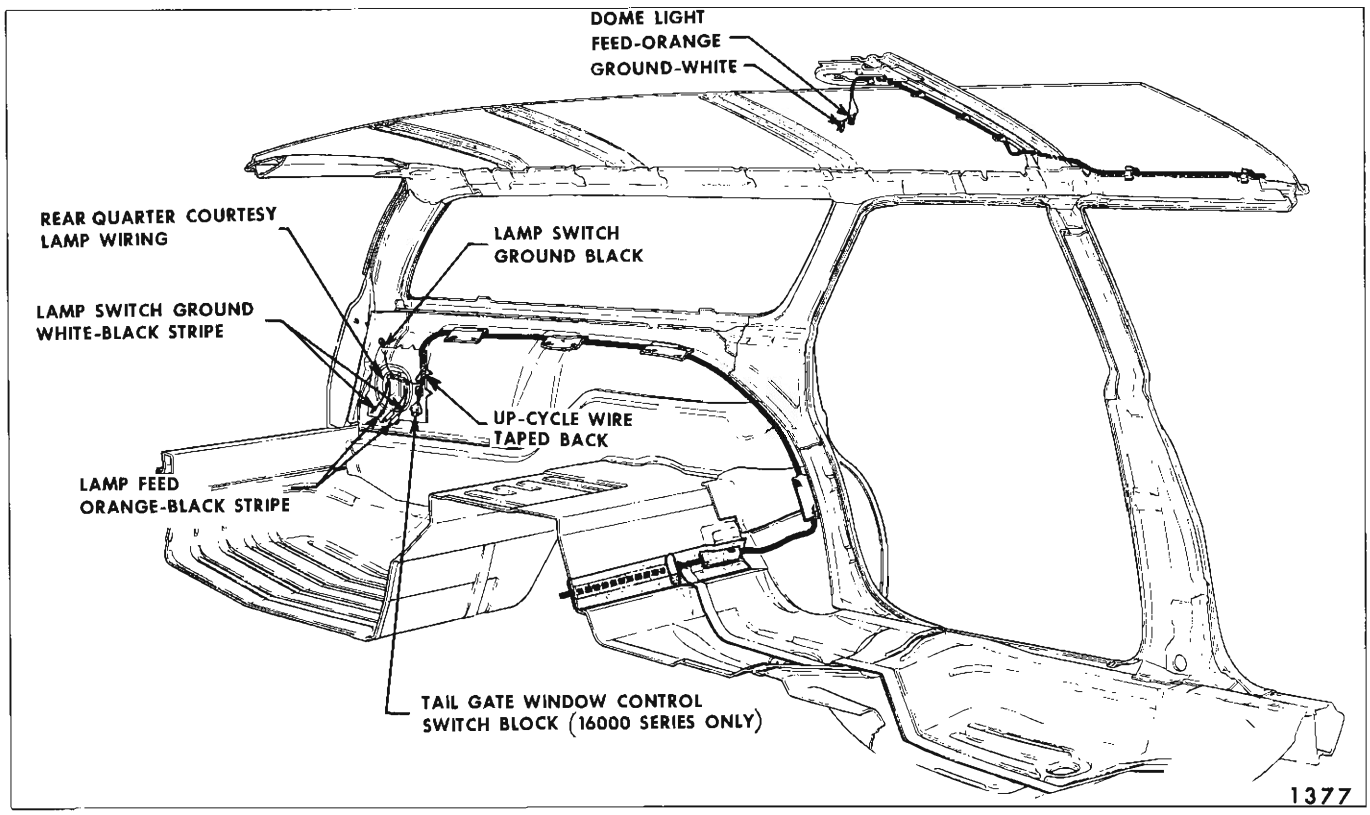


Fig. 1L23—Left Side Power Tail Gate Window and Body Wiring

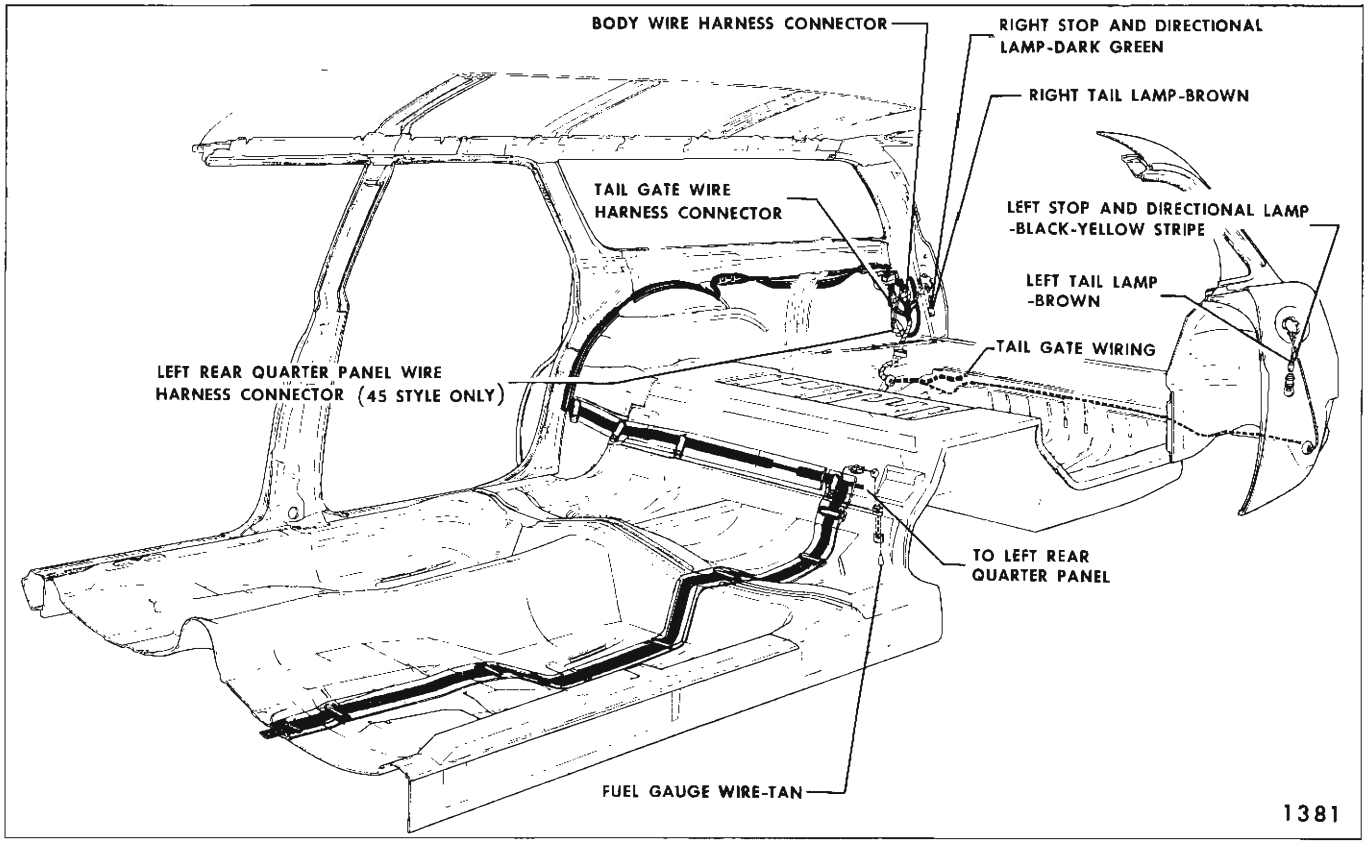


Fig. 1L24—Right Side and Rear Power Tail Gate Window and Body Wiring - 15-16000

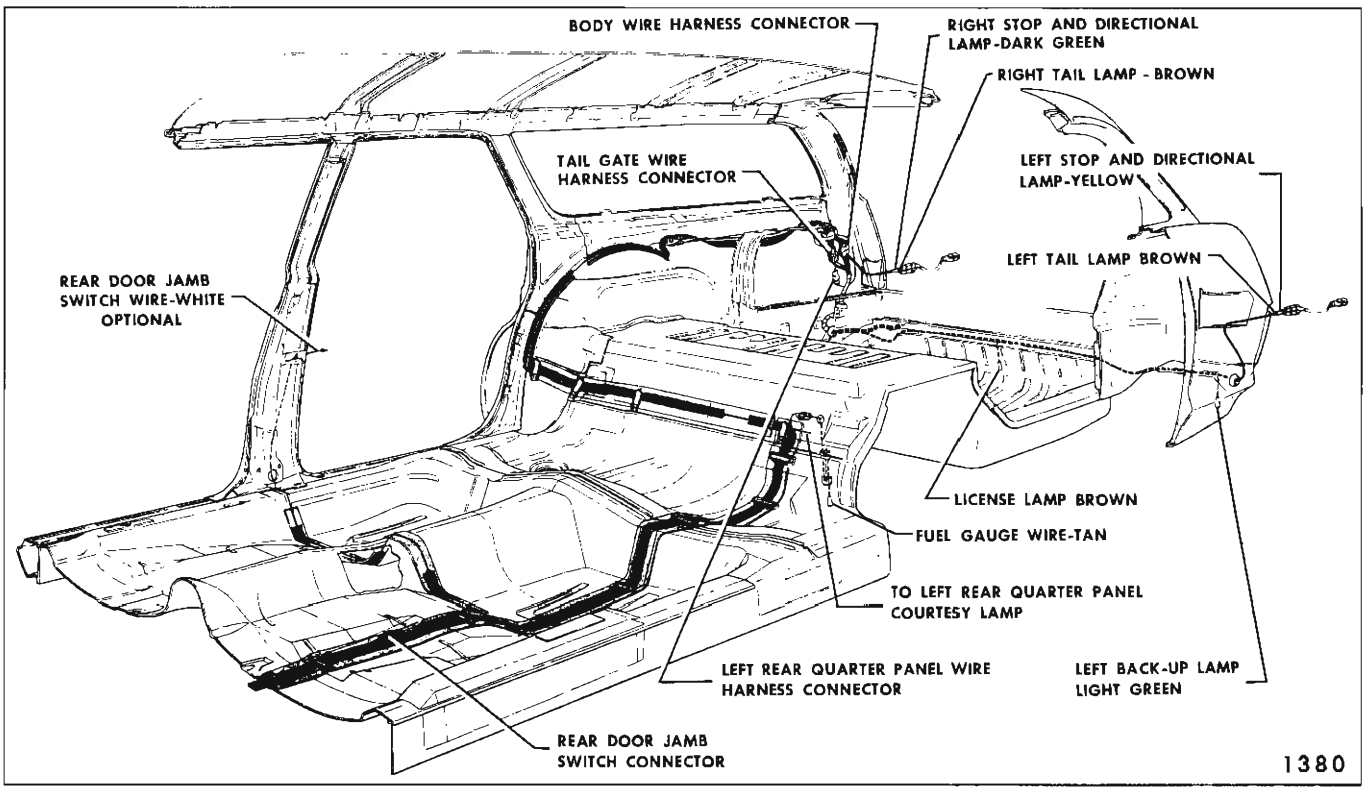


Fig. 1L25—Right Side and Rear Power Tail Gate Window and Body Wiring - 25-26000

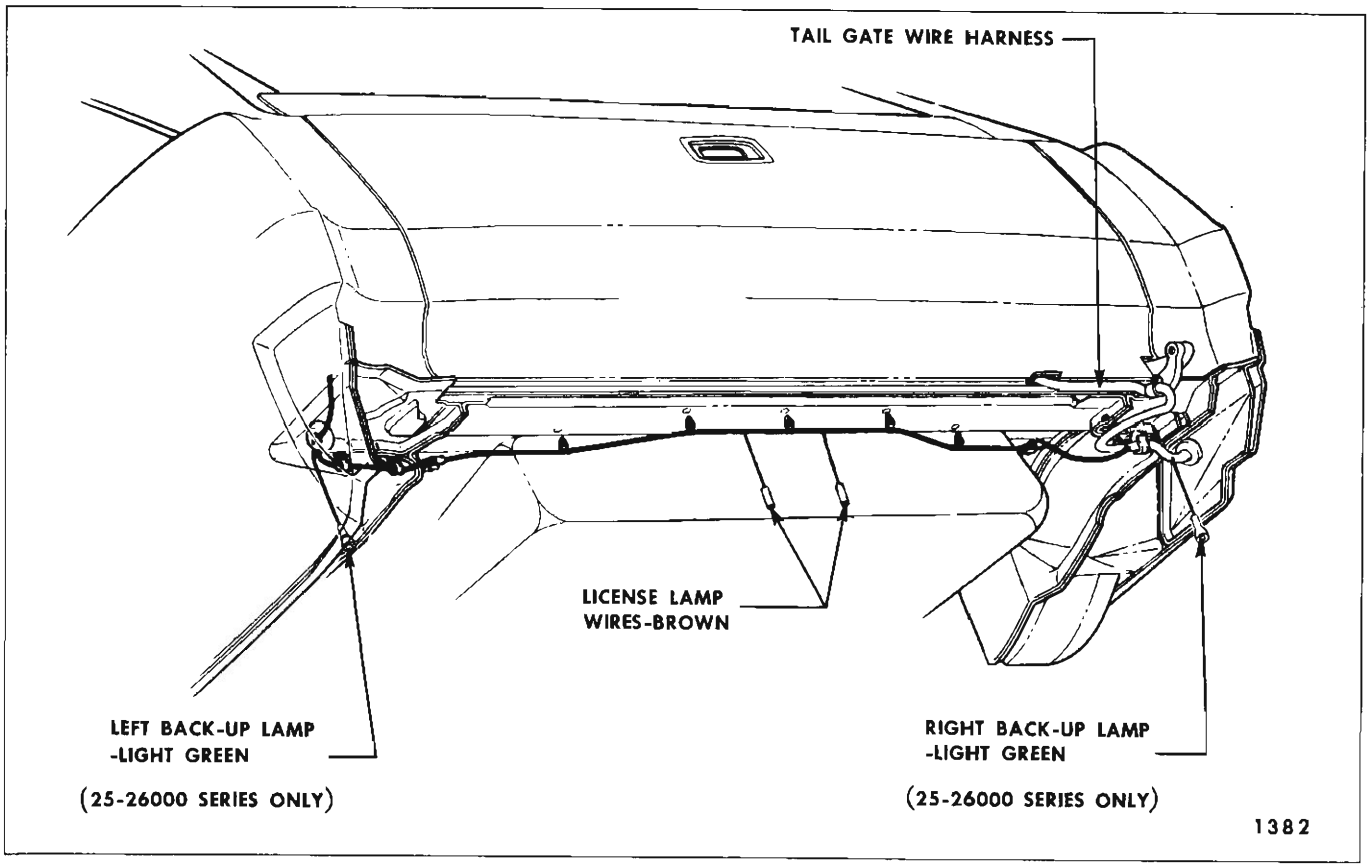


Fig. 1L26—Rear Cross Bar Wiring - 15-16-25-26000 Series

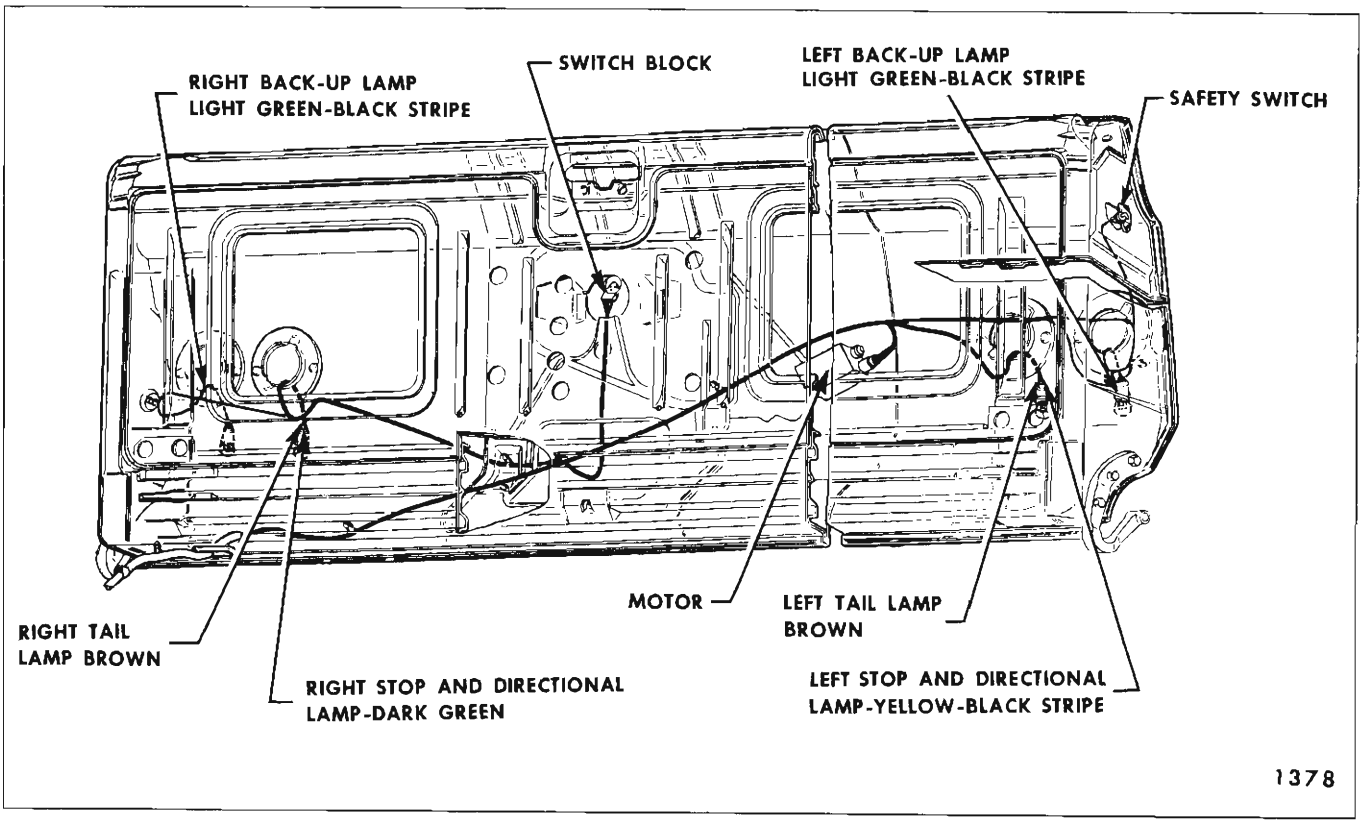


Fig. 1L27—Tail Gate Wiring - 15-16000 (16000 Shown)

To prevent the window from being operated to the up position when the tail gate has been lowered, a safety switch is located on the left edge of the tail gate (Fig. 1L27 15-16000 and 1L28 25-26000). The safety switch opens the ground circuit of the tail gate window motor, making it inoperative.

CHECKING PROCEDURE FOR TAIL GATE WINDOW CIRCUIT

Before performing an intensive checking procedure to determine any failure of the circuit, check all the connectors for proper installation. The checking procedures below may be used to check the operation of a switch or motor after the cause of the electrical failure has been isolated to a particular part of the circuit. Refer to the circuit diagram of the power tail gate window circuit. See Figures 1L29, 1L30 for 15-16000 Series; 1L30 for 25-26000 Series.

A. Checking Feed Circuit Continuity at Circuit Breaker

1. Connect one test light lead to battery side of circuit breaker and ground other lead. If tester does not light, there is an open or short circuit in feed circuit to breaker.

2. To check circuit breaker, disconnect the output feed wire (the wire opposite the power source feed to the breaker) from the breaker. Connect one test light lead to the output terminal and ground other lead. If tester does not light, circuit breaker is inoperative.

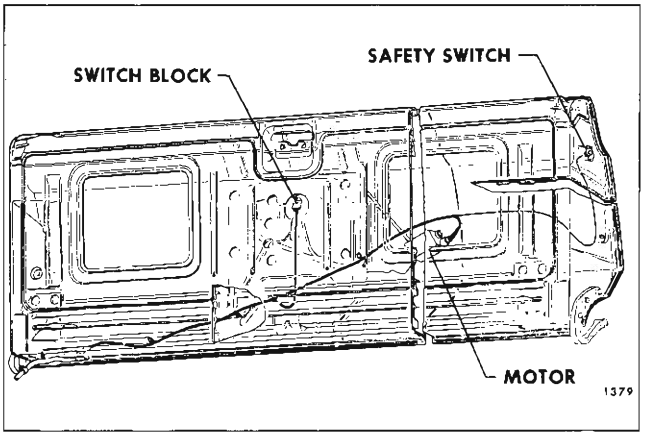
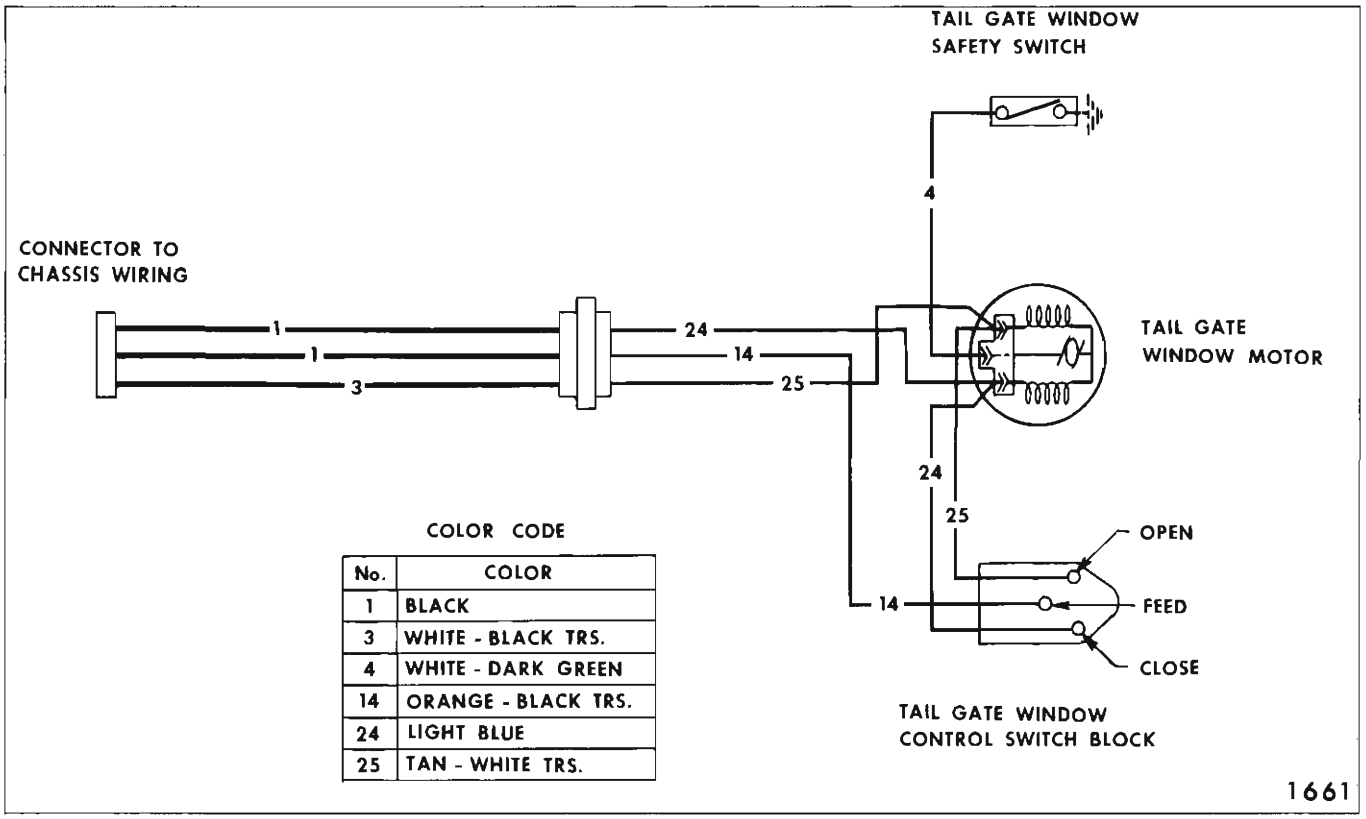


Fig. 1L28—Tail Gate Wiring - 25-26000 Series

B. Checking Feed Circuit Continuity at Control Switch on Instrument Panel

1. Disengage harness connector from switch. Connect one test light lead to feed terminal of switch connector and ground other test lead to body metal. If tester does not light, there is an open or short circuit between switch and power source.



COLOR CODE

No.	COLOR
1	BLACK
3	WHITE - BLACK TRS.
4	WHITE - DARK GREEN
14	ORANGE - BLACK TRS.
24	LIGHT BLUE
25	TAN - WHITE TRS.

Fig. 1L29—Power Tail Gate Window Circuit

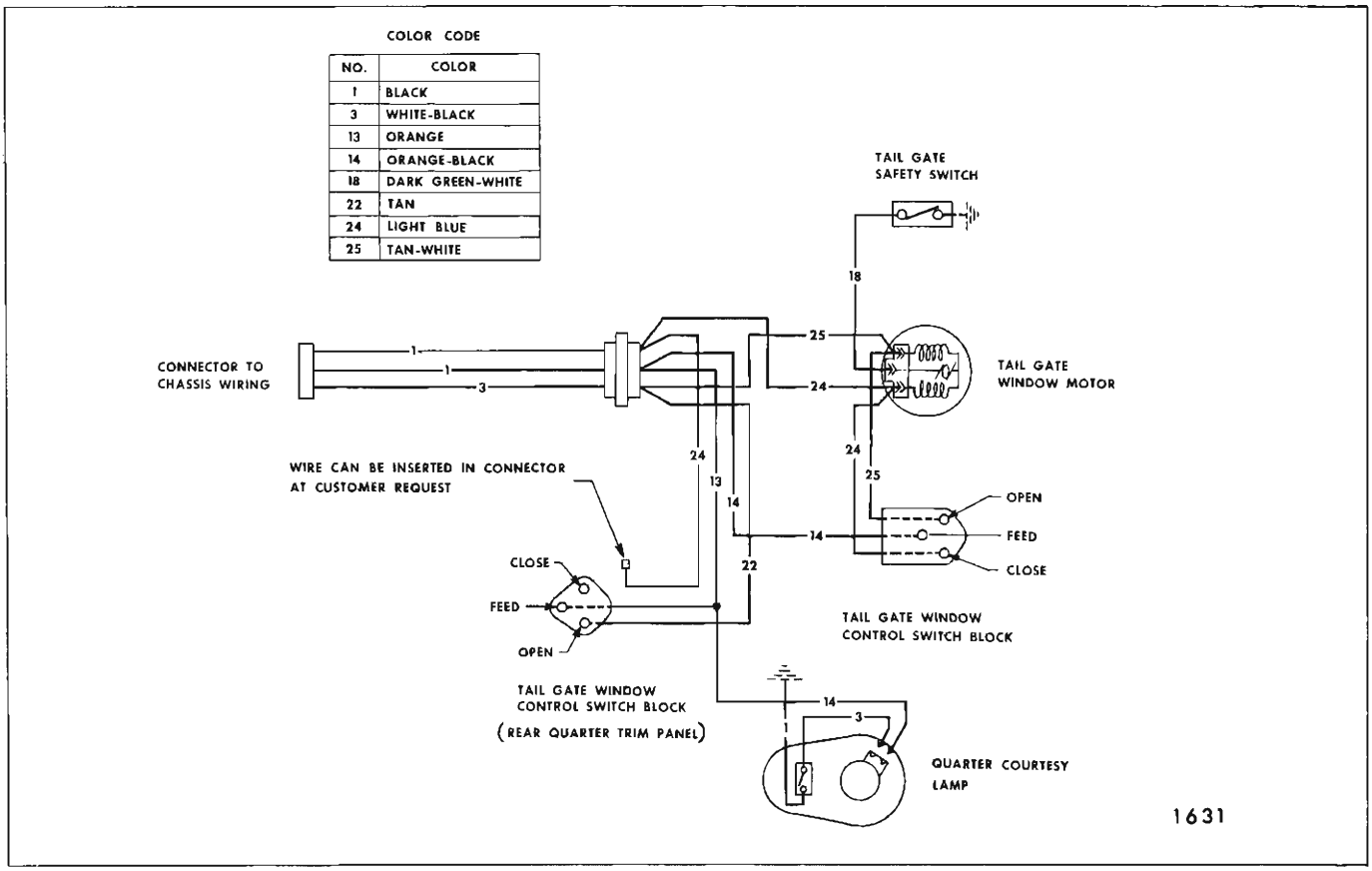


Fig. 1L30—Power Tail Gate Window Circuit Option - 15-16000 Series

C. Checking Control Switch at Instrument Panel

1. Disengage harness connector from switch.

2. Use a 12 gauge jumper wire and insert one end into the feed terminal and the other end into one of the other terminals. Tail gate window motor should operate.

3. Repeat procedure for the other terminals. If the tail gate window motor operates with the jumper wire but does not operate with the control switch, the switch is defective.

D. Checking Control Switch on Tail Gate

Remove tail gate switch and escutcheon as described in tail gate section. Disengage connector from switch and determine that there is current at terminal block; then, use a 12 gauge jumper and perform the same checking procedure as outlined for the control switch at the instrument panel.

E. Checking the Tail Gate Window Motor

1. Disconnect harness connector from the motor.

2. Connect the positive side of power source to the light blue wire terminal (close cycle) on the motor connector and the negative lead to the dark green and white stripe (ground) wire terminal. Motor should operate. To check the reverse operation of the motor, connect the power source to the tan-white stripe wire terminal (open cycle). If motor does not operate in both directions, repair or replace motor.

F. Check Operation of Safety Switch

1. With tail gate open, depress switch arm to simulate the tail gate being closed. Operate control switch. If motor does not operate, either switch is defective or the circuit is open from the motor to the switch.

2. To check for defective switch, connect one end of test light to a source of power and the other lead to the safety switch terminal. If the tester lights when the switch lever is actuated, the switch is operative.

NOTE: Safety switch completes the ground circuit from the motor.

TROUBLE SHOOTING

CONDITION	CAUSE	CORRECTION
A. The tail gate window operates up and down from the tail gate switch but does not operate from the switch at the instrument panel.	1. Open or short circuit from power source to control switch at instrument panel.	1. Check affected wiring for open or short circuit and check connector at switch for proper installation.
	2. Defective or inoperative control switch.	2. Check operation of switch.
B. With the tail gate closed, the window operates downward but does not operate upward when the switch at the instrument panel or tail gate is actuated.	1. Open or short circuit in up cycle feed wire.	1. Check affected wiring for open or short circuit.
	2. Defective motor.	2. Check operation of motor.
C. The window will not operate up or down from any of the control switches.	1. Open or short circuit in circuit from power source to switches or motor.	1. Check operation of circuit breaker.
	2. Safety switch not connected or poor ground.	2. Check affected circuit for open or short circuit.
	3. Mechanical bind or failure in tail gate window regulator mechanism.	3. Check connectors to safety switch and motor for proper engagement.
	4. Defective tail gate window regulator motor.	4. Check tail gate mechanical parts for bind or failure.
		5. Check operation of motor.

HORIZONTAL SEATS

a. ***DESCRIPTION***

The seat adjusters for the bench-type and bucket-type seat are actuated by a 12 volt series wound motor located near the front left side of the seat bottom frame, and are energized by a control switch installed in the seat side panel or in the door arm rest. For typical installations see Figure 1L31 for bucket-type seats and Figure 1L32 for bench-type seats.

For circuit diagrams see Figure 1L33 for 36-38000 series and Figure 1L34 for 48-68000 series.

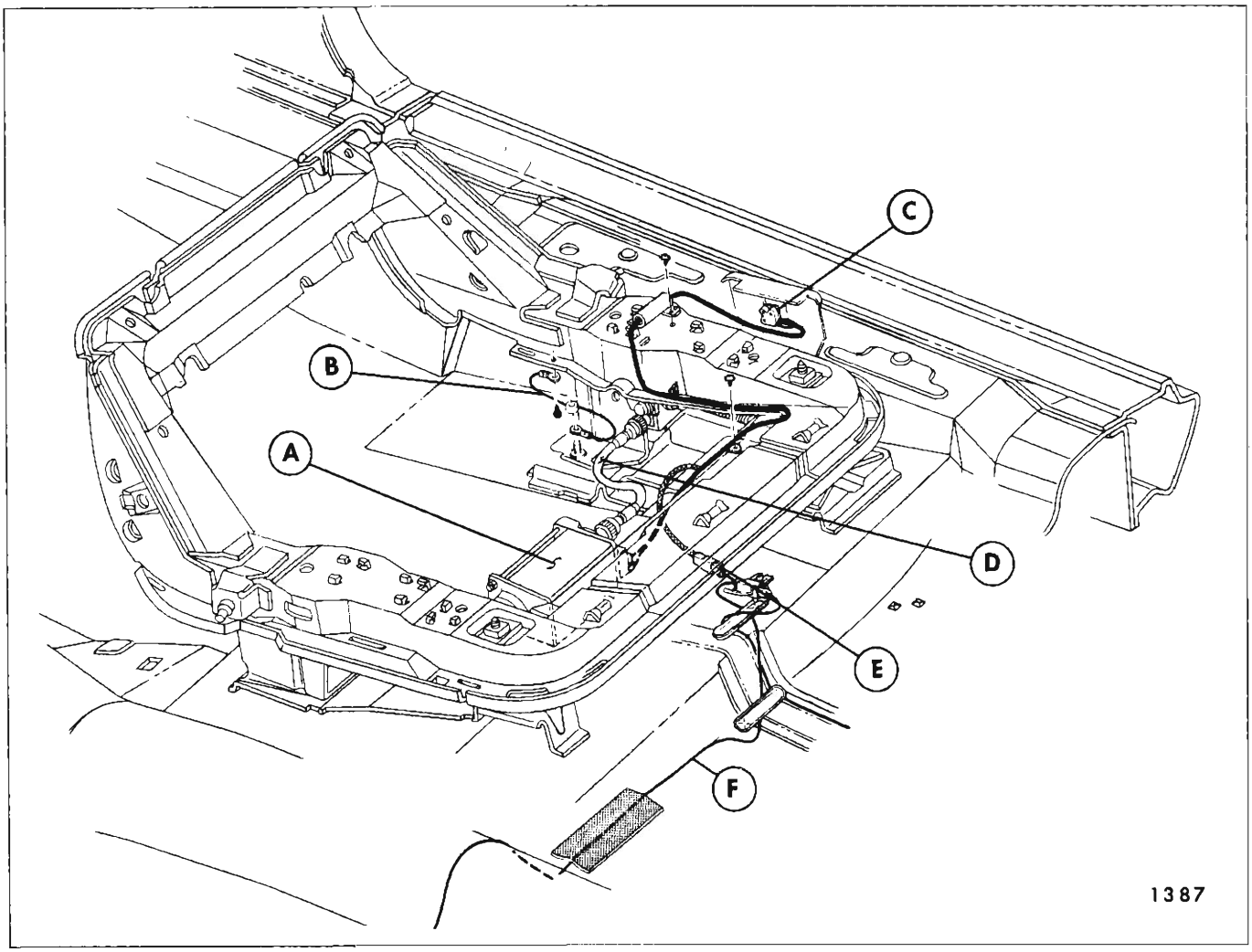


Fig. 1L31—Horizontal Bucket Seat

A. Motor
B. Ground Wire
C. Control Switch Block
D. Horizontal Control Cable
E. Harness Feed Connector
F. Feed Wire to Passengers Two Way Seat

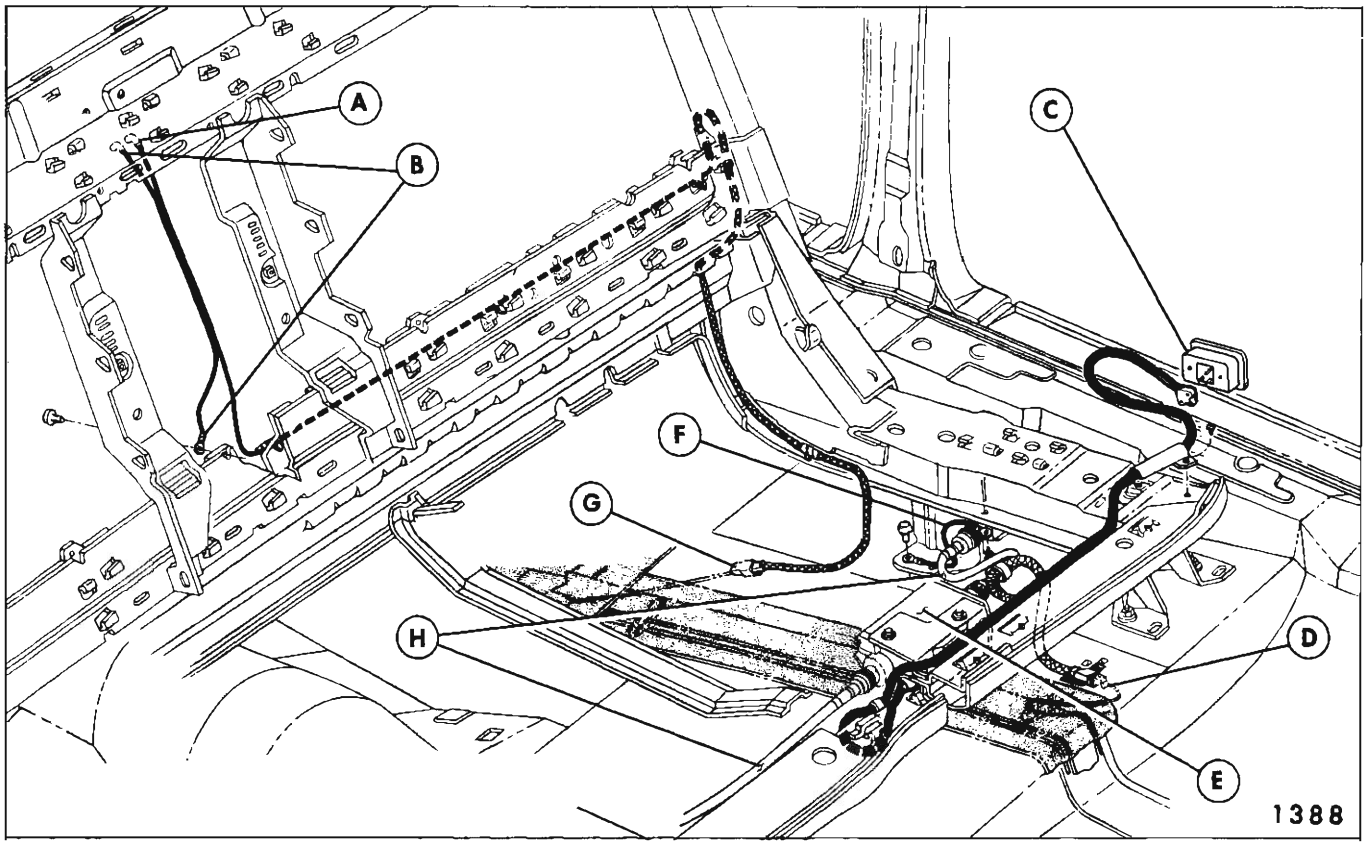


Fig. 1L32—Horizontal Bench Seat

A. Front Seat Back Switch Feed - White
B. Front Seat Back Switch Ground - Black
C. Control Switch
D. Harness Feed Connector
E. Motor
F. Ground Wire
G. Front Seat Back Switch Feed (68000 Only)
H. Horizontal Control Cable

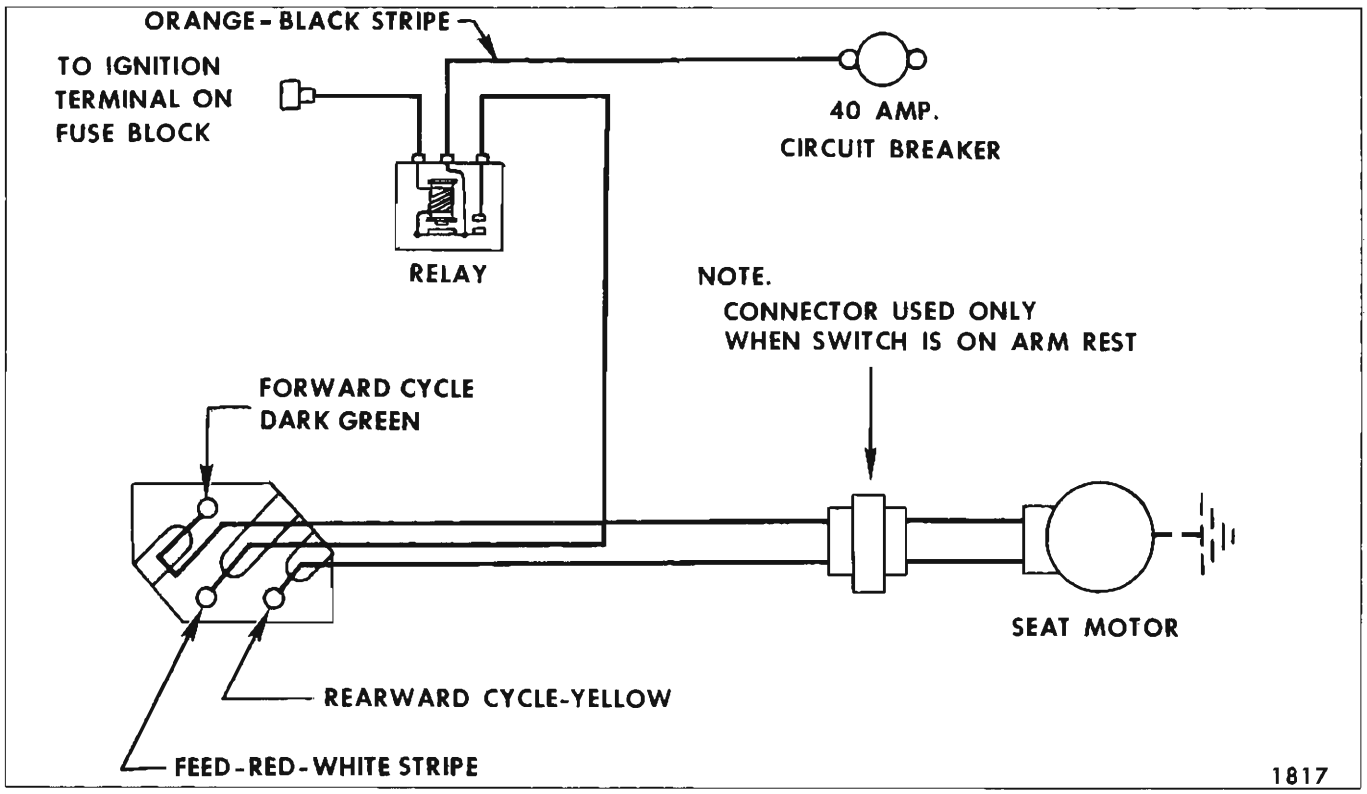


Fig. 1L33—Horizontal Seat Circuit Diagram - 35-36-38000 Series

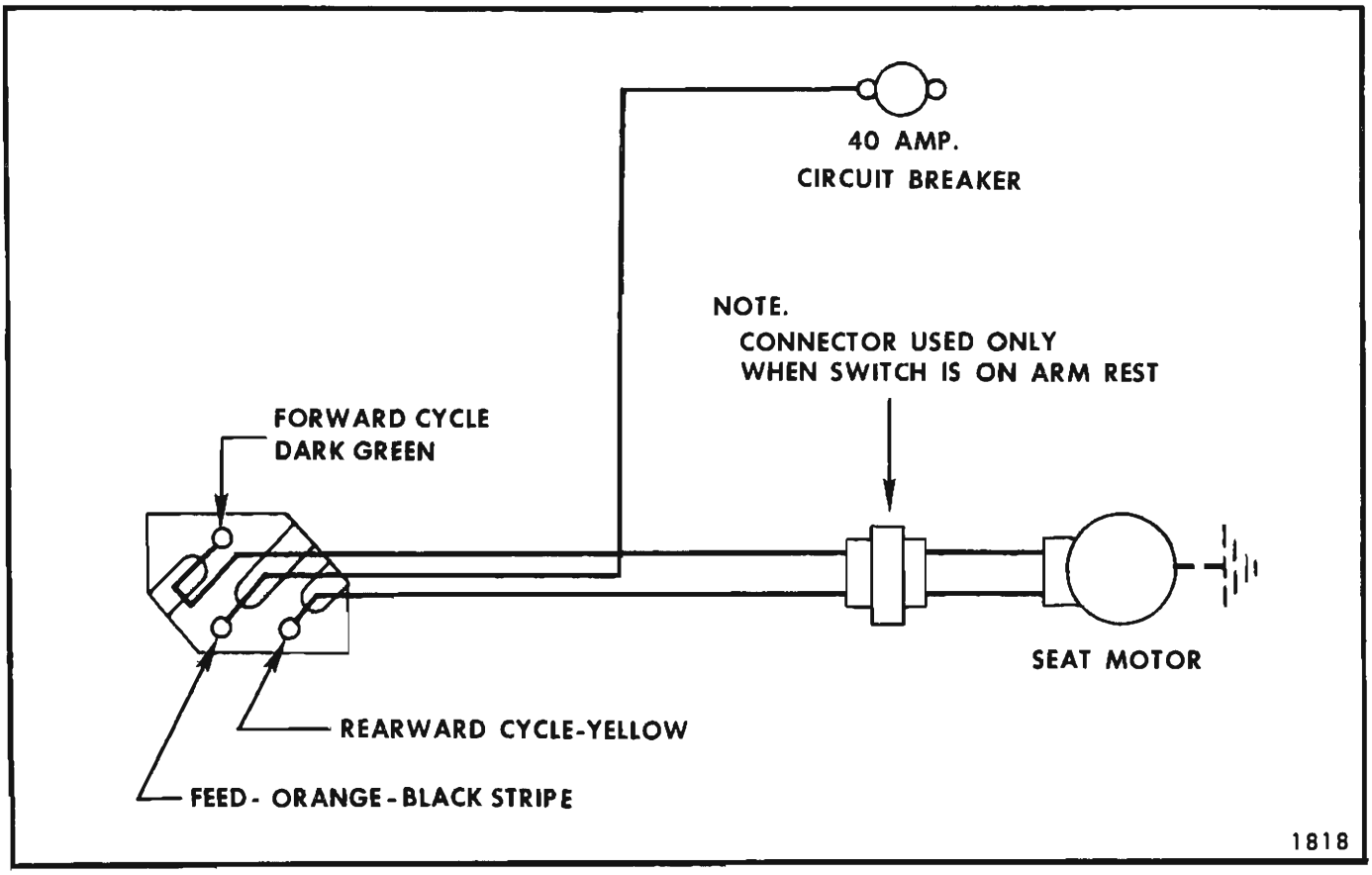


Fig. 1L34—Electric Horizontal Seat Circuit Diagram - 45-46-48-68000 Series

b. Typical Failures and Corrections of Horizontal Seat Circuit

CONDITION	CAUSE	CORRECTION
The seat motor does not operate in either the forward or rearward direction.	a. Open or short circuit in feed harness.	a. Connect one test light lead to feed terminal of switch block and ground other tester lead to body metal. If tester does not light, there is an open or short circuit between switch and power source.
	b. Inoperative motor.	b. Check operation of seat control switch with jumper wire. See "Checking Door Window Control" for similar operation.
		c. Check circuit from control switch to motor for short or open circuit and check ground wire attachment at adjuster.
		d. Check operation of motor with #12 gauge jumper wire. Connect one end of jumper wire to power source and the other end to one of the seat motor terminals. Motor should operate.

CONDITION	CAUSE	CORRECTION
		Perform same check at the other motor terminal. If motor does not operate, repair or replace motor as required.
The seat motor operates in only one direction.	a. Defective switch.	a. Check operation of seat control switch with jumper wire.
	b. Open or short circuit in motor feed wires.	b. Check circuit from control switch to motor for short or open circuit.
	c. Defective seat motor.	c. Check operation of motor with #12 gauge jumper wire. Connect one end of jumper wire to power source and the other end to one of the seat motor terminals. Motor should operate. Perform same check at the other motor terminal. If motor does not operate, repair or replace motor as required.

FOUR-WAY TILT SEAT

ALL EXCEPT 15000-16000 SERIES

DESCRIPTION

The seat adjusters for the bench type and bucket type seats are actuated by a 12 volt, reversible, shunt wound motor with a built-in circuit breaker. See Figure 1L35 for the bench seat installation and Figure 1L36 for the bucket seat installation.

The seat motor is energized by a toggle-type control switch installed in the left seat side panel. On 38439-67-69 styles and 48467 style, the control switch is installed in the left front door arm rest.

The seat adjuster operating mechanism incorporates a transmission assembly which includes two solenoids and four drive cables on bench type seats and two drive cables on bucket seats, leading to the seat adjusters. One solenoid controls the rear vertical movement of the seat while the other solenoid controls the horizontal movement of the seat. When the control switch is actuated, the motor and one of the solenoids are energized simultaneously. Then the solenoid plunger causes the shaft dog to engage with the large gear dog. Power is then transmitted through the transmission shaft which in turn drives the actuator cables. When the adjusters reach their limit of travel, the drive cables stop their rotating action and torque is absorbed by the rubber coupler connecting the motor and transmission. When control switch lever is released the switch contacts open, a spring returns the shaft dog and solenoid plunger to their original position disengaging the shaft dog from the large gear dog. See Seat Section for exploded view of transmission.

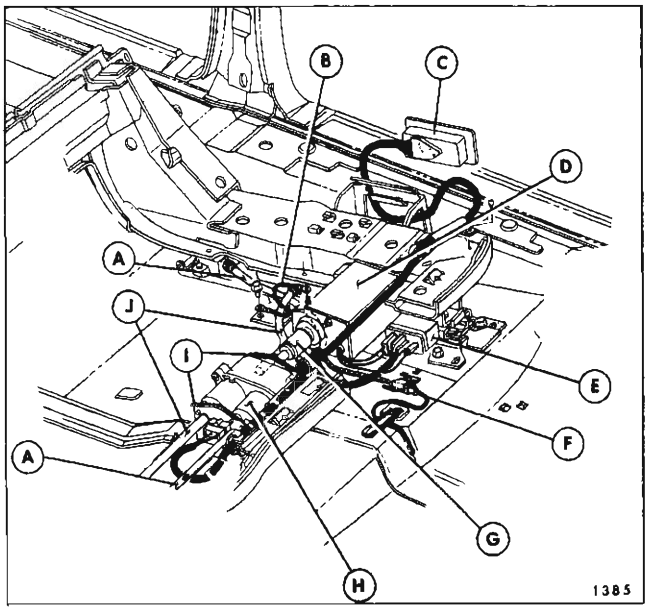


Fig. 1L35—Four Way Bench Seat

A. Vertical Control Cable (Yellow)
B. Ground Wire
C. Control Switch
D. Motor
E. Motor Control Relay
F. Harness Feed Connector
G. Rubber Coupler
H. Transmission and Solenoid Assembly
I. Transmission End Plate
J. Horizontal Control Cable (Black)

CHECKING PROCEDURE (4-WAY SEAT)

It may be necessary to use only one or all of the procedures outlined to locate an electrical failure in the circuit. If the location of the failure is evident follow only the steps required to check the affected wire or component. If the location of the failure is not evident, follow the procedures as outlined. Before performing any extensive check procedures, check the seat adjuster drive cables for proper attachment. In addition, study the seat circuit diagrams to become familiar with the seat circuit. (See Figs. 1L37 for 25-26000, 45-46-48-68000; 1L38 for 48467 only; 1L39 for 35-36-38000; 1L40 for 38000).

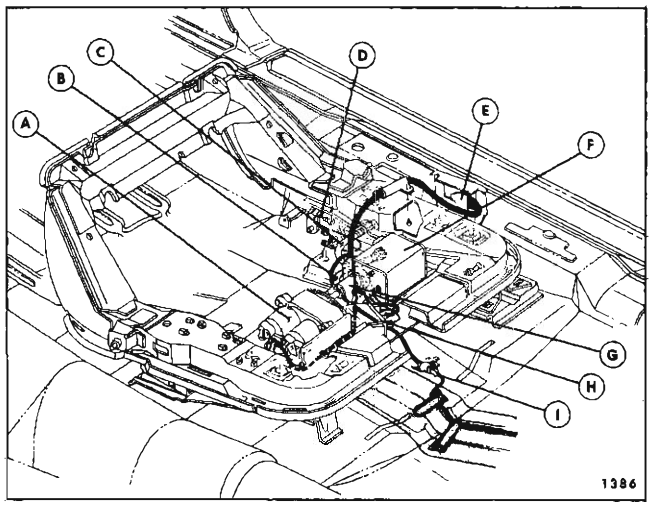
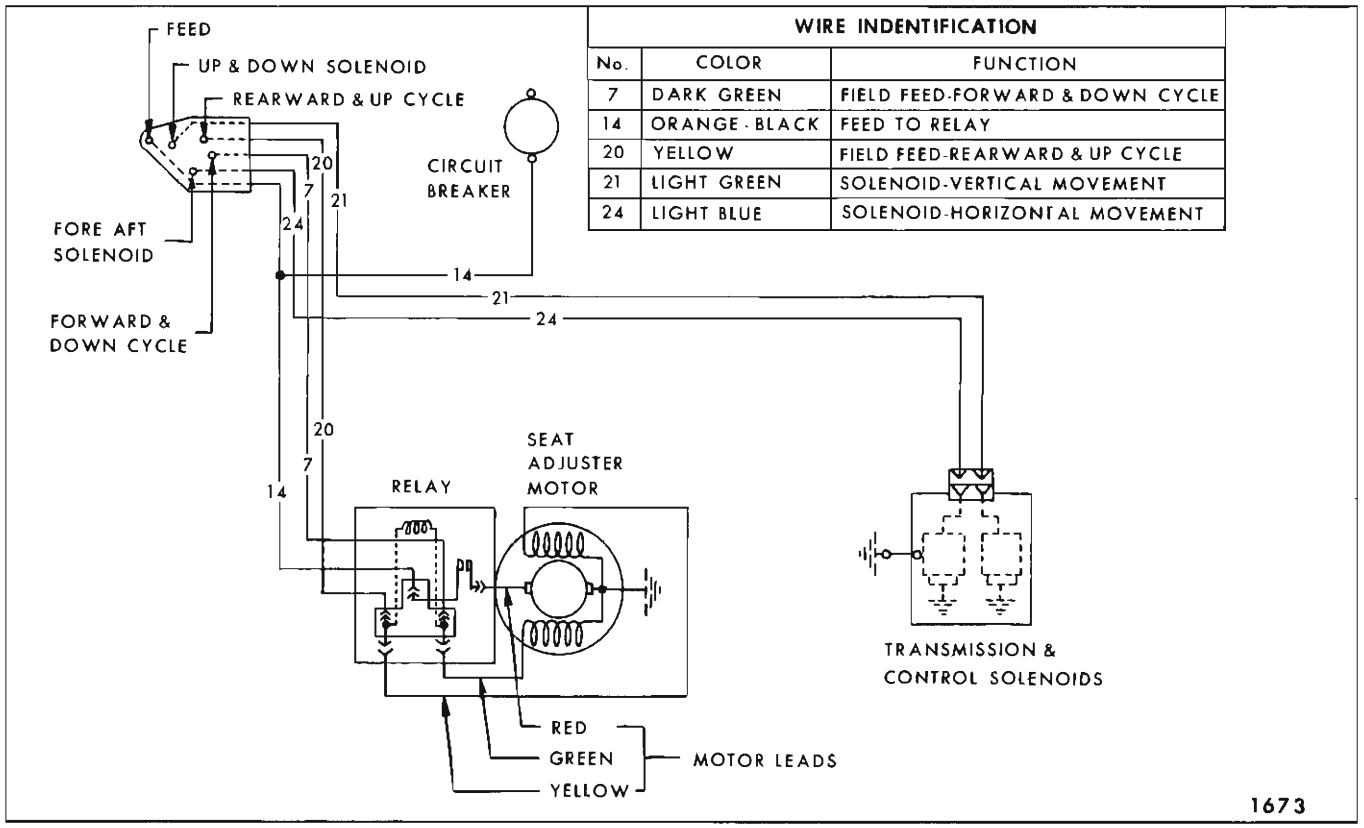


Fig. 1L36—Four Way Bucket Seat

A. Transmission and Solenoid Assembly
B. Horizontal Control Cable (Black)
C. Vertical Control Cable (Yellow)
D. Ground Wire
E. Control Switch Block
F. Motor
G. Rubber Coupler
H. Motor Control Relay
I. Seat Harness Feed Connector



WIRE INDENTIFICATION		
No.	COLOR	FUNCTION
7	DARK GREEN	FIELD FEED-FORWARD & DOWN CYCLE
14	ORANGE - BLACK	FEED TO RELAY
20	YELLOW	FIELD FEED-REARWARD & UP CYCLE
21	LIGHT GREEN	SOLENOID-VERTICAL MOVEMENT
24	LIGHT BLUE	SOLENOID-HORIZONTAL MOVEMENT

Fig. 1L37—Four Way Seat Circuit - 25-26-45-46-48-68000 Series

WIRE IDENTIFICATION		
No.	COLOR	FUNCTION
7	DARK GREEN	FIELD FEED - FORWARD & DOWN CYCLE
14	ORANGE - BLACK	FEED TO RELAY
20	YELLOW	FIELD FEED - REARWARD & UP CYCLE
21	LIGHT GREEN	SOLENOID - VERTICAL MOVEMENT
22	TAN	BLANK
24	LIGHT BLUE	SOLENOID - HORIZONTAL MOVEMENT

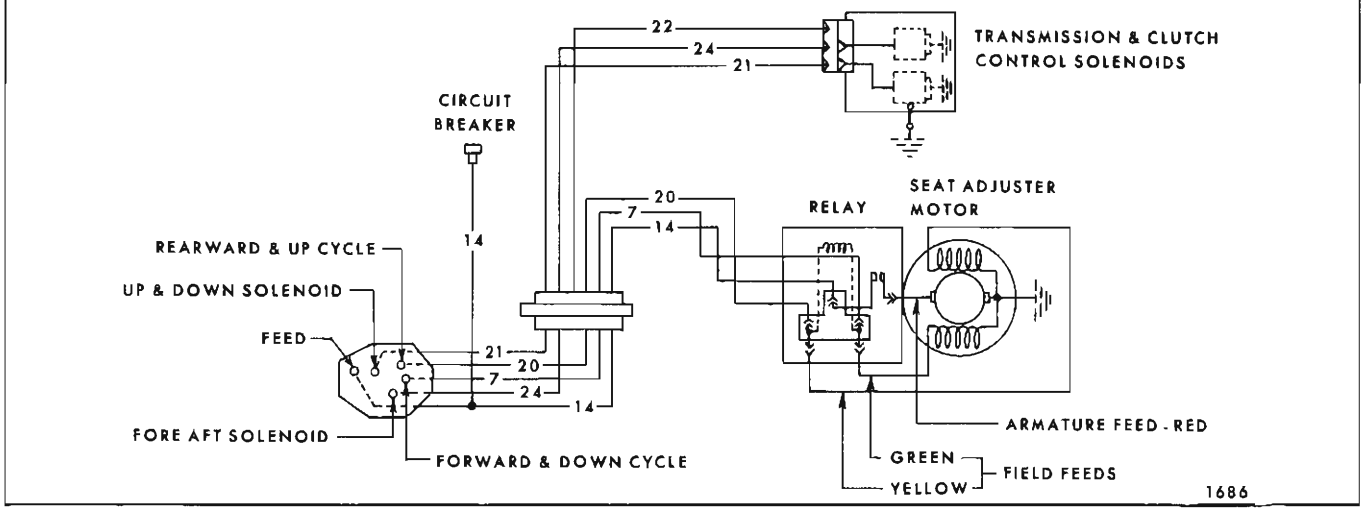


Fig. 1L38—Four Way Seat Circuit Switch in Arm Rest - 48467

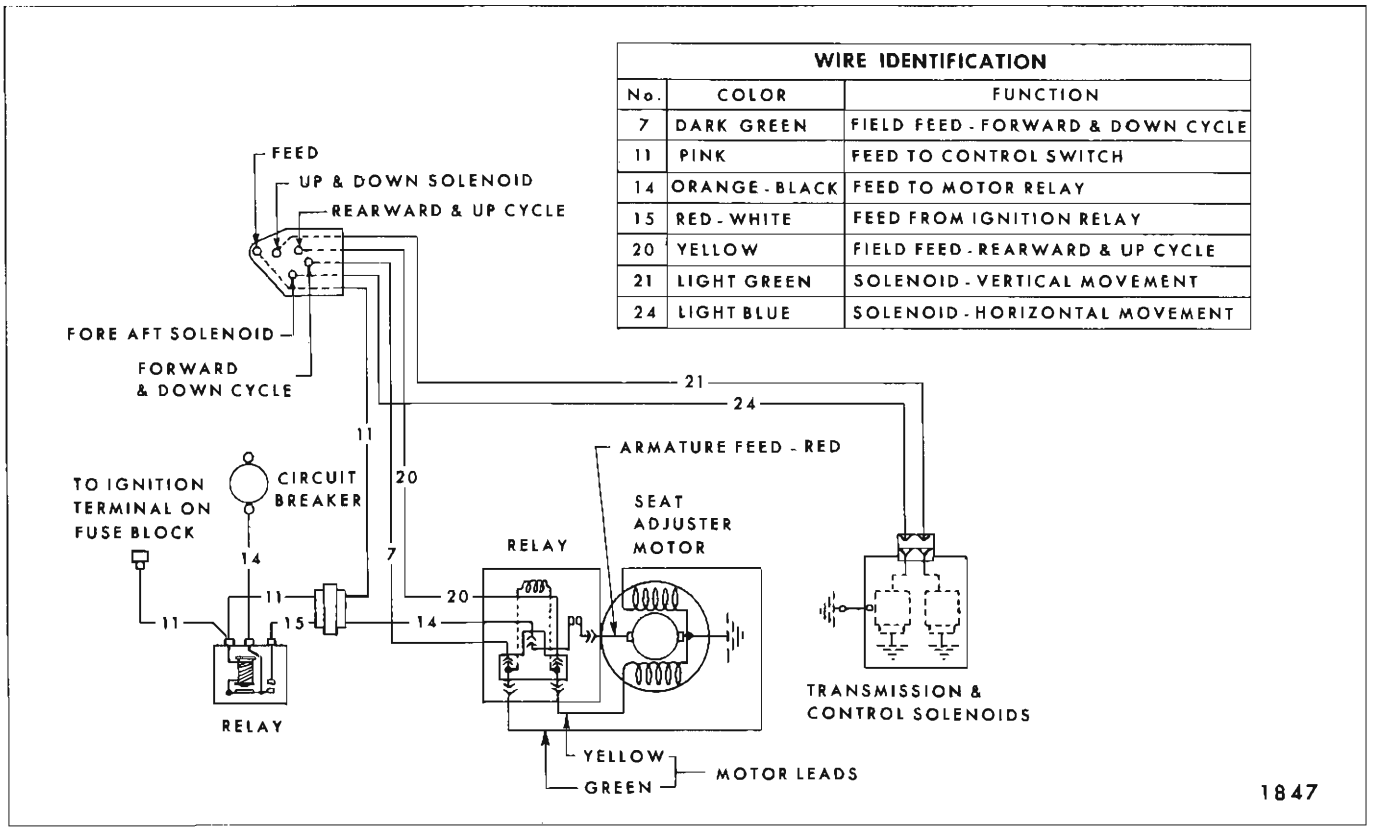


Fig. 1L39—Four Way Power Seat Circuit Switch in Seat Side Panel - 35-36-38000

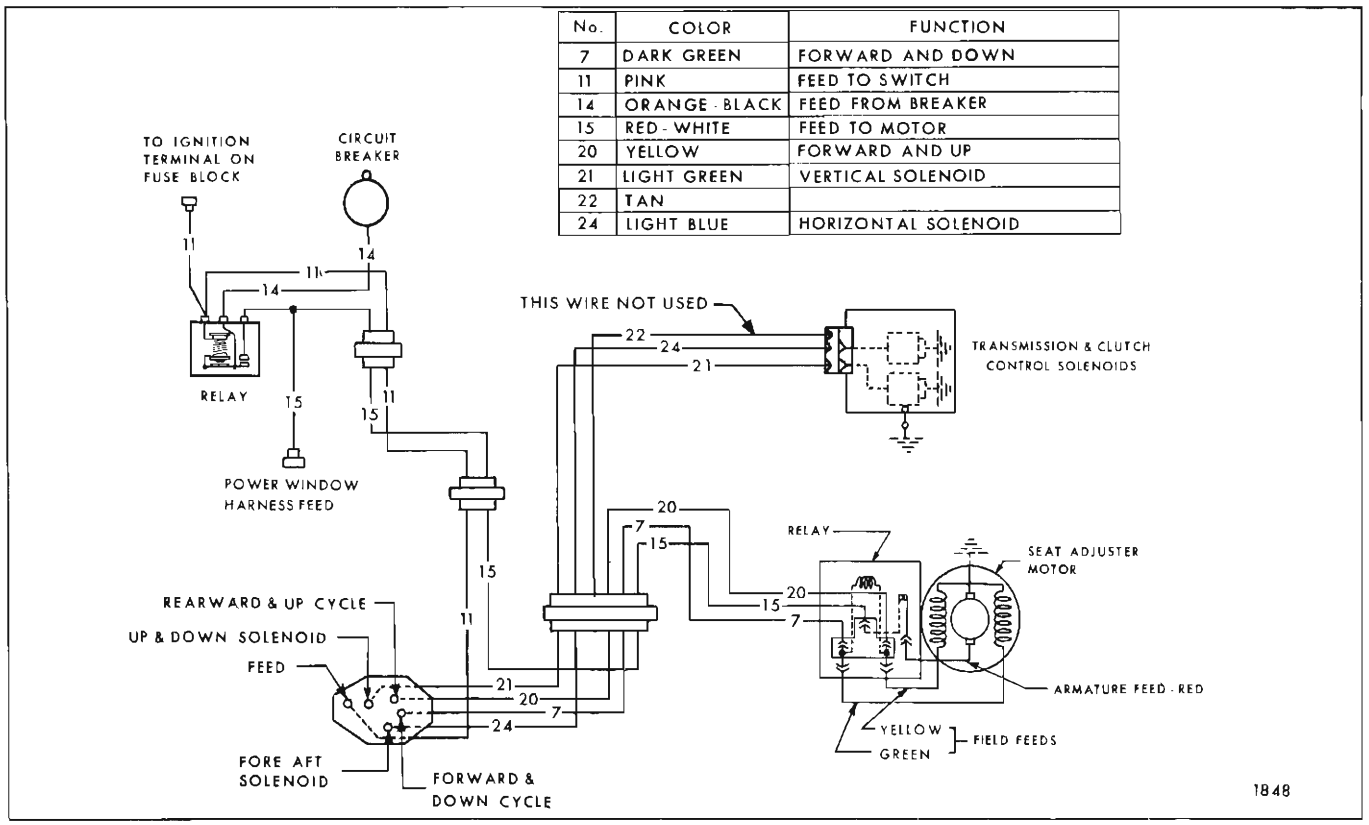


Fig. 1L40—Four Way Seat Circuit Switch in Arm Rest - 38000 Series

1. Checking for Current at Circuit Breaker

A. Connect one test light lead to battery side of circuit breaker (located at front shroud panel in engine compartment 35-36-38000 series; engine compartment 25-26000 series; in fuse block 45-46-48-68000 series and ground other lead. If tester does not light, there is no current at battery side of circuit breaker.

B. To check circuit breaker, disconnect switch feed wire from breaker, and with a test light check for current at switch side of circuit breaker. If tester does not light, there is no current flowing through circuit breaker.

2. Checking the Ignition Relay Assembly - 35-36-38000 Series Only

A. With test light check for current at circuit breaker side of relay. If tester does not light, there is a short or open circuit between circuit breaker and relay assembly.

B. Turn ignition switch on and with a test light check for current at output side of relay. If tester does not light, the relay is defective or there is a short or open circuit between ignition switch and relay assembly. Check wires before replacing relay.

NOTE: 35-36-38000 Series Only - Ignition switch must be on for performing the remainder of checking procedure.

3. Checking Feed Circuit Continuity at Relay on Seat Motor

A. Disengage three-way connector body from the seat motor relay.

B. Insert one test light lead into the relay power feed connector slot on the harness, and ground other tester lead.

C. If tester does not light, there is no current at end of feed wire. Failure is caused by an open or short circuit in feed circuit.

4. Checking for Current at Seat Control Switch

A. Connect one test light lead to feed terminal of switch block and ground other test light lead to body metal.

B. If tester does not light, there is no current at switch block. Failure is caused by an open or short circuit between switch block and power source.

5. Checking the Seat Control Switch

In the following operations which specify the seat control switch to be actuated, a switch that has been checked for proper operation may be connected to the switch block. If a switch is not available, a three-way jumper wire can be made to perform the switch function. The method of making the jumper wire and the switch locations to be connected to obtain a specific movement of the seat are shown in Figures 1L41, 42. If a jumper wire is used, number the locations on the switch block as indicated in the illustration.

NOTE: To make jumper wire, obtain two (2) pieces of #12 gauge wire, each 4 1/2" long. Join one end of each wire as shown in diagram. The joined end can be inserted in the feed location in the switch block; one of the remaining ends can be inserted into one of the solenoid locations.

A. Obtain switch or jumper wire and connect to switch block.

B. Operate switch if used. If adjusters operate with switch or jumper wire, but did not operate with original switch, the original switch is defective or connector block was not sufficiently engaged.

IMPORTANT: To obtain a seat movement using a three-way jumper wire at the switch block, the switch feed location, one of the motor field wire locations and one of the solenoid locations have to be connected simultaneously.

The switch locations to be connected to obtain a specific seat movement are outlined as follows:

(1) To raise seat, place jumper wire in locations A, B and E.

(2) To lower seat, place jumper wire in locations A, D and E.

(3) To operate seat forward, place jumper wire in locations A, C and D.

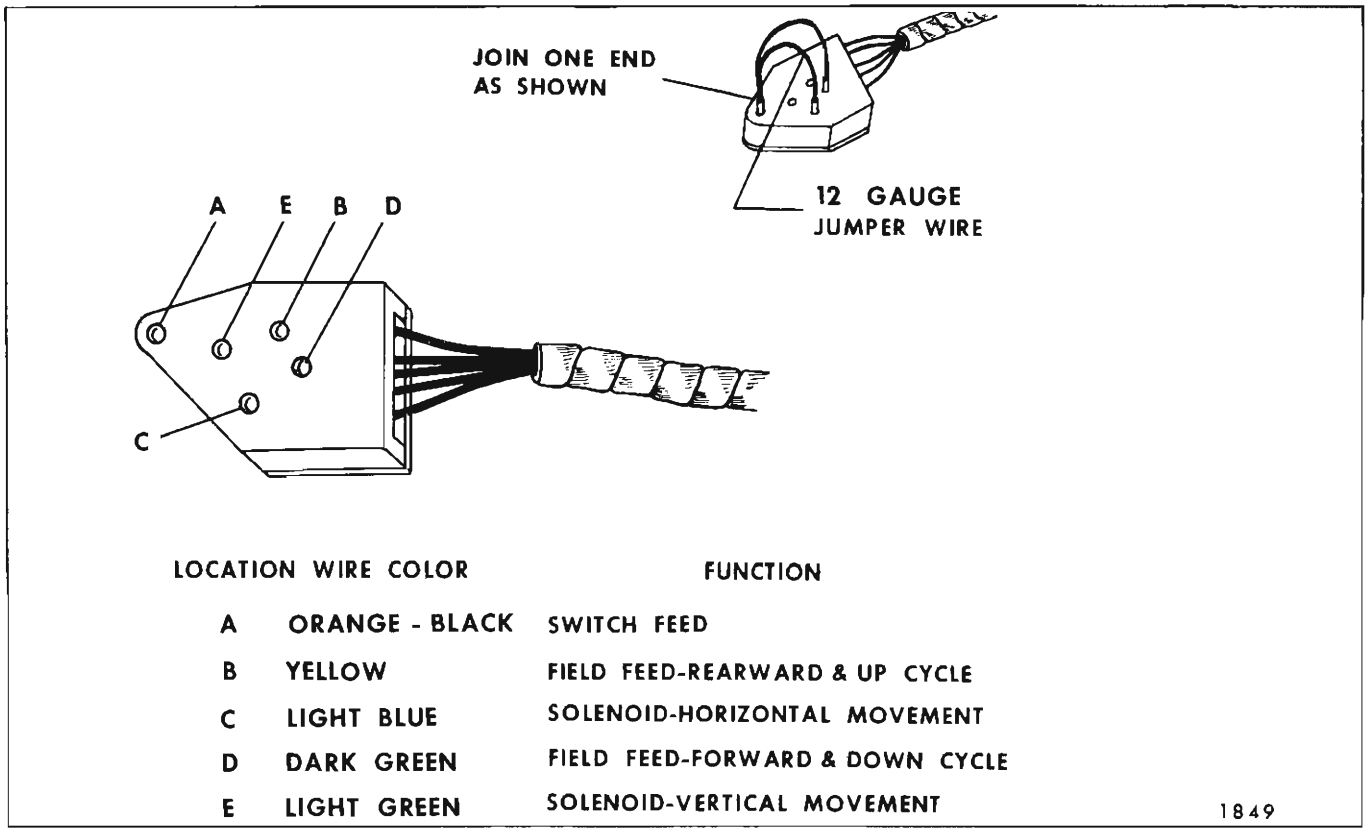
(4) To operate seat rearward, place jumper wire in locations A, B and C.

6. Checking Wires Between Control Switch and Motor Relay

A. Disengage three-wire harness connector from relay at motor.

B. Insert one test light lead into the motor field connector slot on harness and ground other lead.

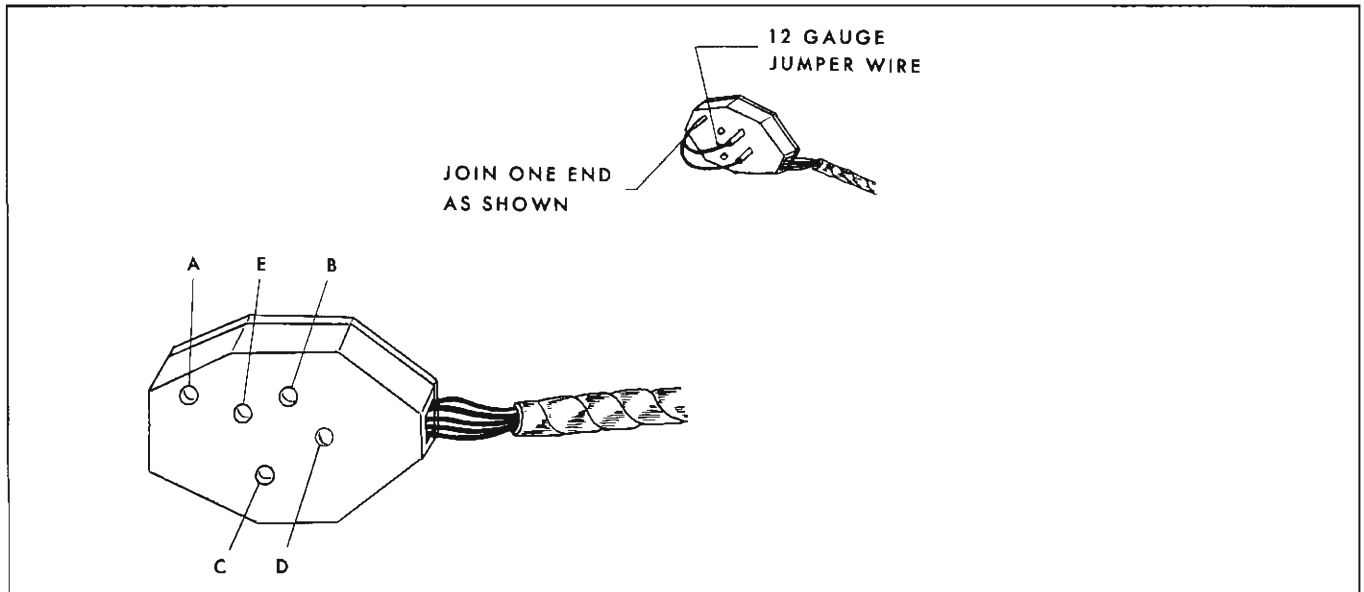
C. Actuate seat switch to energize field wire being tested.



LOCATION	WIRE COLOR	FUNCTION
A	ORANGE - BLACK	SWITCH FEED
B	YELLOW	FIELD FEED-REARWARD & UP CYCLE
C	LIGHT BLUE	SOLENOID-HORIZONTAL MOVEMENT
D	DARK GREEN	FIELD FEED-FORWARD & DOWN CYCLE
E	LIGHT GREEN	SOLENOID-VERTICAL MOVEMENT

1849

Fig. 1L41—Four Way Seat Switch Block - 25-26-45-46-48-68000 Series



LOCATION	WIRE COLOR	FUNCTION
A	PINK	SWITCH FEED
B	YELLOW	FIELD FEED—REARWARD & UP CYCLE
C	LIGHT BLUE	SOLENOID—HORIZONTAL MOVEMENT
D	DARK GREEN	FIELD FEED—FORWARD & DOWN CYCLE
E	LIGHT GREEN	SOLENOID—VERTICAL MOVEMENT

1850

Fig. 1L42—Four Way Switch Block - 35-36-38000 Series

D. If tester does not light, there is no current at end of wire. Failure is caused by an open or short circuit between end of wire and switch. Check other motor field wire in the same manner.

7. Checking the Relay Assembly

A. Disconnect three (3) leads from relay assembly. These are the wires leading from the motor to the relay.

B. Connect one end of a jumper wire to one of the motor field feed studs on the relay and ground the other end of the jumper wire.

C. Connect one test light lead to motor armature feed stud on relay and ground other tester lead.

D. With jumper wire, energize the field stud which is not grounded.

CAUTION: Do not energize grounded side. If tester does not light, the relay is defective.

8. Checking the Motor Assembly

A. Disconnect motor field feed wires from motor.

B. Connect one end of a #12 gauge jumper wire to battery positive pole and other end to one of the motor field and the armature wires.

C. If motor does not operate, motor is defective. Check the remaining motor field wire in the same manner.

9. Checking Wires Between Switch and Solenoids

A. Disconnect harness connector from transmission assembly.

B. Connect one test light lead to one terminal of power feed and ground other test light lead to body metal.

C. Operate switch to wire being tested. If tester does not light, there is no current at the end of harness wire. Failure is caused by an open or short circuit between end of wire and switch or defective switch.

D. Check other wire in same manner.

NOTE: One wire in connector is a blank. Check wiring diagram for colors of wires actually used.

10. Checking the Solenoid

A. Check solenoid ground strap attachment for proper ground.

B. Connect one end of a #12 gauge jumper wire to the battery positive pole and the other end to the lead of the solenoid being checked.

CAUTION: To prevent damaging the solenoid, do not energize solenoid for more than one minute.

C. Operate switch, actuate adjuster motor and solenoid being checked.

D. If adjusters do not operate and there is no mechanical failure of the adjusters, the solenoid is defective.

NOTE: If solenoid is functioning properly, a "click" may be heard when solenoid plunger operates.

TYPICAL ELECTRICAL FAILURES OF FOUR-WAY POWER SEATS

CONDITION	CAUSE	CORRECTION
1. Seat adjuster motor does not operate.	a. Short or open circuit between power source or switch and motor.	a. Check circuit from power source and switch to motor to locate failure.
	b. Defective motor relay.	b. Replace relay.
	c. Defective motor.	c. Check motor. If defective repair or replace as required.
	d. Defective switch.	d. Replace switch.
	e. Defective circuit breaker.	e. Replace circuit breaker.

CONDITION	CAUSE	CORRECTION
2. Seat adjuster motor operates in both directions but seat adjusters are not actuated.	a. Short or open circuit between switch and affected solenoid.	a. Check circuit from switch to solenoid to locate failure.
	b. Defective solenoid.	b. Check solenoid. If defective, repair or replace as required.
	c. Defective switch.	c. Replace switch.
3. Seat Adjuster motor operates in one direction only, seat moves down and forward, but does not move up and rearward.	a. Short or open circuit between one of the motor relay wires and seat control switch.	a. Check circuit between affected motor relay wire and seat switch.
	b. Defective field coil in motor.	b. Check motor. If defective repair or replace as required.
	c. Defective switch.	c. Replace switch.

SIX WAY SEATS
ALL SERIES

DESCRIPTION

The seat adjusters are actuated by a 12-volt motor installed at the left side of the seat assembly (See Fig. 1L43). The motor is energized by a (3) button-type control switch located in the left seat side panel on all styles except 68000 Series which incorporates a rotary type switch in the seat side panel.

On 38439-67-69 styles and 48467 style, the control switch is installed in the left front door arm rest.

The current for the power seat circuit is obtained through a 40 ampere circuit breaker located:

Left shroud - 15-16000 Series

Engine compartment - 25-26-35-36-38-39000 Series

Fuse Block - 45-46-48-68000 Series

35-36-38000 Series Only - In addition to the circuit breaker a relay is used in the circuit which prevents the operation of the seat until the ignition switch is turned "on".

The electrical portion of the six way seat operates as follows:

When the control switch is actuated, current flows to the transmission solenoid which controls the desired seat movement. The energizing of the solenoid coil results in the solenoid plunger dog engaging the gear mechanism to rotate the control cable. The same switch action which energized the solenoid produces a current flow through the motor control relay to one of the motor field coils. The current flows through the relay, closes the contacts between the relay power source and the armature motor lead wire, and results in the operation of

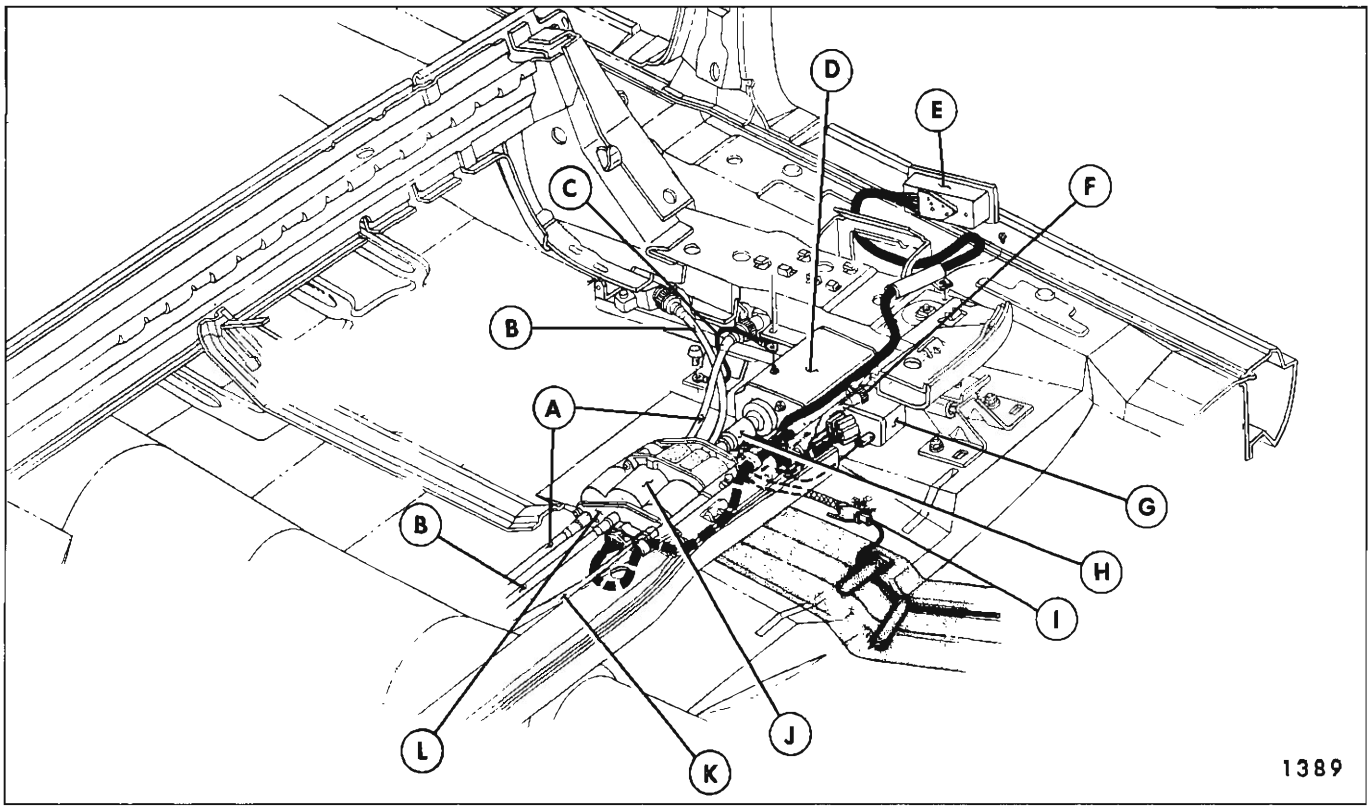


Fig. 1L43—Six Way Seat

A. Horizontal Control Cable (Black)
B. Rear Vertical Control Cable (Blue)
C. Ground Wire
D. Motor
E. Control Switch
G. Motor Control Relay
H. Rubber Coupler
F. Front Vertical Control Cable (Yellow) - Left Side
I. Harness Feed Connector
J. Transmission and Solenoid Assembly
K. Front Vertical Control Cable (Yellow) - Right Side
L. Transmission End Plate

the seat motor. When the control switch lever is released, the switch contacts open, a spring returns the shaft dog and solenoid plunger to their original position disengaging them from the gear dog.

CIRCUIT CHECKING PROCEDURES

It may be necessary to use only one or all of the procedures outlined to locate an electrical failure in the circuit. If the location of the failure is evident, follow only the steps required to check the affected wire or component. If the location of the failure is not evident, follow the procedure as outlined. Before performing any extensive check procedures, check the seat adjuster drive cables for proper attachment. In addition, study the seat circuit diagrams to become familiar with the seat circuit. See Figures 1L44 for 15-16-25-26-45-46-48000 series; 1L45-46 for 35-36-38000; 1L47 for 68000 series.

A. Check Feed Circuit Continuity at Circuit Breaker

1. Connect one test light lead to battery side of circuit breaker and ground other lead. If tester does not light, there is an open or short circuit in feed circuit to breaker.

2. To check circuit breaker, disconnect the output feed wire (the wire opposite the power source feed to the breaker) from the breaker and with test light check terminal from which the wire was disconnected. If tester does not light, circuit breaker is inoperative.

3. 45-46-48000 & 68000 Series. Check feed circuit continuity at fuse block.

B. Checking Relay Assembly at Shroud - 35-36-38000 Series

1. With test light check relay feed (orange-black stripe). If tester does not light, there is an open or short circuit between relay and circuit breaker.

2. Turn ignition switch on and with test light check output terminal of relay (red-white stripe). If tester does not light, the relay is inoperative or there is a short or open circuit between ignition switch (pink) and relay assembly. (Check fuse at dash panel).

C. Check Feed Circuit Continuity at Seat Control Switch

1. Connect one test light lead to feed terminal of switch block and ground other test lead to body metal.

2. If tester does not light, there is an open or short circuit between switch and power source.

D. Checking the Seat Control Switch

NOTE: In the following operations which specify the seat control switch to be actuated, a switch that has been checked for proper operation may be connected to the switch block. If a switch is not available, a three-way jumper wire can be made to perform the switch function. The jumper wire and the switch locations to be connected to obtain a specific movement of the seat are shown in Figures 1L49 - 35-36-38000 with switch in seat side panel; 1L50 - 38000 with switch in arm rest; 1L51 - 68000 series. If a jumper wire is used, letter the locations on the switch block as indicated in the illustration. Details outlining the making and use of the jumper wire follow the checking procedurs.

1. Obtain switch or jumper wire and connect to switch block.

2. Operate switch. If adjusters operate with new switch or jumper wire, but did not operate with original switch, the original switch is defective.

3. Check all six movements of seat adjuster.

E. Check Feed Circuit Continuity at Relay on Seat Motor

1. Disengage 3-wire connector body from the seat motor relay terminal.

2. Insert one test light lead into the relay power feed connector slot on the harness, and ground the other test light lead.

3. If tester does not light, there is no current at end of feed wire. Failure is caused by an open or short in feed circuit.

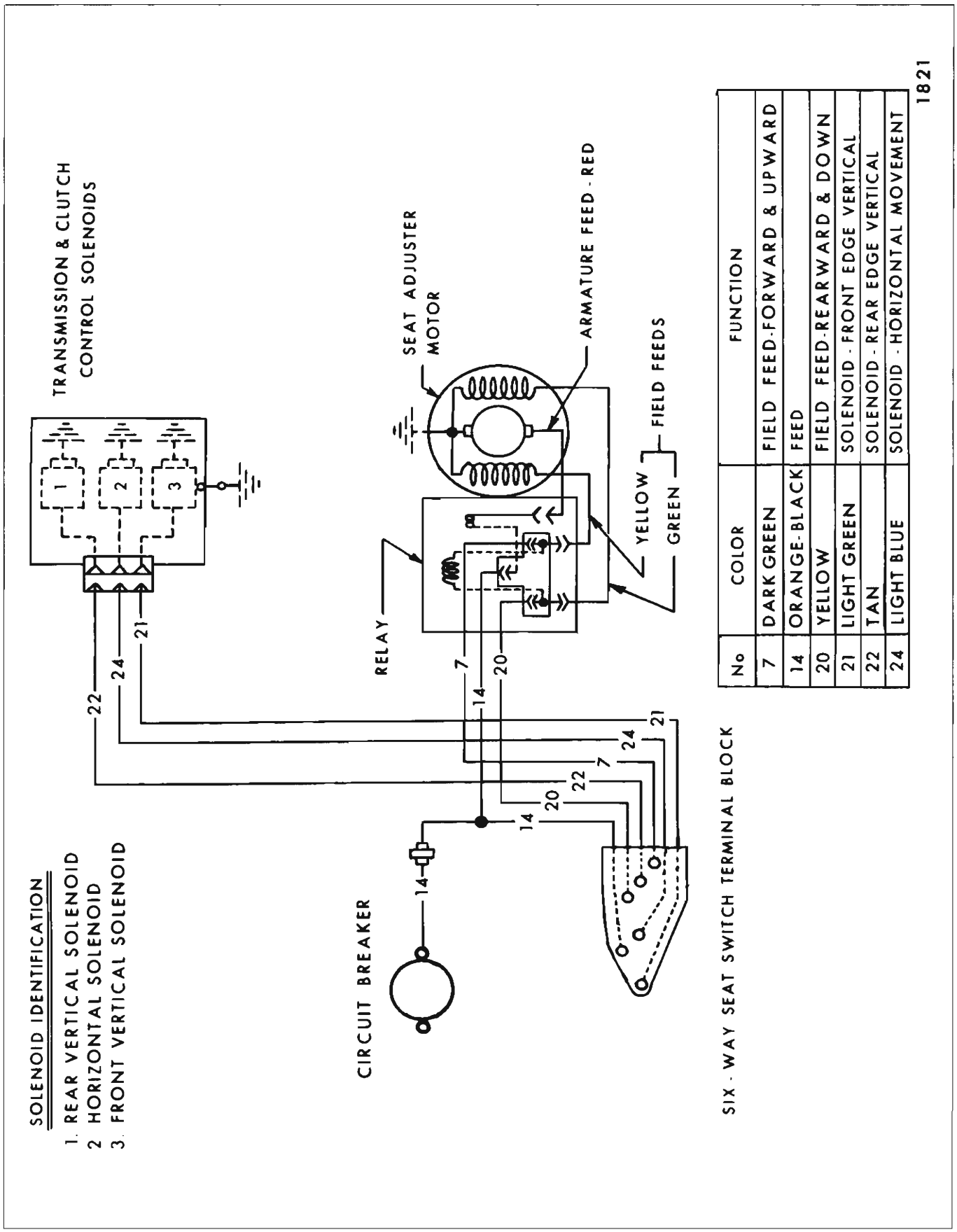
F. Checking Wires Between Control Switch and Motor Relay

1. Disengage 3-wire harness connector from relay at motor.

2. Insert one test light lead into the motor field connector slot on harness and ground the other lead.

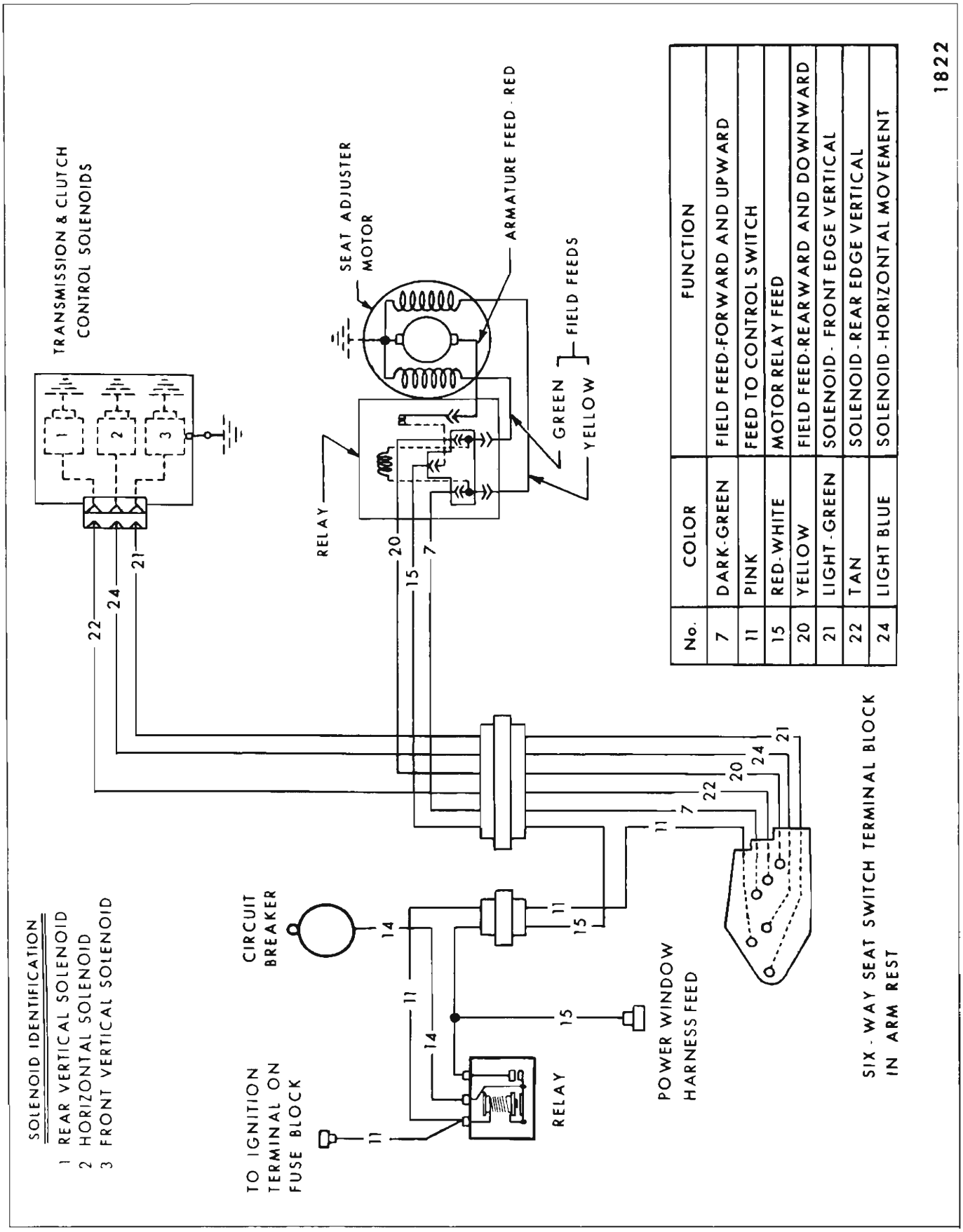
3. Actuate seat switch to energize field wire being tested.

4. If tester does not light, there is no current at



No	COLOR	FUNCTION
7	DARK GREEN	FIELD FEED-FORWARD & UPWARD
14	ORANGE-BLACK	FEED
20	YELLOW	FIELD FEED-REARWARD & DOWN
21	LIGHT GREEN	SOLENOID - FRONT EDGE VERTICAL
22	TAN	SOLENOID - REAR EDGE VERTICAL
24	LIGHT BLUE	SOLENOID - HORIZONTAL MOVEMENT

Fig. 1L44—Circuit Diagram for - 15-16-25-26-45-46-48000 Series



No.	COLOR	FUNCTION
7	DARK-GREEN	FIELD FEED-FORWARD AND UPWARD
11	PINK	FEED TO CONTROL SWITCH
15	RED-WHITE	MOTOR RELAY FEED
20	YELLOW	FIELD FEED-REARWARD AND DOWNWARD
21	LIGHT-GREEN	SOLENOID - FRONT EDGE VERTICAL
22	TAN	SOLENOID - REAR EDGE VERTICAL
24	LIGHT BLUE	SOLENOID - HORIZONTAL MOVEMENT

Fig. 1L45—Circuit Diagram for 38000 Series

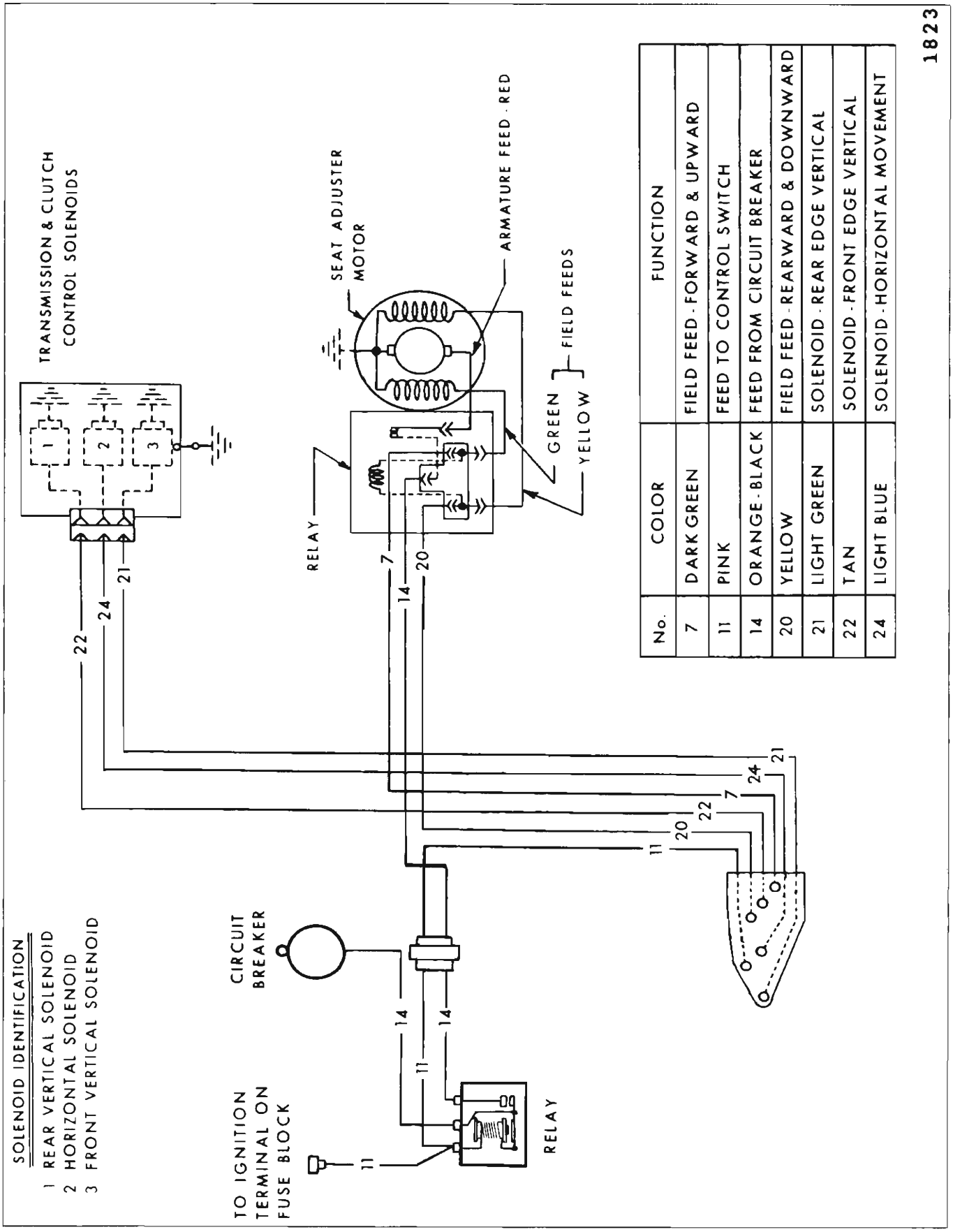
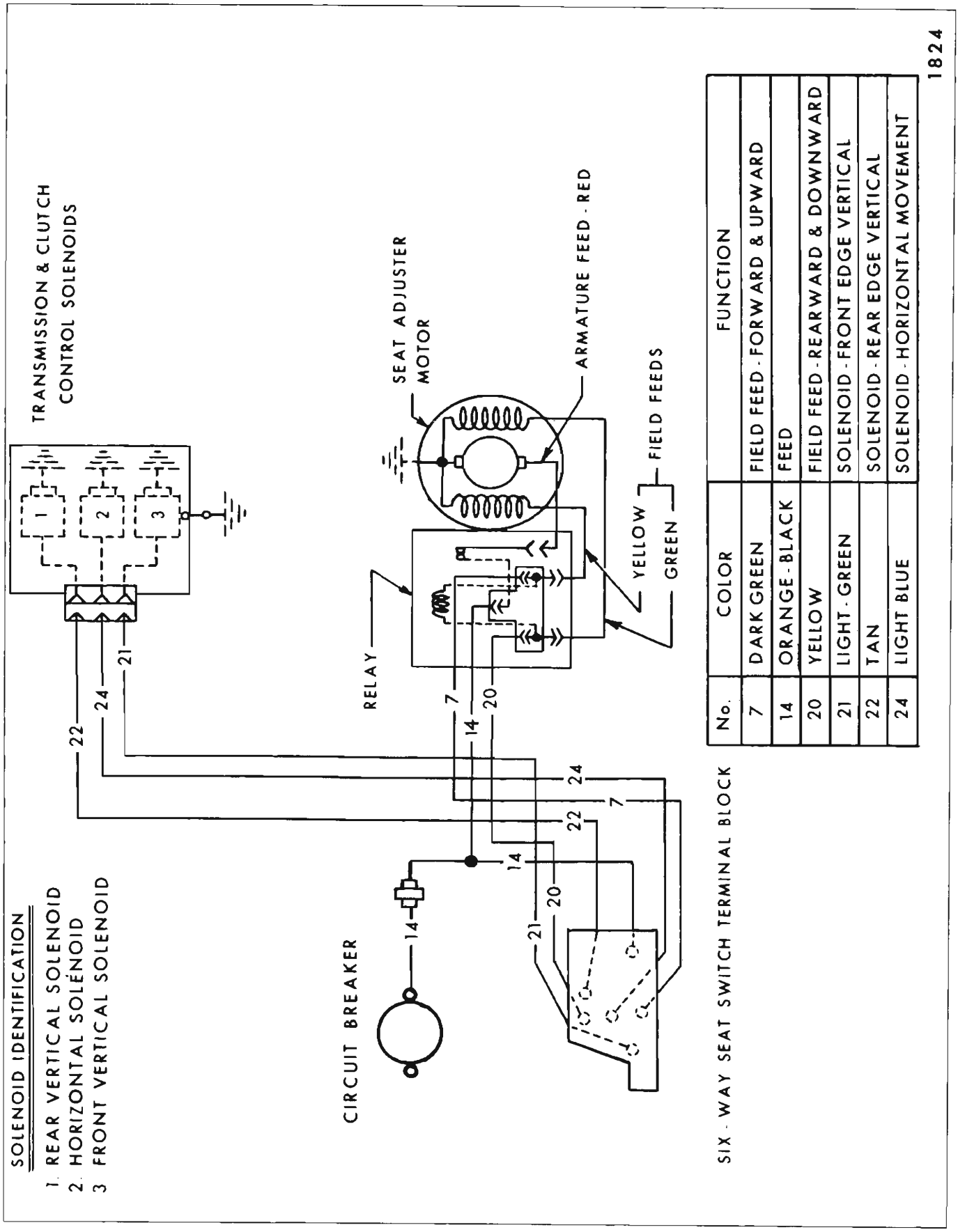


Fig. 1L46—Six Way Circuit Diagram - Switch in Seat Side Panel - 35-36000 Series



No.	COLOR	FUNCTION
7	DARK GREEN	FIELD FEED - FORWARD & UPWARD
14	ORANGE - BLACK	FEED
20	YELLOW	FIELD FEED - REARWARD & DOWNWARD
21	LIGHT - GREEN	SOLENOID - FRONT EDGE VERTICAL
22	TAN	SOLENOID - REAR EDGE VERTICAL
24	LIGHT BLUE	SOLENOID - HORIZONTAL MOVEMENT

Fig. 1L47—Circuit Diagram – 68000 Series

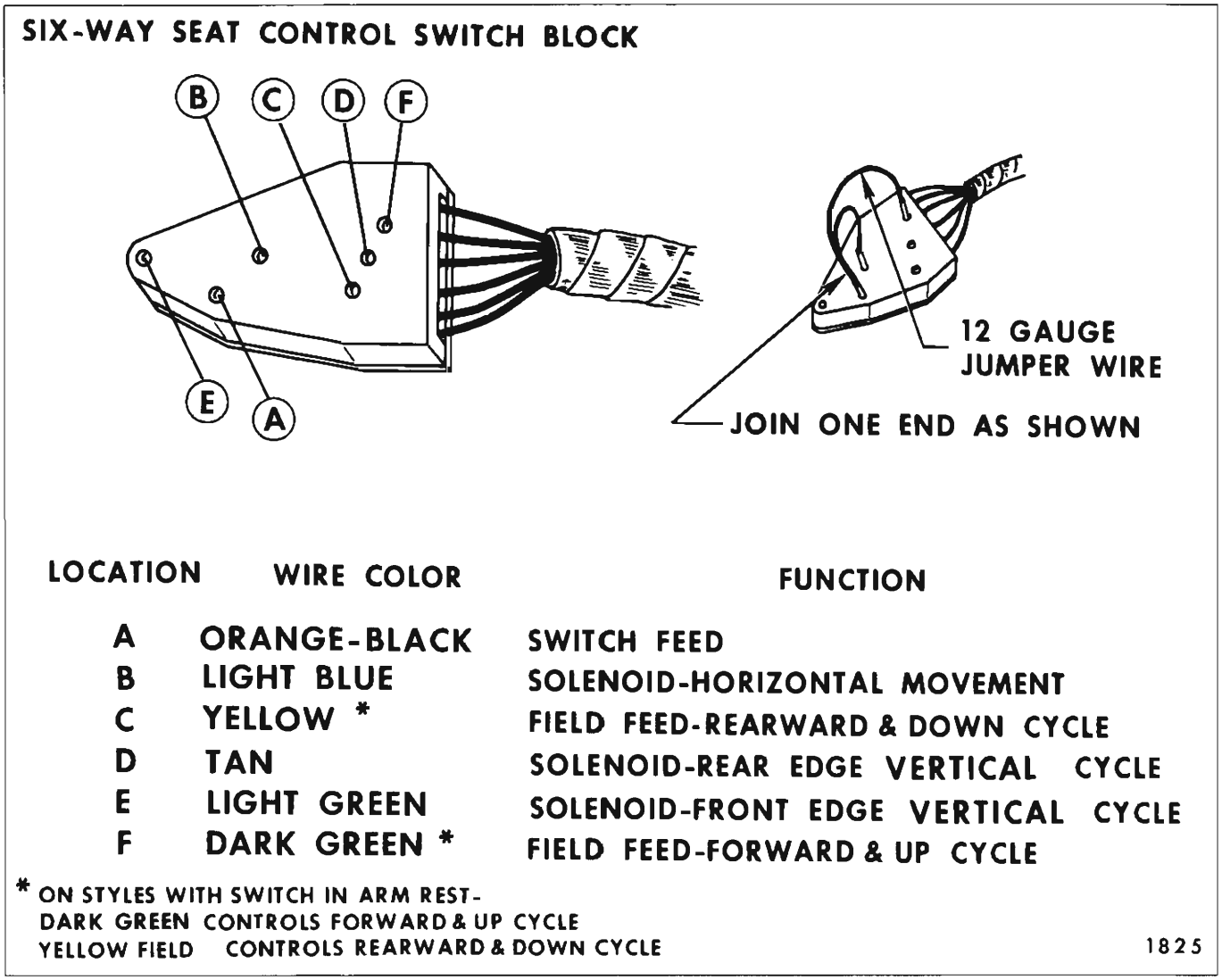


Fig. 1L48—15-16-25-26-45-46-48000 Series

end of wire. Failure is caused by an open or short circuit between end of wire and switch. Check other motor field wire in the same manner.

G. Check the Relay Assembly

1. Disconnect three (3) motor leads from relay assembly. These are the wires leading from the motor to the relay.

2. Connect one end of a jumper wire to one of the motor field feed studs on the relay and ground the other end of the jumper wire.

3. Connect one end of test light to motor armature feed stud on relay and ground other tester lead.

4. With a jumper wire, energize the field stud which is not grounded. If tester does not light the relay is defective.

H. Check the Motor Assembly

1. Disconnect the motor armature feed lead and one of the motor field feeds from the relay assembly.

2. With a jumper wire, energize the armature feed and one of the field feeds.

3. If motor does not operate, it is defective. Check the other motor field feed in the same manner.

I. Checking the Wire Between the Solenoid and Switch

1. Disengage harness connector from transmission.

2. Connect one test light lead to end of harness wire being tested and ground other lead.

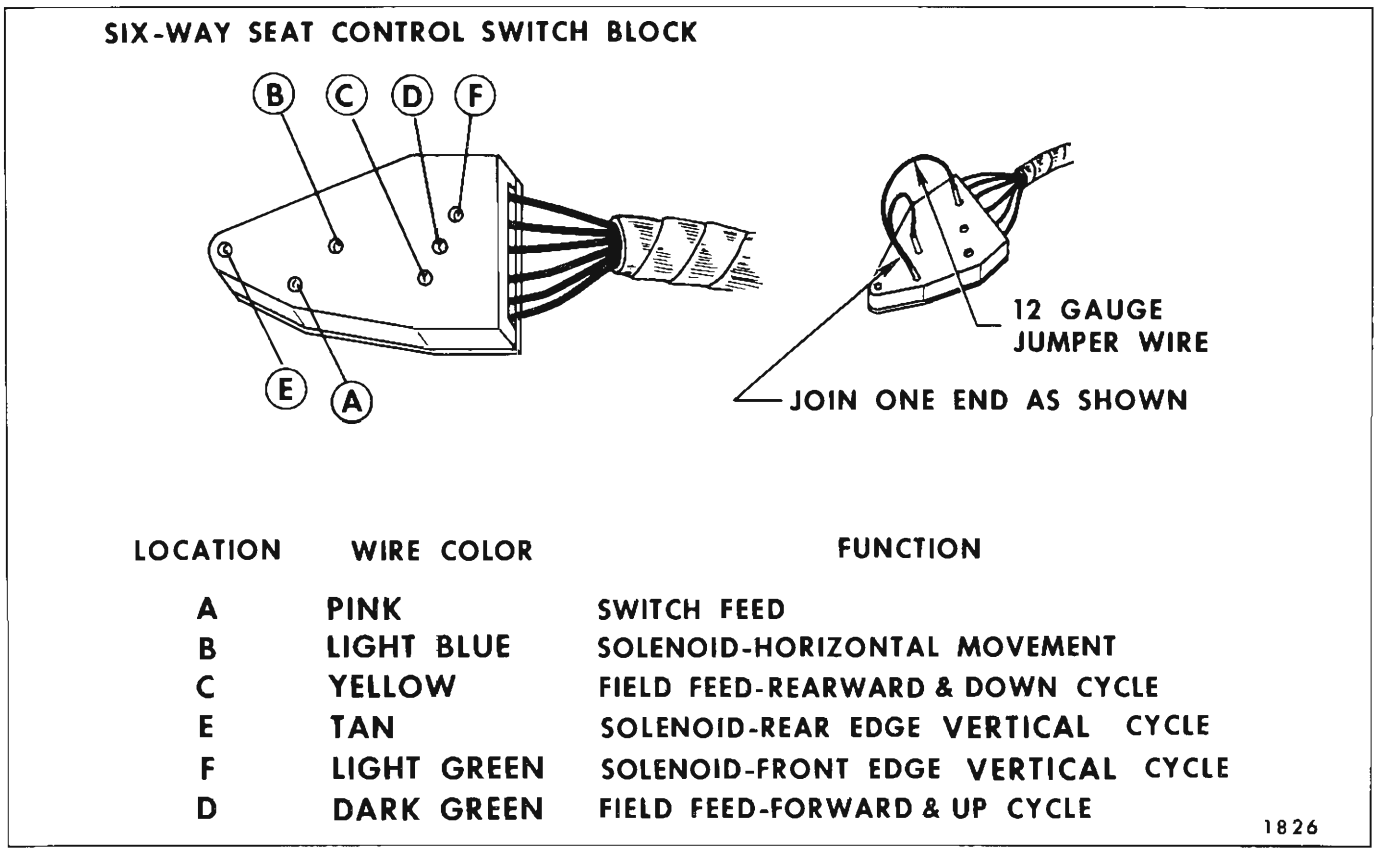


Fig. 1L49—35-36-38000 Series with Switch in Seat Side Panel

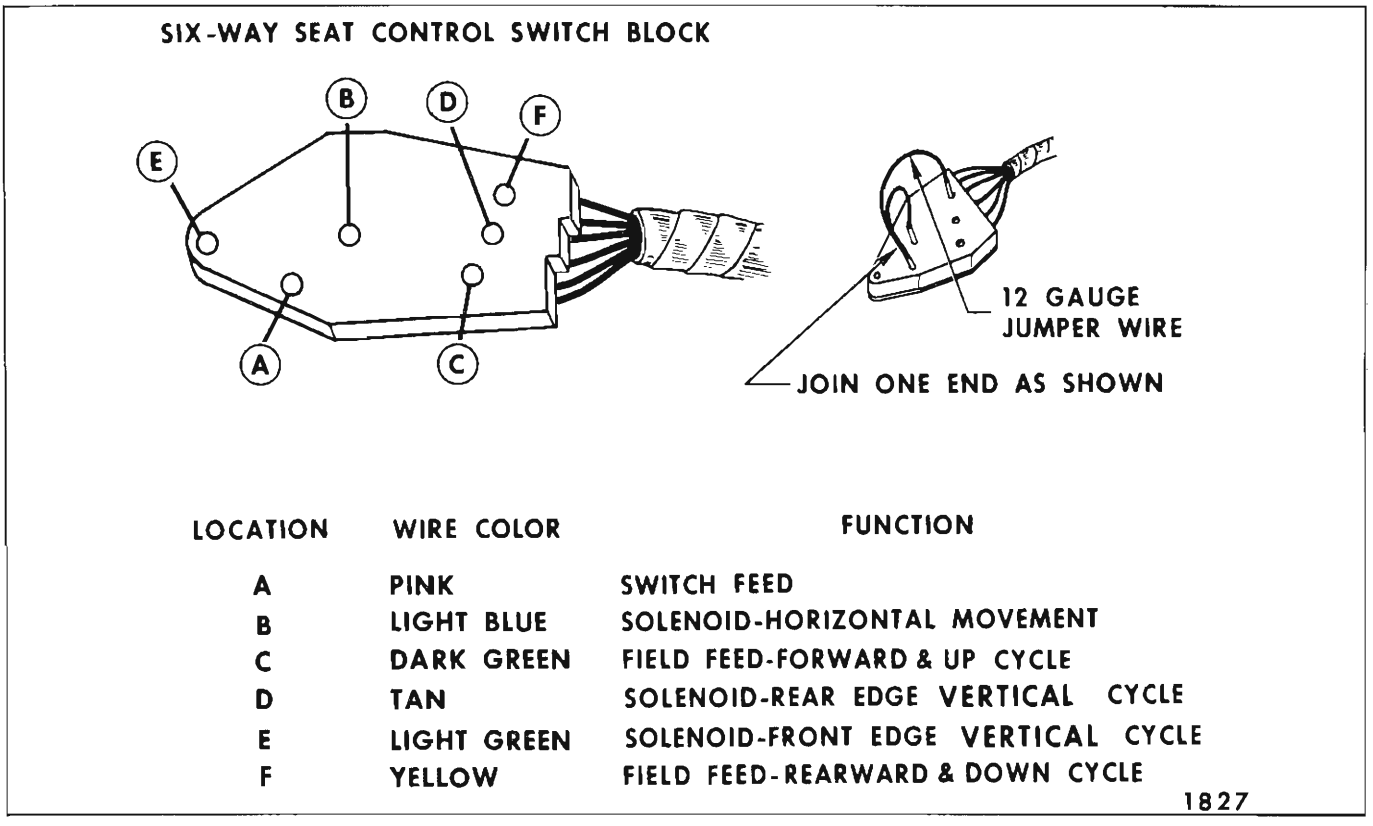
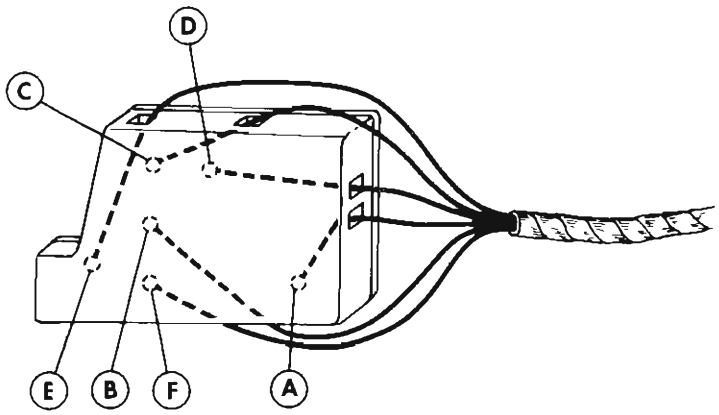


Fig. 1L50—38000 Series with Switch in Arm Rest



LOCATION	WIRE COLOR	FUNCTION
A	ORANGE-BLACK	SWITCH FEED
B	LIGHT BLUE	SOLENOID-HORIZONTAL MOVEMENT
C	YELLOW	FIELD FEED-REARWARD & DOWN CYCLE
D	TAN	SOLENOID-REAR EDGE VERTICAL CYCLE
E	LIGHT GREEN	SOLENOID-FRONT EDGE VERTICAL CYCLE
F	DARK GREEN	FIELD FEED-FORWARD & UP CYCLE

1828

Fig. 1L51—68000 Series

3. Operate switch to energize wire being tested. If tester does not light, there is no current at end of wire. Failure is caused by an open or short circuit between end of wire and switch.

J. Checking the Solenoid

1. Check solenoid ground strap attachment for proper ground.

2. Energize solenoid being checked with jumper wire.

NOTE: If solenoid is functioning, a "click" should be heard when solenoid plunger operates "in" and "out".

CAUTION: To prevent damaging the solenoid, do not energize solenoid for more than one minute.

3. With solenoid energized, actuate seat control switch to energize adjuster motor.

4. If adjusters do not operate, and there is no mechanical failure in the seat unit, the solenoid is defective.

Three-Way Jumper Wire for Checking Seat Switch

To make jumper wire, obtain two (2) pieces of #12 gauge wire, each 4 1/2" long, join one end of each wire as shown in Figure 1L48. The joined end can be inserted in the feed location in the switch block; one of the remaining ends can be inserted into one of the field locations in the switch block; the other end can be inserted into one of the solenoid locations.

IMPORTANT: To obtain a seat movement using a 3-way jumper wire at the switch block, the switch feed location, one of the motor field wire locations and one of the solenoid locations must be connected.

On Bodies with Switch in Seat Side Panel:

1. To raise front edge of seat, place jumper in locations A, F and E.

2. To lower front edge of seat, place jumper in locations A, C and E.

3. To raise rear edge of seat, place jumper in locations A, F and D.

4. To lower rear edge of seat, place jumper in locations A, C and D.

5. To move seat forward, place jumper in locations A, B and F.

6. To move seat rearward, place jumper in locations A, C and B.

On Bodies with Switch in Arm Rest:

1. To raise front edge of seat, place jumper in locations A, C and E.

2. To lower front edge of seat, place jumper in locations A, F and E.

3. To raise rear edge of seat, place jumper in locations A, C and D.

4. To lower rear edge of seat, place jumper in locations A, F and D.

5. To move seat forward place jumper in locations A, C and B.

6. To move seat rearward, place jumper in locations A, F and B.

TYPICAL ELECTRICAL FAILURES OF SIX-WAY SEAT CIRCUITS

CONDITION	CAUSE	CORRECTION
Seat adjuster motor does not operate.	a. Short or open circuit between power source or switch and motor.	a. Check circuit from power source and switch to motor to locate failure.
	b. Defective motor.	b. Check ignition switch circuit through relay at left shroud - 35-36-38000 Only.
		c. Check motor. If defective, repair or replace as required.
Seat adjuster motor operates, but seat adjusters are not actuated.	a. Short or open circuit between switch and affected solenoid.	a. Check circuit from switch to solenoid to locate failure.
or	b. Defective solenoid.	b. Check solenoid. If defective, repair or replace as required.
Seat adjuster motor operates, front edge of seat moves up and down and seat moves forward and rearward. The rear edge of seat cannot be operated.		
Seat adjuster motor operates and seat adjusters move front and rear edge of seat up and forward but will not move the seat down and rearward.	a. Short or open circuit between one of the motor field wires and seat control switch.	a. Check circuit between affected motor field wire and seat switch.
	b. Defective field coil in motor.	b. Check motor. If defective, repair or replace as required.
or		
Seat adjuster motor operates and seat adjusters move front and rear of seat down and rearward, but will not move the seat up and forward.		