

1956 VOL. 15-2 PONTIAC NO.

# 1956 PONTIAC FOUR DOOR CATALINA REMOVAL & INSTALLATION OF BODY PARTS

1956 STYLE

This Service News contains body information applicable to the 1956 Pontiac Four Door Catalina styles. Completely different service procedures are presented which clearly illustrate and explain such items as the newly designed front and rear door hardware and side roof rail weatherstrip.

# **CONTENTS**

| SECTION | SUBJECT                        | PAG |
|---------|--------------------------------|-----|
| 1       | FRONT END                      | 3   |
| Winds   | hield Assembly                 | 3   |
| Winds   | hield Wiper Assembly           | 6   |
| Instru  | ment Panel Assembly            | 9   |
| Shroud  | d Ventilating System           | 10  |
| 2       | DOORS                          | 13  |
| Handle  | es, Trim, Molding, Etc         | 13  |
|         | Lock Striker                   |     |
| Side R  | coof Rail Weatherstrip         | 15  |
| Front   | Door Assembly                  | 16  |
| Front   | Door Ventilator                | 19  |
|         | Door Window                    |     |
|         | Door Window Regulator Electric |     |
|         | or Assembly                    | 21  |
| Front   | Door Locking Mechanisms        | 22  |
| Front   | Door Weatherstrips             | 25  |
|         | Door Assembly                  |     |
| Rear I  | Door Locking Mechanisms        | 29  |
| Rear I  | Door Window                    | 33  |
| Rear I  | Door Window Regulator Electric |     |
|         | or Assembly                    | 37  |
| Rear D  | Door Weatherstrips             | 37  |
| Center  |                                |     |

| SECTION        | SUBJECT   | PAGE   |
|----------------|---|--------|
| 3 H            | HEADLINING AND SEATS  | 39     |
| Front          | ning  | 40     |
| 4              | REAR END  | 47     |
|                | Window Assembly   |        |
| 5              | ELECTRICAL  | 52     |
| dure<br>Seat C | w Circuit Trouble Shooting Procees                                | s . 54 |
| 6              | BODY LUBRICATION  | 59     |
|                | Parts Lubricated Twice a Year<br>Parts Lubricated When Accessible |        |
| 7              | EXTERIOR MOLDINGS   | 63     |



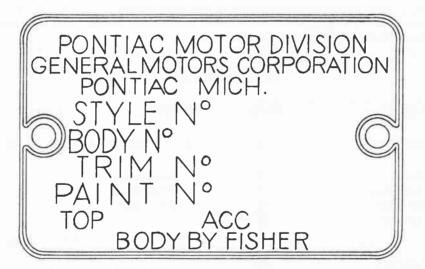


# **BODY IDENTIFICATION**

Throughout the various removal and installation procedures contained in this Service News, reference is made to the Fisher Body style number wherever specific style identification is necessary.

The body style number on a Fisher Body is stamped on a number plate located on the shroud upper panel underneath the hood of the car, immediately in front of the right windshield wiper transmission.

In addition to providing body style identification, the number plate also carries the body number, trim number, and paint number.



Illustrated above is a facsimile of a body number plate. The information on this plate is of extreme importance whenever correspondence or orders are prepared pertaining to the body.

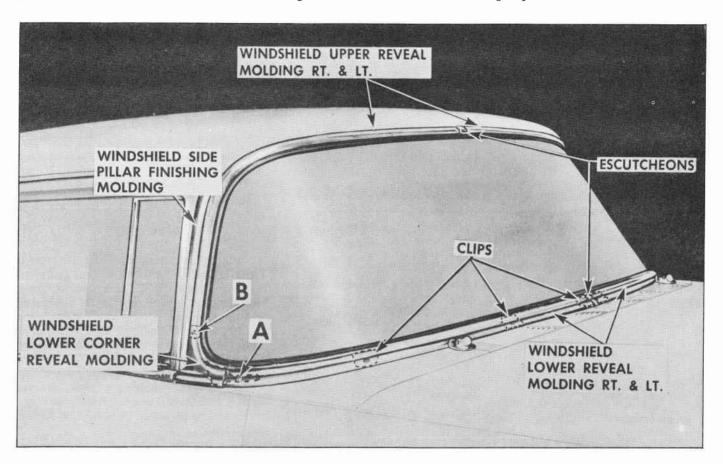
For information relative to the hood, hood hinges, front fenders and other chassis parts, refer to the Pontiac Shop Manual.

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# WINDSHIELD ASSEMBLY

2739, 2739D, 2839SD

The 1956 Pontiac incorporates a large one-piece windshield which is retained in the windshield opening by a one-piece rubber channel. The illustration below shows the windshield and windshield reveal moldings installed on a body. Also shown are the names of the reveal moldings and the location of the retaining clips.



## WINDSHIELD REVEAL MOLDINGS

The illustration above shows the windshield reveal moldings installed to the body. Also shown are the names of the reveal moldings and the location of the retaining clips.

#### REMOVAL AND INSTALLATION

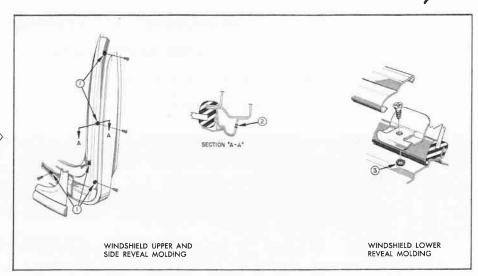
- 1. Apply masking tape to body at areas adjacent to windshield lower reveal moldings.
- 2. Remove wiper blade and arm assembly from each transmission.
- 3. Remove transmission escutcheon spanner nut and escutcheon from each transmission.
- 4. With suitable tool, carefully snap off escutcheon from junction of lower reveal moldings to expose clip attaching screw.
- 5. Remove screw securing retaining clip under escutcheon and slide clip into either molding.
- 6. On inside of body beneath instrument panel, remove nut and washer securing each windshield lower reveal molding clip located between transmission and lower corner reveal molding.
- 7. Carefully slide lower reveal molding approximately

- 1-1/2" toward center-line of body. NOTE: At this location, reveal molding lower flange is cut out to permit disengagement of lower edge of molding from clip located between transmission and center-line of body.
- 8. Disengage molding from clip and remove from body.
- 9. Remove screw "A" and screw securing tab at rear lower corner of corner reveal molding, then slide molding downward and remove from body. Remove screw "B" securing lower end of upper reveal molding. Repeat steps 7 through 9 on opposite side of body.
- 10. Remove three (3) screws securing windshield side pillar finishing molding and carefully pry off molding. NOTE: The windshield upper reveal moldings are secured in the windshield rubber channel by a tee flange and can be removed after the windshield glass and rubber channel are removed from the body.

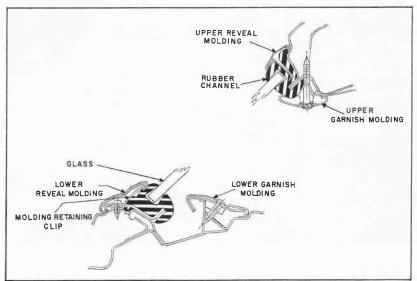




- 11. To install moldings, reverse removal procedures and seal molding attaching screw holes as follows:
- a. Apply medium-bodied sealer to screw holes indicated at one (1) in drawing.
- b. Apply sealer inside of holes as indicated at two (2) in section "A-A".
- c. Apply medium-bodied sealer around lower reveal molding clip attaching holes indicated at three (3).



# WINDSHIELD GLASS



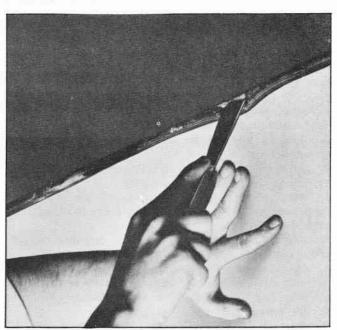
## REMOVAL

- 1. Place protective covering over hood, front fenders, instrument panel and front seat assembly. NOTE: The opposite drawing shows a typical section of the windshield assembly.
- 2. On inside of body, remove windshield side, upper and lower garnish moldings and rear view mirror support.
- 3. Remove windshield lower reveal and corner reveal moldings, then remove screw securing lower end of upper reveal moldings. See "Windshield Reveal Moldings."

- 4. Remove screws securing lower reveal molding attaching clips and remove clips from body.
- 5. On inside of body, loosen lip of rubber channel from pinchweld flange along top and sides of windshield as follows:

With palm of hand apply pressure to edge of glass as shown. At same time, use a putty knife or other suitable tool and carefully assist lip of rubber channel over pinchweld flange.

- 6. After windshield rubber channel is free from pinchweld flange, obtain aid of helper and lift windshield assembly from body opening. Place windshield on covered bench.
- 7. Remove windshield upper reveal moldings by disengaging tee flange of molding from windshield rubber channel.
- 8. Remove rubber channel from glass.

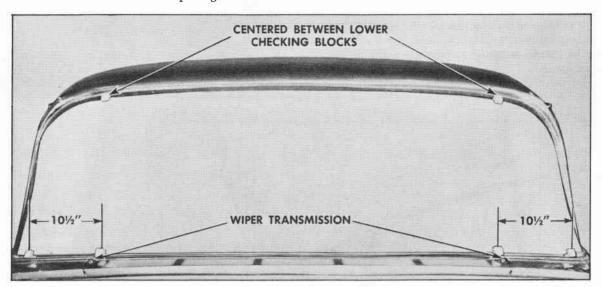






# CHECKING THE BODY WINDSHIELD OPENING

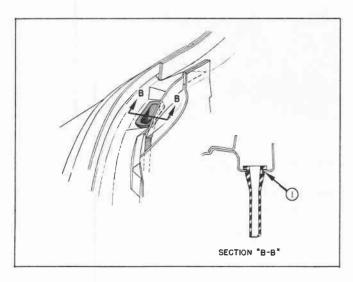
Due to the size and contour of the new windshield, it is important that the body windshield opening be checked thoroughly before the installation of a replacement windshield glass. The procedure below outlines the method which may be used to check the windshield opening.

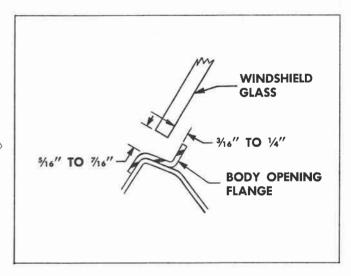


- 1. Check windshield rubber channel for any irregularities.
- 2. Clean off old sealer from around windshield opening and check entire body opening flange.
- 3. Check new windshield glass to opening by supporting glass with six wooden spacers as shown in illustration. CAUTION: Care should be exercised to make certain that glass does not strike body metal during this temporary installation. Edge chips can lead to future breaks.
- 4. With windshield glass supported and centered in opening by spacers, check relationship of glass to body opening around entire perimeter of glass.

The drawing opposite shows typical section taken through glass and body opening. Check glass to body relationship as follows:

a. Inside surface of glass should be uniform distance from body flange. Dimension should be from 3/16" to 1/4".





- b. Outer edge of glass should be uniform distance from body metal, measured in plane of glass. Dimension should be from 5/16" to 7/16".
- 5. Mark any sections of body to be re-formed, remove glass and re-form opening as required.
- 6. Check windshield opening again as outlined in step 4. Then MARK GLASS AND BODY so that glass can be accurately centered in opening when installed.

# WINDSHIELD GLASS

# INSTALLATION

1. Check windshield drain gutter and drain hose at each end of gutter for any obstructions, and clean out if necessary.

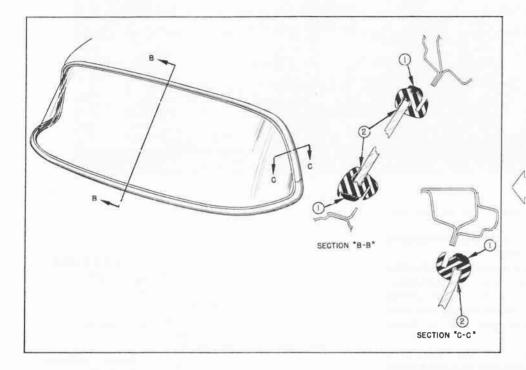
Drawing shows drain hose at end of windshield drain gutter. Section "B-B" shows sealing of drain hose at one (1).





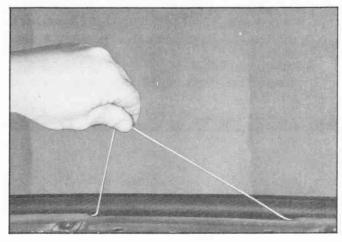
- 2. Locate center-line of windshield glass. Assemble rubber channel to glass with groove for windshield upper reveal molding located on top edge of glass. Install upper reveal moldings. NOTE: To facilitate installation of reveal moldings, apply mild soap solution to molding tee flange and cavity in rubber channel.

  3. Insert strong cord into pinchweld cavity of rubber channel completely around windshield. Tie ends of cord and tape to inside of glass at bottom center as shown in illustration.



- 4. Apply ribbon of mediumbodied sealer completely around base of rubber channel, as indicated in opposite drawing at one (1).
- 5. With aid of helper, carefully place and center windshield assembly in windshield opening.

- 6. While pressing firmly from outside, have helper on inside slowly pull cord from lower center to each lower corner of windshield to seat lip of rubber over flange along bottom of windshield opening. Then pull cord along both sides and top of windshield.
- 7. Seal outside lip of rubber channel to glass around perimeter of windshield, using weatherstrip cement.
- 8. Clean off excess sealer and cement using mineral spirits. Reinstall previously removed parts.
- 9. Remove protective covering.



# WINDSHIELD WIPER ASSEMBLY

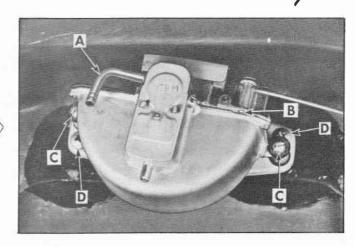
The windshield wiper assembly consists of a wiper motor, auxiliary drive, and two (2) wiper transmissions which are operated by a cable drive. Each transmission assembly is designed with "spring-loaded" pulleys that when released automatically adjust wiper cable tension. The wiper motor auxiliary drive assembly is installed to the forward side of the dash panel and is designed with two (2) pulleys to which the ends of the transmission cables are attached.



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# WINDSHIELD WIPER MOTOR REMOVAL AND INSTALLATION

- 1. Detach vacuum line from connector at "A".
- 2. Loosen screw "B" and detach control cable from wiper motor.
- 3. Remove screws indicated at "C" and remove motor from auxiliary drive.
- 4. To install, reverse removal procedure. Make sure control cable is correctly positioned for proper valve operation.

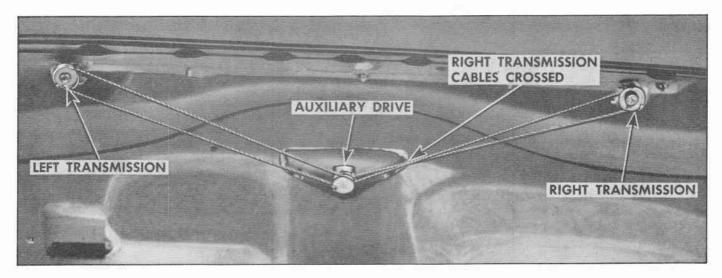


# WINDSHIELD WIPER MOTOR AND AUXILIARY DRIVE ASSEMBLY REMOVAL

- 1. Remove instrument panel compartment box.
- 2. Adjust cables to slack position. See "Cable Adjustment."
- 3. Observe attachment of cables to auxiliary drive, then detach cables from pulleys. IMPORTANT: Note how

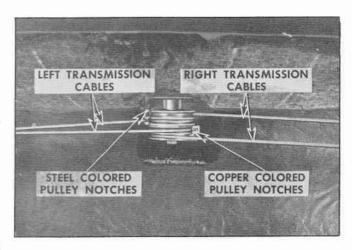
right transmission cables are crossed.

4. At front of dash panel, disconnect vacuum line and control cable from wiper motor, then remove two (2) screws indicated at "D" in illustration above and remove wiper motor and auxiliary drive assembly from body.



## INSTALLATION

- 1. Connect vacuum line and control cable to wiper motor.
- 2. Assemble wiper motor and auxiliary drive to dash panel and secure with two (2) attaching screws.
- 3. Inside of body, attach transmission cables to auxiliary drive pulleys as shown in illustration. IMPORTANT: Cross right transmission cables as shown in illustration above, then connect copper-colored cable ends to copper-colored notches on pulley, and steel-colored cable ends to steel-colored notches on drive pulley.
- 4. Adjust cables to required tension. See "Cable Adjustment."
- 5. Operate wiper motor and check entire wiper mechanism, then install instrument panel compartment box.



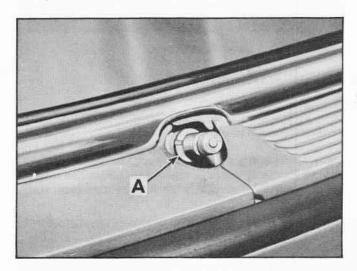




# WINDSHIELD WIPER TRANSMISSIONS REMOVAL

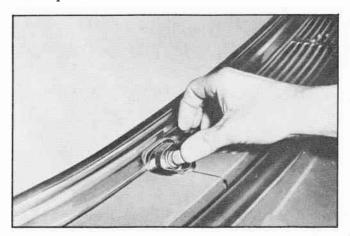
The illustration shows a wiper transmission with component parts removed from the body.

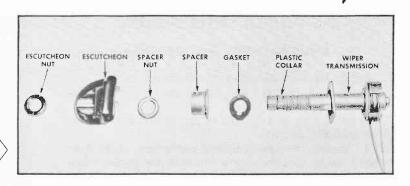
- 1. Remove wiper blade and arm assemblies.
- 2. Remove instrument panel compartment box.
- 3. Adjust wiper transmission cables to slack position. See "Cable Adjustment."
- 4. Observe attachment of transmission cables to auxiliary drive, then disconnect cables from pulleys.



# WINDSHIELD WIPER CONTROL REMOVAL AND INSTALLATION

- 1. Detach windshield wiper control cable from motor.
- 2. Loosen set screw on control knob and remove knob.
- 3. Remove spanner nut and escutcheon from wiper control shaft.
- 4. Push wiper control forward through instrument panel and lower it beneath level of panel.
- 5. Tag wiper hoses for proper identification and disconnect them from wiper control, then remove control and cable as an assembly.
- 6. To install, reverse removal procedure. Make sure control cable is correctly positioned at motor for proper valve operation.





- 5. On outside of body at each transmission, remove escutcheon spanner nut. Lift escutcheon from body, disconnect washer hose and remove escutcheon.
- 6. At each transmission, remove the transmission spacer spanner nut indicated at "A" and remove spacer.
- 7. On inside of body, pull each transmission down through shroud panel and remove from body.

#### INSTALLATION

- 1. Install gasket to each transmission. Apply mediumbodied sealer around transmission shaft to gasket surface contacting metal.
- 2. Position each transmission assembly in body, install spacer and secure in place with spacer spanner nut.
- 3. Attach transmission cables to auxiliary drive drums. See step 3 and 4 of the Windshield Wiper Motor and Auxiliary Drive Assembly. NOTE: If new transmission is being installed, it is necessary to remove plastic collar from transmission before cables can be tensioned.
- 4. Connect washer hose to transmission escutcheon and secure escutcheon with chrome plated spanner nut.
- 5. Reinstall wiper blade and arm assemblies. Check operation of wiper motor and transmission assembly.
- 6. Reinstall instrument panel compartment box.

# TRANSMISSION CABLE ADJUSTMENT

The transmission cables are tensioned by "spring-loaded" pulleys. When the end of the transmission shaft is pushed "in" as shown in the illustration, the spring-loaded pulleys unlock and tension the cables. To obtain slack in the wiper transmission cables, proceed as follows:

- 1. Push "in" base of wiper arm, where arm fits over transmission shaft, to unlock spring-loaded pulleys. If wiper arm has been removed, push in end of transmission as shown in illustration.
- 2. While pulleys are unlocked, have helper on inside of car pull cable to obtain slack. When sufficient slack is obtained, release end of transmission shaft to lock cables in slack position.
- 3. To restore tension in cables, push "in" on end of transmission shaft. Repeat operation on opposite transmission. NOTE: Loose cables cause blade slap or over-travel at end of stroke. If this condition exists, adjust tension of cables as outlined in step 3 above.





# **INSTRUMENT PANEL ASSEMBLY**

The instrument panel is designed with the compartment box located at the center of the panel. An instrument panel cover trim assembly which consists of a fiberglass foundation and fabric cover is available as an option. The cover is cemented in place along the rear edge; the front edge of the cover is secured in place by a two (2) piece metal retainer located beneath the lower garnish moldings.

# INSTRUMENT PANEL COVER TRIM ASSEMBLY

# STYLES EQUIPPED WITH INSTRUMENT PANEL COVER

#### REMOVAL

- 1. Remove side and lower garnish moldings.
- 2. Along front edge of instrument panel cover remove screws securing cover retainers and remove retainers.
- 3. At each end of instrument panel, remove instrument panel cover side retainer.
- 4. Along rear edge of cover, remove or loosen instrument panel parts as required to remove cover.
- 5. Carefully detach cover from rear edge of instrument panel and remove from body.

# INSTALLATION

- 1. Clean up and thoroughly dry cementing surfaces on instrument panel.
- 2. Apply trim cement to rear edge of cover and corresponding surface on instrument panel. Allow cement to become tacky.
- 3. Carefully position cover assembly on instrument panel, then press cemented edge to instrument panel. Reinstall cover retainers.
- 4. Reinstall instruments and moldings, and clean up excess trim cement.

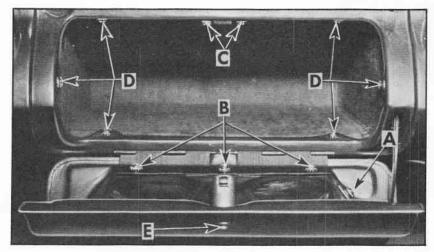
# INSTRUMENT PANEL COMPARTMENT DOOR

# REMOVAL AND INSTALLATION

- 1. Open door and with pencil scribe location of hinge on door.
- 2. Remove hinge attaching screws at door or instrument panel attaching side, and two (2) screws indicated at "A", then remove door.
- 3. To install, position door within hinge scribe marks and reinstall attaching screws.

# **ADJUSTMENTS**

- 1. To adjust closed position of door up or down, loosen screws "B", adjust door as required and tighten screws.
- 2. To adjust door from side to side, loosen compartment door male hinge strap attaching screws, which are located beneath instrument panel. Adjust door as required and tighten screws.
- 3. To adjust compartment door lock striker, loosen two (2) screws indicated at "C", adjust door as required, then tighten screws.



# INSTRUMENT PANEL COMPARTMENT BOX

#### REMOVAL AND INSTALLATION

- 1. Remove screws indicated at "D" in illustration above.
- 2. Move box forward and downward, and remove from instrument panel.
- 3. To install, reverse removal procedure.

# DOOR LOCK KNOB

#### REMOVAL AND INSTALLATION

- 1. Remove door lock cylinder.
- 2. With suitable tool, unscrew lock knob escutcheon indicated at "E" in illustration above, and remove escutcheon and lock knob.
- 3. To install, reverse removal procedure.

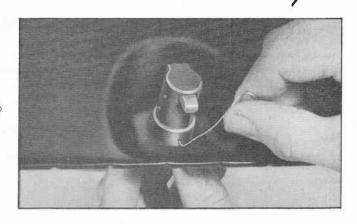


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# INSTRUMENT PANEL COMPARTMENT DOOR LOCK CYLINDER

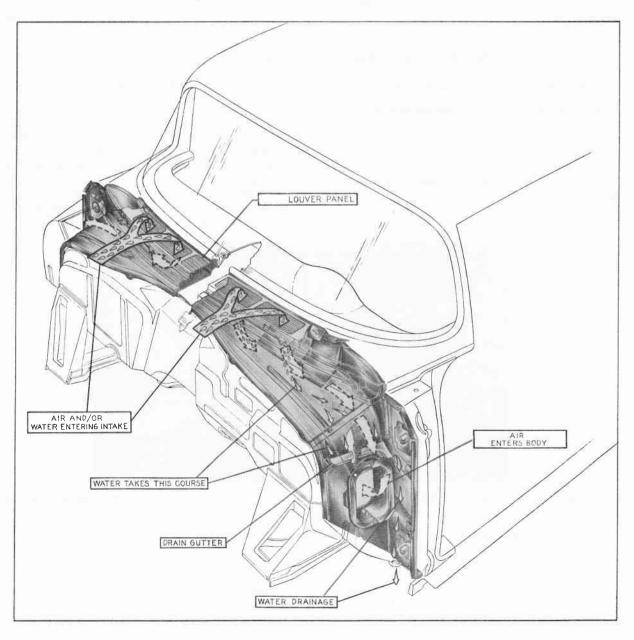
## REMOVAL AND INSTALLATION

- 1. With suitable tool, depress #1 tumbler of cylinder as shown in illustration and remove cylinder.
- 2. To install, reverse removal procedure.



# SHROUD VENTILATING SYSTEM

The 1956 Pontiac incorporates a ventilating system with an air intake louver panel located on top of the shroud. The air entering the shroud top ventilator louver panel flows through a duct which guides the air into the body through an opening at each shroud side duct panel. The flow of air into the body is regulated by a valve in each shroud side opening; each valve is adjusted by the use of a cable and control knob. Water entering the inlet louver panel into the duct flows down the shroud side duct panel into a drain gutter which directs the water out of the body.



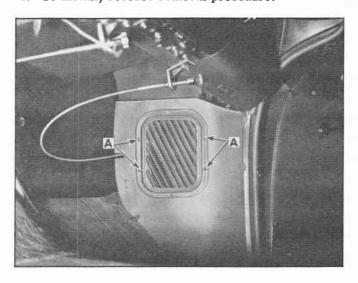


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# SHROUD TOP VENTILATOR LOUVER PANEL

# REMOVAL AND INSTALLATION

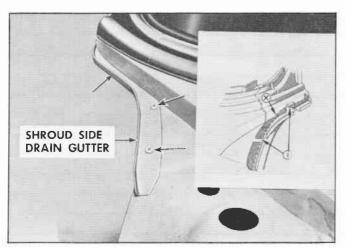
- 1. Remove windshield lower reveal molding. See "Windshield Lower Reveal Moldings."
- 2. Remove lower reveal molding retaining cliplocated on louver panel.
- 3. Lift up hood and remove screws indicated by arrows in illustration, then remove panel from body.
- 4. To install, reverse removal procedure.

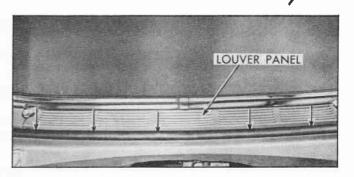


# AIR VENT CONTROL ASSEMBLY AND OUTLET DOOR

# REMOVAL AND INSTALLATION

- 1. Remove shroud side foundation.
- 2. Remove two (2) screws indicated at "A", or nut at "B".
- 3. Remove clips securing control cable, then disengage end of cable from door at "C" and remove from body.
- 4. To remove door from outlet, pry hinge pin at "D" downward and remove door. On left door, pry lower hinge pin upward to remove door.
- 5. To install, reverse the removal procedure.



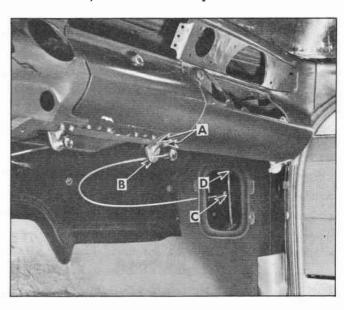


# SHROUD DUCT PANEL AIR GRILLE REMOVAL AND INSTALLATION

- 1. Remove six (6) screws securing grille to shroud side foundation, and remove grille and screen.
- 2. To install, reverse removal procedure.

# SHROUD SIDE FOUNDATION REMOVAL AND INSTALLATION

- 1. Bend open tabs securing panel along toe pan.
- 2. Remove four (4) screws "A", disengage rear edge from retainer and remove side foundation.
- 3. To install, reverse removal procedure.



## SHROUD SIDE DRAIN GUTTER

A shroud side drain gutter is located on the right and left shroud side panel adjacent to the door opening as shown in the illustration opposite.

## REMOVAL AND INSTALLATION

- 1. Remove the three (3) screws indicated by arrows and remove gutter.
- 2. To install, reverse the removal procedure. Apply body caulking compound between gutter and body metal as indicated at one (1) in inset. Be sure that seal is continuous at area marked "X"





# FRONT BODY HINGE PILLAR WEATHERSTRIP

The weatherstrip is located along the upper portion of the front body hinge pillar and is secured in place by four (4) snap-in clips which are formed from a wire insert.

# REMOVAL AND INSTALLATION

Carefully position tip of mechanically retained weatherstrip inserting tool or other suitable tool under weatherstrip at each clip location and snap clip out of the hole. To install weatherstrip, reverse the removal procedure.

| NOTES |
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# FRONT AND REAR DOORS

# 1956 PONTIAC SPECIAL SEDAN STYLES

2739, 2739D AND 2839SD

Many new changes have been incorporated in the design of the front door hardware parts on the special sedan styles. Some of these parts, such as the door lock and striker mechanisms and connecting rods are new and require new service procedures.

The rear door and door hardware parts are entirely new in design and require new service procedures.

The door section is divided into the following parts:

- A. Service operations which are the same or similar for both front and rear doors.
- B. Service operations for the front door.
- C. Service operations for the rear door.

Special attention should be given the new door lock striker adjustments and dimensional specifications for use of striker emergency spacers. Special attention should also be given to both front and rear door window adjustments to provide proper window frame contact with the side roof rail weatherstrip.

# FRONT AND REAR DOOR INSIDE HARDWARE AND TRIM

# FRONT AND REAR DOOR INSIDE HANDLES

#### REMOVAL AND INSTALLATION

- 1. Depress door trim assembly at handle and with spring removing tool, remove retaining ring, then remove handle and bearing plate.
- 2. To install, reverse removal procedure. NOTE: Install handle at same angle as handle on opposite door, except ventilator regulator handle which should point toward rear of car on left door and toward front of car on right door. Window or ventilator should be in closed position when checking angle of handle on opposite door.

# FRONT AND REAR DOOR WINDOW CONTROL SWITCH

# STYLES EQUIPPED WITH ELECTRICALLY POWERED WINDOW REGULATORS

# REMOVAL AND INSTALLATION

- 1. Remove door belt finishing molding and ventilator regulator handle.
- 2. Loosen upper portion of door trim assembly sufficiently to allow access to terminal block.
- 3. Disconnect terminal block switch by carefully pulling block to disengage it from switch studs.
- 4. Carefully push switch from door trim assembly to release switch from retainer. NOTE: In some instances it may be necessary to pry open tabs of retainer which secure switch at "A".
- 5. To remove switch from escutcheon, depress clips at sides of switch with pointed tool inserted through holes "B" and remove clips.
- 6. To install, reverse removal procedure. NOTE: The "feed" stud of the master control switch should point toward front of car when installed in door trim assembly. Check operation of switch before completing reinstallation of parts.

# FRONT AND REAR DOOR BELT FINISHING MOLDING

REMOVAL AND INSTALLATION

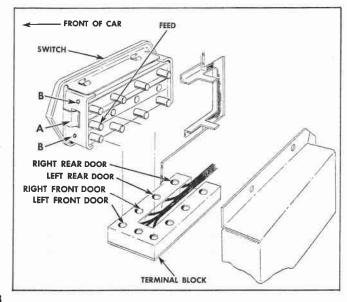
- 1. Remove inside locking rod knob.
- 2. Remove screw securing each end of molding; disengage molding from clips and remove from door.
- 3. To install reverse removal procedure.

# FRONT AND REAR DOOR ARM REST

2739 AND 2739D

#### REMOVAL AND INSTALLATION

- 1. From underside of arm rest remove two (2) screws securing arm rest to door panel, and remove arm rest.
- 2. To install, reverse removal procedure.







# FRONT AND REAR DOOR TRIM ASSEMBLY

## REMOVAL AND INSTALLATION

- 1. Remove door inside handles and door belt finishing molding.
- 2. On doors equipped with door arm rest panel assembly, remove two (2) screws from arm rest recess trim cup. On doors equipped with removable-type arm rest, remove arm rest.
- 3. Remove one (1) screw at each lower corner of trim assembly.
- 4. With clean rubber mallet, tap trim assembly along front and rear edge to free nails in slots.
- 5. With suitable tool, pry front and rear edge of trim assembly free of door inner panel.
- 6. On doors equipped with electrically-powered window regulators, disconnect switch terminal block from switch assembly by carefully pulling block to disengage it from switch studs.

- 7. Lift door trim assembly upward to disengage it from retaining tabs and long metal retainer at lower edge of door.
- 8. To install, seal nail slots as specified in "Door Inner Panel Sealing" and reverse removal procedure. On door equipped with electrically-operated window regulators, check operation of switch after connecting terminal block. When button is pushed up, window should raise; when button is pushed down, window should lower. NOTE: Make sure that tension springs are reinstalled over door handle spindles, and that trim assembly is engaged with tabs and long metal retainer at lower edge of door. Broken retaining nails can be replaced with repair tabs which are available as service parts.

# FRONT AND REAR DOOR LOCK STRIKER

Front and rear door lock strikers incorporate the new inter-lock feature consisting of a notch in the striker into which the lock bolt housing extension engages. With the inter-lock feature it is very important that the lock extension engages properly in the striker notch and that, where necessary, the correct striker emergency spacers are used to obtain proper engagement.

## REMOVAL AND INSTALLATION

- 1. With pencil, scribe position of striker on body pillar.
- 2. Remove three (3) door lock striker attaching screws and remove striker and adjusting plates from pillar.
- 3. To install, place striker and adjusting plates within scribe marks on pillar and tighten screws.

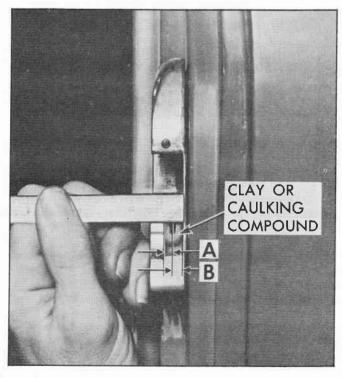
IMPORTANT: Whenever a door has been removed and installed, or realigned, the door SHOULD NOT be

closed completely until a visual check is made to determine if the lock extension will engage in the striker notch. Where required, door lock striker emergency spacers should be installed so that door can be closed and an accurate check made to determine emergency spacer requirements.

# FRONT AND REAR DOOR LOCK STRIKER ADJUSTMENTS

- 1. To adjust striker "up" or "down" or "in" or "out" loosen striker plate screws and shift striker and adjusting plates as required, then tighten screws.
- 2. DIMENSIONAL SPECIFICATIONS FOR USE OF DOOR LOCK STRIKER EMERGENCY SPACERS.
  - A. Front door should be properly aligned and the body properly shimmed before checking door spacer requirements.
  - B. To determine if door lock striker emergency spacers are required, apply modeling clay or body caulking compound in the door lock striker notch where the lock extension engages and then close the door to form a measurable impression in the clay or caulking compound, as shown in illustration.

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 on following page.



#### FISHER BODY SERVICE NEWS

| •                       |   |                     |                               |
|-------------------------|---|---------------------|-------------------------------|
| Dimension "A"           | No. of<br>Spacers Required              | Spacer<br>Thickness | Striker<br>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)<br>1 - (1/16" Spacer) | 3/16" (Total)       | "                             |
| 0 to 1/16" Interference | 2 - (1/8" Spacers)                      | 1/4" (Total)        | " (1/4" longer)               |

NOTE: Dimension "B" from center of lock extension to inside face of striker notch should never be less than 1/8".

# SIDE ROOF RAIL WEATHERSTRIP

The side roof rail weatherstrip is a one-piece weatherstrip with an "L" shaped metal insert through the entire length of the weatherstrip. The weatherstrip is secured to the side roof rail by fourteen (14) screws and to the body front pillar by one (1) screw. IMPORTANT: The attaching holes in the side roof rail weatherstrip are elongated to provide "in" and "out" adjustment for proper contact with the front and rear door window frames. However, the amount of adjustment is small and is not intended to correct for improper ventilator or door window alignment. It is very important that the front door ventilator and the front and rear door windows are checked and, if necessary, aligned for proper contact with the side roof rail weatherstrip.

The following procedures may be used for removing, installing and adjusting the side roof rail weatherstrip.

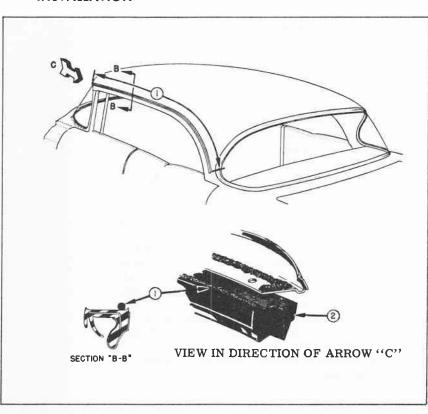
## REMOVAL

- 1. Open both front and rear doors and lower the windows.
- 2. Remove one (1) screw securing weatherstrip at body front hinge pillar and screws securing weatherstrip to

side roof rail. Carefully detach weatherstrip from sealer and remove from body. CAUTION: Use care when removing and handling weatherstrip so as not to bend metal insert.

#### INSTALLATION

- 1. Clean off all old sealer from weatherstrip attaching surfaces along side roof rail.
- 2. As a bench operation, apply a continuous ribbon of heavy-bodied sealer (3/16" diameter) along the inboard edge of weatherstrip as indicated at "1" in illustration, along entire length of weatherstrip.
- 3. At the front end of the weatherstrip apply a good grade of weatherstrip cement to the contacting surface of weatherstrip, indicated at "2".
- 4. Position weatherstrip to side roof rail and retain in position with one (1) attaching screw at front center and rear of weatherstrip.
- 5. Install loosely all weatherstrip attaching screws.
- 6. With the doors and windows closed, position weatherstrip so that an even, continuous contact is made with the window frames, as shown in drawing at top of next page, and tighten weatherstrip attaching screws. Clean off excess sealer and cement with mineral spirits.
- 7. Lubricate weatherstrip as specified in "Body Lubrication", page 61.



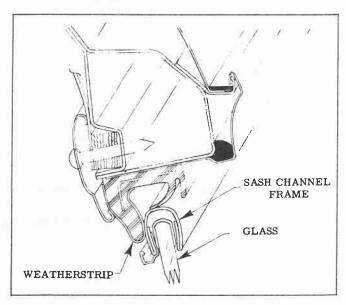
<sup>\*</sup> Zinc or cadmium-plated flat head cross recess screw with countersunk washer.

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#### **ADJUSTMENTS**

1. The attaching holes in the side roof rail weatherstrip are elongated to provide "in" and "out" adjustment for proper contact with the front and rear door window frames as shown in illustration. To adjust weatherstrip, loosen attaching screws along area requiring adjustment, move weatherstrip "in" or "out" as required and retighten screws. NOTE: The amount of "in" and "out" weatherstrip adjustment is small and is not intended to correct for improper ventilator or door window alignment. If proper weatherstrip contact cannot be obtained through the "in" and "out" weatherstrip adjustment, the door ventilator and/or windows must be aligned to obtain the proper weatherstrip contact. 2. The side roof rail weatherstrip can also be shimmed downward to provide proper contact with the ventilator frame and door glass frames. To perform this operation, detach weatherstrip from side roof rail sufficiently to install tapered waterproof shims between the weatherstrip and the side roof rail. DO NOT BEND THE IN-TEGRAL METAL INSERT. Shims should be securely cemented to side roof rail, and specified sealer should be re-applied to weatherstrip in affected area.

CAUTION: Shims should be well tapered and long enough to provide a continuous sealing surface along the length



of the weatherstrip. Shims which are not tapered or too short may cause local irregularities in the sealing surface.

# FRONT DOOR ASSEMBLY AND HINGES

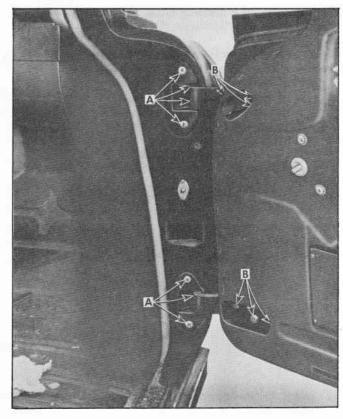
1956 PONTIAC SPECIAL SEDAN STYLES 2739, 2739D AND 2839SD

The front door hinges are the swing-out type with an integral door check and hold open, similar to past models. The hinges are attached to the front body hinge pillar and to the door assembly with bolts, cage nuts and anchor plates. Either of two (2) methods may be used to remove the door from the body.

- 1. The door and hinges can be removed as an assembly from the body hinge pillar.
- 2. The door can be removed from the hinge straps.

# **REMOVAL**

- 1. Place suitable protective covering overfrontfender at door opening to protect finish.
- 2. Remove door trim assembly. NOTE: The above step does not have to be performed if door and hinges are being removed, and body is not equipped with electrically powered window regulator.
- 3. Scribe hinge box locations on front body hinge pillar or hinge strap locations on door, depending on method of removal being used.
- 4. On bodies equipped with electrically-powered window regulators, proceed as follows:
  - a. Remove two (2) screws securing electric conduit to door hinge pillar. Bend out conduit tabs and remove from wire harness.
  - b. Remove small access hole cover. Loosen or detach wire harness clips as required and disconnect motor leads from harness. Remove wire harness from between door panels through opening in door hinge pillar.
- 5. With door properly supported, remove bolts "A", securing upper and lower hinges to front body hinge pillar, or bolts "B" securing door to hinge straps, depending on method of removal being used. NOTE: Two bolts at upper hinge and at lower hinge are located inside of hinge boxes at front body hinge pillar.
- 6. With aid of helper, remove door assembly from body.



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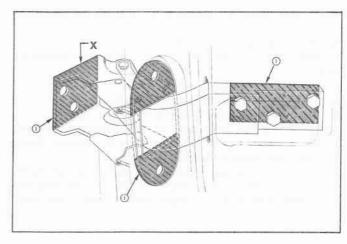
#### INSTALLATION

1. As an anti-squeak precaution, before installation of door, coat all attaching surfaces of hinges with medium-bodied sealer, as indicated in shaded areas of opposite drawing at "1". In addition, apply extra sealer on surface indicated by "X", to obtain watertight seal.

2. With aid of a helper, reinstall door to body opening.

Align hinges within scribe marks and tighten bolts. Check door for proper alignment.

- 3. On bodies equipped with electrically-powered window regulators, proceed as follows:
  - a. Install wire harness in between door panels and connect motor leads. Tighten wire harness clips, making sure that spacers are installed at proper locations.
  - b. Reinstall conduit to door hinge pillar.
- 4. Where required, seal door inner panel as specified in "Door Inner Panel Sealing" and reinstall previously removed parts.



5. For lubrication information, see "Body Lubrication".

# **DOOR ADJUSTMENTS**

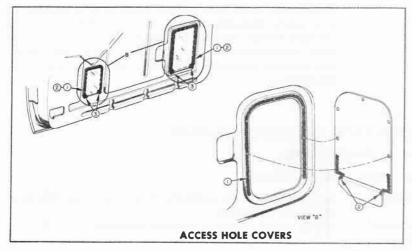
Door adjustments are provided through the use of floating cage nuts and anchor plates in the door and adjacent hinge pillar. When checking the door for misalignment, remove the door lock striker from the body pillar to allow the door to hang free on its hinges. Procedure for adjusting the door is outlined below. IMPORTANT: After performing any door adjustments the front door ventilator and window should be checked for proper alignment with the side roof rail weatherstrip and adjusted, where required. In addition the door lock extension-to-striker engagement should be checked, as described on page 14, and adjusted, if necessary.

- 1. The door can be adjusted up or down and in and out at the front body hinge pillar as follows:.
  - A. Scribe location of hinge boxes on pillar.
  - B. Loosen bolts indicated at "A" in illustration on bottom of previous page.
  - $\ensuremath{\text{\textbf{C}}}.$  Shift door to desired position, then tighten bolts.
- 2. The door can be adjusted up or down and fore or aft at door attaching side of hinge straps as follows:
  - A. Remove door trim assembly.
  - B. Scribe location of hinge straps on door.

- C. Loosen bolts indicated at "B" in illustration on bottom of previous page, then shift door to desired position.
- D. Tighten bolts and reinstall door trim assembly. NOTE: The frictional areas of the door hinge "hold open" clips contacted by the hinge straps must be lubricated periodically for ease of operation and prevention of frictional noises. For lubrication instructions refer to "BODY LUBRICATION", page 59.

# FRONT DOOR INNER PANEL SEALING 2739, 2739D AND 2839SD

The illustration shows the front door inner panel areas which must be sealed to prevent entrance of water and possible damage to interior trim. Whenever any work is performed on the door where the weatherseal has been disturbed, the area must be resealed before the door trim assembly is reinstalled. NOTE: Each numbered step in the procedure below refers to the corresponding numbered arrow in the illustration. The kinds of sealer to be used are also explained in the description below.



## **SEALING OPERATIONS**

- 1. Apply a ribbon (approximately 3/16" diameter) of medium-bodied sealer across the top and down the side flanges to a point 1/2" beyond the access hole cover offset line to provide a seal between cover and inner panel.
- 2. Apply a ribbon of medium-bodied sealer to the contacting surface of access hole cover at the lower corners, as indicated in illustration.
- 3. After access hole cover is installed, seal lower corners of cover, at offset, with body caulking compound.



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Apply body caulking compound at the following locations:

- 1. Over the window regulator attaching holes.
- 2. Over the window cam attaching holes.
- 3. Over the ventilator division channel lower attaching hole.
- 4. Over trim assembly nail slots.
- 5. Over the wiring clip attaching hole.
- 6. Over the arm rest attaching holes.

Apply waterproof body tape at the following locations:

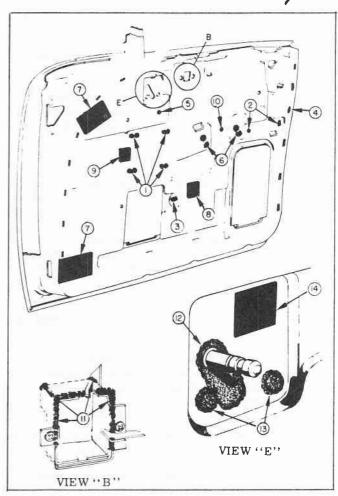
- 7. Over both lower and upper hinge access hole.
- 8. Over the window cam access hole.
- 9. Over the manual window regulator spindle hole.
- 10. Over the door lock remote control connecting rod clip attaching hole apply before installing clip.

#### View "B"

11. On styles equipped with electrically operated window regulators apply body caulking compound in the upper rear corners, across the top and downthe side joints of switch hole cover and inner panel. Sealer to be worked into openings to insure proper seal.

#### View "E"

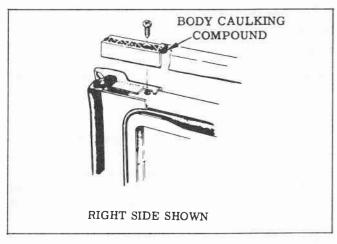
- 12. Apply a sufficient amount of body caulking compound to block off the ventilator tee shaft access hole.
- 13. Apply body caulking compound over ventilator regulator attaching holes.
- 14. Apply waterproof body tape over access hole.



## FRONT DOOR VENTILATOR CAP FINISHING MOLDING

2739, 2739D AND 2839SD

# REMOVAL AND INSTALLATION



- At top of ventilator remove two (2) screws securing cap finishing molding and remove molding from ventilator.
- 2. Before installing cap finishing molding apply a ribbon (1/4) in diameter) of body caulking compound from the front edge of the molding to rearward of the attaching hole then outboard to the outer flange as shown in illustration. Make sure window glass bumper assembly is properly fastened at top of ventilator division channel, then install cap finishing molding.

After installation, clean off excess sealer and make sure bumper assembly is properly positioned infinishing molding.

# FRONT DOOR VENTILATOR GARNISH MOLDING

2739, 2739D AND 2839SD

# REMOVAL AND INSTALLATION

- 1. Remove door belt finishing molding and ventilator cap finishing molding.
- 2. At door hinge pillar remove one (1) screw securing door weatherstrip tab and two (2) screws securing gar-
- nish molding, then carefully remove garnish molding from door assembly.
- 3. To install, reverse removal procedure.





# FRONT DOOR VENTILATOR ASSEMBLY

2739, 2739D AND 2839SD

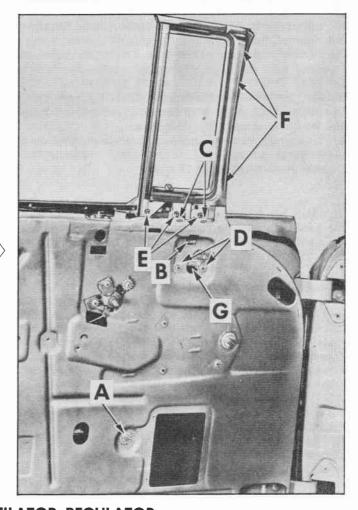
## REMOVAL AND INSTALLATION

- 1. Lower door window. Remove door trim assembly and ventilator garnish molding.
- 2. Remove small access hole cover and ventilator division channel adjusting stud and nut "A".
- 3. Through access hole "B" remove screw securing ventilator tee shaft to regulator shaft.
- 4. Remove screws "C" securing ventilator to regulator and loosen regulator attaching screws "D".
- 5. Remove screws "E" securing ventilator to return flange of door outer panel and screws indicated at "F" securing ventilator to hinge pillar.
- 6. Disengage ventilator tee shaft from regulator and remove ventilator from door.
- 7. To install, reverse removal procedure. Seal door inner panel as specified in "FRONT DOOR INNER PANEL SEALING", page 17.



To provide proper contact of the ventilator frame with the side roof rail weatherstrip a small amount of "in" and "out" adjustment can be obtained at the top rear of the ventilator frame by adjusting the lower end of the ventilator division channel "in" or "out". The ventilator division channel can be adjusted "fore" and "aft" for alignment with the door window glass. To adjust lower end of ventilator division channel, proceed as follows:

- 1. Loosen adjusting stud nut "A".
- 2. Turn adjusting stud "in" or "out" and position channel "fore" or "aft" as required, then tighten stud hut "A".



# FRONT DOOR VENTILATOR REGULATOR

2739, 2739D AND 2839SD

## REMOVAL AND INSTALLATION

- 1. Remove door trim assembly and small access hole cover.
- 2. Through access hole "B" remove screw securing ventilator tee shaft to regulator shaft.
- 3. Remove regulator attaching screws "C" and "D".
- 4. Lower regulator sufficiently to disengage from

ventilator tee shaft, then lower regulator between door panels and remove from door through access hole. 5. To install, reverse removal procedure. Seal door inner panel as specified in "FRONT DOOR INNER PANEL SEALING", page 17.

# **ADJUSTMENTS**

- 1. Excessive "play" (flutter) of the ventilator at the pivot shaft when the ventilator is in the open position can be corrected by adjusting "tee" shaft screw through access hole "B".
- 2. The opening effort, required to open or close the ventilator, can be slightly increased or decreased by adjusting friction clamp screw through regulator spindle hole "G".

# FRONT DOOR WINDOW (MANUAL & ELECTRIC)

# REMOVAL AND INSTALLATION

- 1. Lower door glass. Remove door trim assembly and large access hole cover.
- 2. Remove door window stops "A".
- 3. Remove tape covering small access hole at "B" and

remove two (2) screws, indicated at "B", from each end of the sash channel cam. NOTE: If the regulator lift arm covers the rear inner attaching screw "B", raise window and remove screw through access hole "G", then



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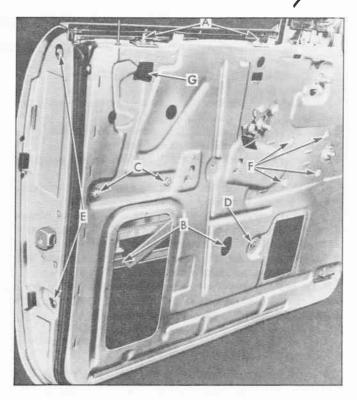
lower window and remove remaining screws.

- 4. On bodies equipped with electrically powered window regulators disconnect regulator motor lead wire to prevent accidental operation of the window.
- 5. Disengage window from sash channel cam. Lift window upward, then tilt window rearward to clear ventilator frame and remove from door. CAUTION: On bodies equipped with electrically powered window regulators DO NOT OPERATE REGULATOR MOTOR after the window assembly is disengaged from the regulator. Operation of the motor with the load removed may damage the unit and make it inoperative.
- 6. To install, reverse removal procedure. Seal door inner panel as specified in "FRONT DOOR INNER PANEL SEALING", page 17.

## **ADJUSTMENTS**

To adjust the door window glass for proper contact with the side roof rail weatherstrip or to relieve a binding door glass caused by misalignment of the glass with the glass run channels, proceed as follows:

- 1. To correct a condition where the glass is "cocked" in the glass run channels, loosen the stationary cam rear attaching screw "C" and adjust rear of cam "up" or "down" as required, and retighten screw.
- 2. To adjust front of window upper frame "in" or "out" for proper contact with the side roof rail weatherstrip or to adjust the lower portion of the division channel "fore" or "aft" for alignment with the window, loosen ventilator division channel adjusting stud nut at "D" turn stud "in" or "out" or position lower end of division channel "fore" or "aft" as required, and retighten stud nut.
- 3. To adjust rear of window upper frame "in" or "out" for proper contact with the side roof rail weatherstrip, or to adjust rear of window "in" or "out" at belt line loosen glass run channel attaching screws "E", position channel as required, and retighten screws.
- 4. To adjust limit of "up" travel of the window for proper contact with the side roof rail weatherstrip, adjust window stops at "A".



# FRONT DOOR GLASS RUN CHANNEL REMOVAL AND INSTALLATION

- 1. Raise window and remove door trim assembly and large access hole cover.
- 2. Remove glass run channel attaching screws "E". Lower channel from behind window frame extension and remove through access hole.
- 3. To install, reverse removal procedure. Seal door inner panel as specified in "FRONT DOOR INNER PANEL SEALING", page 17.

# FRONT DOOR WINDOW REGULATOR (MANUAL AND ELECTRIC)

2739, 2739D AND 2839SD

## REMOVAL AND INSTALLATION

- Remove door trim assembly and both access hole covers.
- 2. Remove door window glass as previously described. CAUTION: On doors equipped with electrically powered window regulators DO NOT OPERATE REGULATOR MOTOR after the window assembly is disengaged from the regulator, or as a bench operation after the regulator is removed from the door. Operation of the motor with the load removed may damage the unit and make it inoperative.
- 3. On doors equipped with electrically powered window regulators, disconnect motor leads from wire harness
- 4. Remove stationary cam attaching screws "C", then disengage cam from regulator arm and remove from door.
- 5. Disengage window sash channel cam from regulator

arms and remove from door.

- 6. Remove ventilator division channel adjusting stud and nut "D" indicated in above illustration.
- 7. Remove four (4) regulator attaching screws "F" and carefully remove regulator through large access hole. IMPORTANT: To remove the motor assembly from an electrically operated window regulator, carefully read and follow instructions outlined below under "WINDOW REGULATOR ELECTRIC MOTOR ASSEMBLY".
- 8. To install, reverse removal procedure. Seal door inner panel as specified in "FRONT DOOR INNER PANEL SEALING", page 17.

Lubricate window regulator and cam channels as specified in "BODY LUBRICATION", page 61.





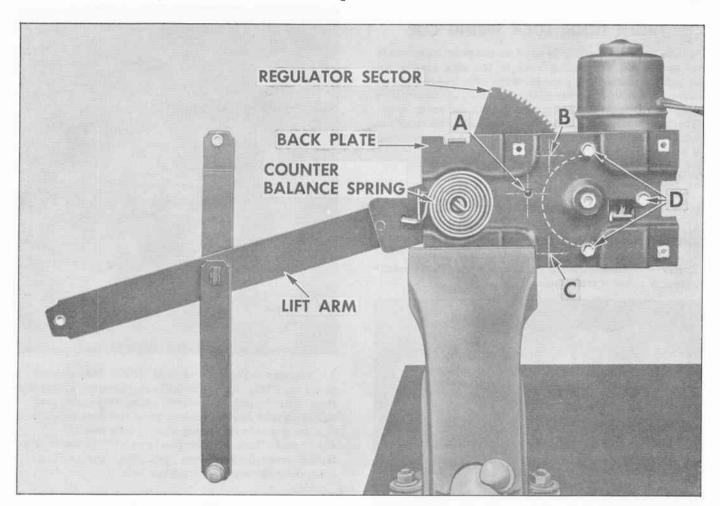
# FRONT DOOR WINDOW REGULATOR ELECTRIC MOTOR ASSEMBLY

# STYLES EQUIPPED WITH ELECTRICALLY POWERED WINDOW REGULATORS

The electric motor assembly, which powers the window regulator on electrically-operated windows, is a twelve (12) volt reversible direction motor with a built-in circuit breaker and a self-locking gear drive. The motor is secured to the regulator assembly with three (3) screws.

The principle of operation of the electrically-powered window regulator is as follows:

When the motor is actuated, the motor pinion gear which is meshed with the rack portion of the regulator sector, rotates, providing the up and down movement of the regulator lift arm.



# REMOVAL AND INSTALLATION

- 1. Remove front door electric window regulator assembly. See Door Window Regulator on page 20.
  2. Clamp electric window regulator securely in vise. Illustration opposite shows Door Window Regulator. NOTE: The position of the regulator assembly in vise will vary with the type of regulator, and position of the lift arm. CAUTION: BE SURE TO PERFORM STEPS 3 & 4 BEFORE ATTEMPTING TO REMOVE THE MOTOR FROM THE REGULATOR. The regulator lift arm, which is under tension from the counter-balance spring, can cause serious injury if the motor assembly is removed without locking the sector in position with a nut and bolt.
- 3. Drill a 1/4" hole through back plate and sector at location indicated at either A, or B, or C, depending on position of lift arm. NOTE: Do not drill into motor

housing, part of which is indicated by lines. In addition, locate hole not less than 3/4" away from edge of back plate or sector.

4. Insert 3/16" bolt through hole in back plate and

sector, and install nut to bolt. Do not tighten nut. 5. Remove three (3) attaching bolts "D", and remove motor assembly from regulator. NOTE: Clean off steel chips from the regulator sector and motor pinion gear. 6. To install, reverse the removal procedure. If difficulty is encountered when trying to line up the motor attaching holes, the regulator lift arm may be moved up or down manually, so that the motor pinion gear will mesh with the teeth on the regulator sector, and the regulator attaching holes will line up. NOTE: Be sure to remove temporary nut and bolt from regulator before

installing it into the door or rear quarter.





# FRONT DOOR LOCKING MECHANISMS 2739, 2739D AND 2839SD

The front door lock and striker incorporate the new inter-lock feature consisting of an extended lock bolt housing which engages a mating notch in the striker. With the inter-lock feature it is very important that the lock extension engages properly in the striker notch and that where necessary striker emergency spacers of the proper thickness are used to obtain proper engagement.

The operation of the front door locks on the special sedan styles is the same as on other sedan styles; however, due to the new center pillar design the lock is located lower in the door requiring connecting rods from the door outside handle and lock cylinder assemblies.

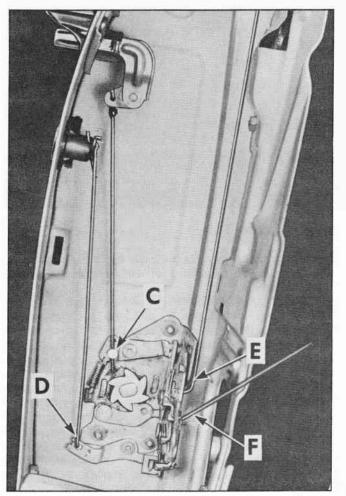
# FRONT DOOR LOCK SPRING CLIP

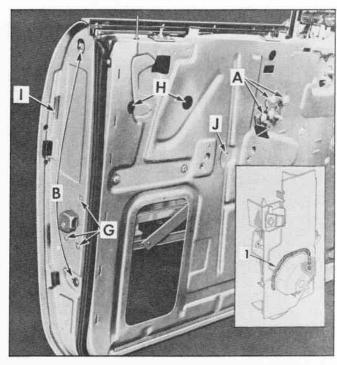
A new type spring clip is used on the door lock levers to secure the connecting rods to the lock levers. To detach the connecting rods from the lock, insert a screw driver between the connecting rod and lock lever, then snap rod from spring clip and detach rod from lever. Whenever connecting rods have been detached from the lock, check that the spring clips are not damaged and, if necessary, install new clips.

# FRONT DOOR LOCK

## REMOVAL

- 1. Raise door window. Remove door trim assembly  $\lfloor$  and large access hole cover.
- 2. Remove glass run channel attaching screws "B". Lower run channel from behind window frame extension and remove from door.





- 3. Through large access hole detach connecting rods at "C", "D", "E" and "F" in opposite illustration from lock levers. To detach connecting rods, insert a screw driver between connecting rod and lock lever, then snap rod from spring clip on lock lever.
- 4. Remove lock attaching screws "G" in above illustration from face of door lock pillar and remove lock from door through large access hole.

#### INSTALLATION

- NOTE: Before installing door lock, apply a ribbon of caulking compound on the door lock facing at the top and side joints of the lock bolt housing, as indicated at "1" in inset of illustration above. After installation of lock clean off any excess caulking compound on lock facing or door lock pillar.
  - 1. To install door lock, reverse removal procedure. Before attaching the outside handle connecting rod adjusting nut at "C" in illustration opposite, adjust nut so that door outside handle bell crank just contacts handle push button shaft, then attach adjusting nut to lock lever.
  - 2. Check all operations of door lock before installing access hole cover, trim assembly and door hardware parts. Seal door inner panel as specified in "Door Inner Panel Sealing", page 17.





# FRONT DOOR OUTSIDE HANDLE

The door outside handle is equipped with a bell crank lever which actuates the lock lever by means of a connecting rod. An adjusting nut is provided at the lower end of the outside handle connecting rod to provide adjustment for proper contact of the handle push button shaft with the bell crank.

#### REMOVAL AND INSTALLATION

- 1. Raise door window. Remove door trim assembly and large access hole cover.
- 2. Through access hole detach outside handle connecting rod adjusting nut "C", indicated in previous illustration, from lock lever. To detach adjusting nut from lock, insert a screw driver between connecting rod and lock lever, then snap rod and adjusting nut from spring clip on lock lever.
- 3. Through access holes "H", indicated in illustration at top of previous page, remove handle attaching screws, then remove handle and gaskets with attached connecting rod from door. As a bench operation remove connecting rod from handle.
- 4. To install, reverse removal procedure. Before attaching the outside handle connecting rod adjusting nut "C", indicated in illustration at top of previous page, to lock lever, adjust nut so that door handle bell crank just contacts handle push button shaft, then attach adjusting nut to lock lever.

Check operation of outside handle before installing access hole cover, door trim assembly and hardware parts. Seal door inner panel as specified in "FRONT DOOR INNER PANEL SEALING", page 17.

## FRONT DOOR LOCK CYLINDER

The front door lock cylinder operation differs from cylinders on other models in that the cylinder actuates the door lock by means of a connecting rod.

## REMOVAL AND INSTALLATION

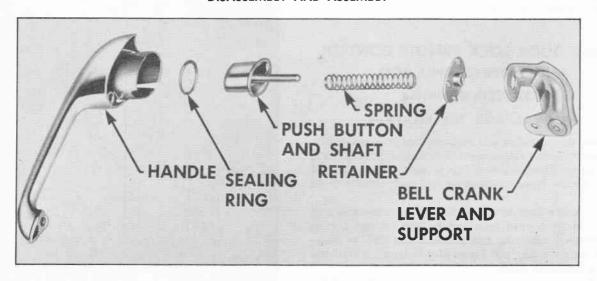
- 1. Raise door window. Remove door trim assembly and large access hole cover.
- 2. Through large access hole detachlock cylinder connecting rod "D" from lock lever. See illustration at bottom of previous page. To detach connecting rod, insert a screw driver between connecting rod and lock lever, then snap rod from spring clip on lock lever.
- 3. With a suitable tool pry out retaining clip "I", shown in illustration at top of previous page, sufficiently to allow removal of lock cylinder with attached
- connecting rod from the door.
- 4. Door lock cylinder connecting rod may be removed from lock as a bench operation.
- 5. To install, reverse removal procedure.

Check operation of lock cylinder and lock before installing access hole cover, door trim assembly and hardware parts.

Seal door inner panel as specified in "Door Inner Panel Sealing", page 17.

## FRONT DOOR OUTSIDE HANDLE

DISASSEMBLY AND ASSEMBLY



- 1. Remove front door outside handle, as previously described.
- 2. Depress retainer sufficiently to turn bell crank lever and support quarter turn. Remove bell crank lever
- and support, retainer, spring, push button and shaft and sealing ring from handle.
- 3. To install, reverse disassembly procedure.

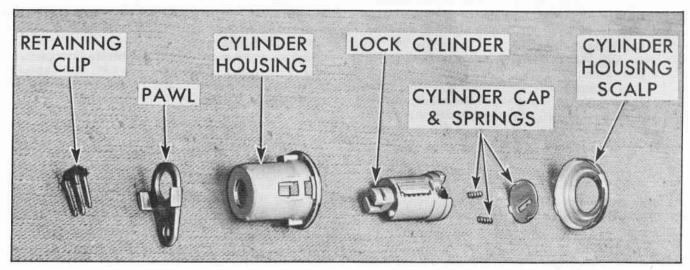


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# FRONT DOOR LOCK CYLINDER

## DISASSEMBLY AND ASSEMBLY

- 1. Remove cylinder assembly from door.
- 2. Remove retaining clip and pawl.
- 3. Carefully bend open four cylinder housing scalp tabs and remove scalp. NOTE: While removing scalp, hold cylinder cap, which is under tension from cap springs, depressed with finger. After scalp is removed,
- observe position of spring and cap so they can be reinstalled in same relative positions. See illustration below.
- 4. Remove cylinder from cylinder housing.
- 5. To install, reverse removal procedure.



# FRONT DOOR INSIDE LOCKING ROD AND KNOB

## REMOVAL AND INSTALLATION

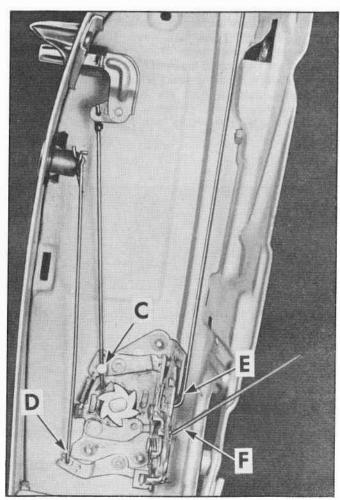
- 1. Raise door window. Remove door trim assembly and large access hole cover.
- 2. Through access hole detach inside lock rod "E", indicated in illustration opposite from lock lever and remove rod from door.
- 3. To install inside locking rod, reverse removal procedure. Seal door inner panel as specified in "FRONT DOOR INNER PANEL SEALING".

# FRONT DOOR LOCK REMOTE CONTROL AND CONNECTING ROD

2739, 2739D AND 2839SD

## REMOVAL AND INSTALLATION

- 1. Raise door window and remove door trim assembly.
- 2. Remove lock remote control attaching screws "A", indicated in illustration at top of page  $2\tilde{z}$ ; detach remote control from connecting rod and remove from door.
- 3. To remove door lock remote control connecting rod, remove large access hole cover, then through access hole detach connecting rod from lock at "F" in illustration on page 22, and from clip at location "J" and remove rod from door.
- 4. To install, reverse removal procedure. If large access hole cover has been removed, seal cover and door inner panel as specified in "Door Inner Panel Sealing", page 17.





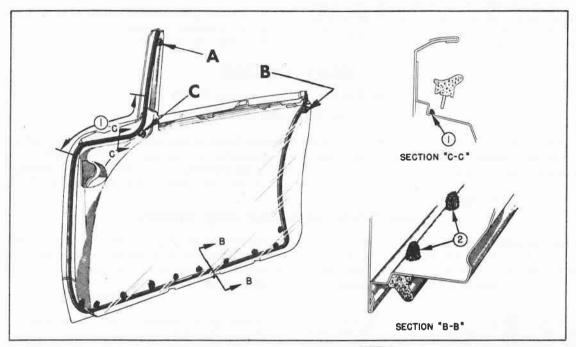


# FRONT DOOR WEATHERSTRIPS

# 1956 PONTIAC SPECIAL SEDAN STYLES 2739, 2739D AND 2839SD

The front door weatherstrip is a one (1) piece mechanically retained type with external clips formed from a wire insert extending through the length of the weatherstrip. The weatherstrip is secured to the door by snapping the weatherstrip clips into holes around the perimeter of the door. At locations "A" and "B", indicated in the illustration, a tab, which is an integral part of the weatherstrip, is secured to the door pillar. Along the cove area of the door the weatherstrip is cemented in place, and at location "C", a clip inserted into the weatherstrip is secured to the hinge pillar. After the weatherstrip is installed, sealer is applied through the inner panel access holes to the weatherstrip attaching clips along the bottom of the door.

A front door hinge pillar auxiliary weatherstrip is provided to direct any water in the cove area of the hinge pillar into a drainage hole in the hinge pillar. The auxiliary weatherstrip is cemented to the door hinge pillar and has two (2) snap-on clips at the lower portion of the weatherstrip.



## REMOVAL

- 1. Remove front door ventilator cap finishing molding.
- 2. Remove screws securing weatherstrip tabs at locations "A" and "B", and weatherstrip clip at location "C".
- 3. Using a mechanically retained weatherstrip inserting tool or other suitable tool, carefully position tip of tool under weatherstrip at each clip location, and snap clip out of hole. NOTE: At top of hinge pillar carefully remove weatherstrip from under ventilator reveal molding. At cove area of hinge pillar carefully break cement bond at same time that weatherstrip clips are being snapped from holes.

## INSTALLATION

- Clean off old weatherstrip cement and sealer from door.
- 2. Insert tab at top of weatherstrip under ventilator reveal molding and install weatherstrip tab attaching screw at location "A" on upper hinge pillar.
- 3. Apply a ribbon of approved weatherstrip cement in corner of rabbet along cove area as indicated at "1" in illustration.
- 4. Install weatherstrip clips into clip holes starting

- at upper hinge pillar and cove area. Press or roll weatherstrip along cove area to assure a good cement bond. To install clips into holes, place "V-shaped" tip of weatherstrip inserting tool on loop of clip, then push clip into hole until it snaps into position. NOTE: Do not use excessive force or strike tool when pushing clips into holes as it may distort shape of clip, resulting in improper weatherstrip retention.
- 5. Install weatherstrip tab attaching screw at location "B" on lock pillar.
- 6. Insert weatherstrip clip into weatherstrip, at location "C", so that prongs of clip are on top of wire insert in weatherstrip, then secure clip to hinge pillar.
- 7. Remove door trim assembly and inner panel access hole covers. Working through access holes apply medium-bodied sealer over and around weatherstrip attaching clips, indicated at "2" in illustration. Seal all clips along door bottom and lower clip at each door pillar.
- 8. Seal and install inner panel access hole covers. Seal door inner panel as specified in "FRONT DOOR INNER PANEL SEALING", page 17. Reinstall door trim assembly and inside hardware parts.

Seal and install ventilator cap finishing molding as described and illustrated on page 18.





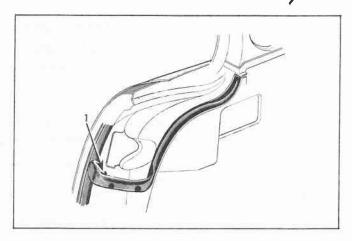
# FRONT DOOR HINGE PILLAR AUXILIARY WEATHERSTRIP

#### REMOVAL

1. With a flat-bladed tool carefully remove two (2) snap-on fasteners located at the lower portion of the weatherstrip, then break weatherstrip seal and remove weatherstrip from door pillar.

#### INSTALLATION

- 1. Apply weatherstrip cement to the surface of the front door hinge pillar contacted by the weatherstrip and to the weatherstrip attaching surface.
- 2. Install two (2) snap-on clips to weatherstrip, then install snap-on clips and lower portion of weatherstrip to pillar to align weatherstrip with drain hole. Install remainder of weatherstrip to pillar as shown in illustration. NOTE: Weatherstrip must not cover any portion of drain hole indicated at "1".



- 3. Firmly press entire length of weatherstrip to hinge pillar to assure a complete cemented bond.
- 4. Clean off any excess cement.

# REAR DOORS

1956 PONTIAC SPECIAL SEDAN STYLES

2739, 2739D AND 2839SD

The rear door and door hardware parts on the 1956 Special Sedan Styles are new and require different service methods from other sedan styles. Removal and installation procedures are explained and illustrated on the following page. Particular attention should be given the rear door window adjustments to provide proper window frame contact with the side roof rail weatherstrip, and to the new door lock striker adjustments and dimensional specifications for use of striker emergency spacers.

# **REAR DOOR ASSEMBLY AND HINGES**

The rear door assembly is attached to the body center pillar with two (2) butt type hinges. The lower hinge, which has an integral type door check and hold open, is secured with three (3) screws to an anchor plate at both the door hinge pillar and center pillar. The upper hinge is secured with three (3) screws to an anchor plate at the door hinge pillar and with three (3) screws to an upper hinge support at the center pillar.

# A I C

# REMOVAL

Either of the following two (2) methods can be used to remove the door from the body.

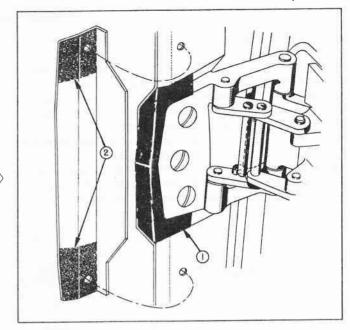
- A. The door and hinges can be removed as an assembly from the center pillar.
- B. The door can be removed from the hinge straps.
- 1. Operate window to down position.
- 2. Clean off excess sealer from around each hinge strap and scribe hinge location on door hinge pillar or center pillar depending on method of removal being used.
- 3. On bodies equipped with electrically-powered window regulators, proceed as follows:
  - Remove door trim assembly and access hole cover.
  - Remove two (2) screws securing electrical conduit to center hinge pillar. Bend out conduit tab and remove conduit from wire harness.
  - c. Loosen or detach wire harness clips, as required, and disconnect motor leads from harness. Remove wire harness from between door panels through opening in door hinge pillar.
- 4. With the door properly supported, remove three (3) upper and lower hinge attaching screws "A" at door hinge pillar or screws "B" at center pillar, depending on the method of removal being used.
- 5. With aid of a helper, remove door from body opening.





# INSTALLATION

- 1. With scraper and mineral spirits, clean off old sealing compound at hinge areas. This operation should be performed carefully to avoid possibility of soiling adjacent trim material.
- 2. Apply a coat of heavy-bodied sealer to attaching surfaces of hinge straps or corresponding surfaces of door and body. It is important to obtain complete coverage with sealer to obtain a proper seal.
- 3. With a helper, lift door into position. Install screws loosely, then align straps within scribe mark on pillar and tighten bolts. Check door for alignment.
- 4. If door and hinges were removed from the center pillar, the lower hinge must be weathersealed before the hinge cover plate is installed over the hinge strap. Seal hinge with medium-bodied sealer as outlined below.
  - a. Prior to installing hinge cover plate, apply a sufficient amount of body caulking compound around hinge, as indicated at "1" to fill hinge depressions at these points.
  - b. Apply medium-bodied sealer to the top and bottom of the underside of the hinge cover plate, as indicated at "2". This seal must contact caulking compound applied in previous step.
  - c. Install hinge cover plate and clean off any excess sealer from around edges of cover plate.
- 5. On bodies equipped with electrically-powered window regulators, proceed as follows:
  - a. Install wire harness to attaching clips between door panels and connect to motor leads. Check operation of window.



- b. Install conduit to hinge pillar and secure wiring harness in conduit with retaining tab.
- c. Install access hole cover and regulator attaching screw. Seal door inner panel as specified in "REAR DOOR INNER PANEL SEALING", page 28.
- d. Install door trim assembly and remaining door hardware.

# REAR DOOR ADJUSTMENTS

Due to the new center pillar upper hinge support, the rear door hinge adjustments are performed in a different manner than on other sedan styles. "In" and "out" adjustment is provided at the door hinge pillar while "up" and "down" adjustments can be made at the center pillar. In addition, waterproof shims can be installed between the door hinge pillar and hinge straps to adjust the door "rearward".

When checking the door for alignment, remove the door lock striker from the body pillar to allow the door to hang free on its hinges. Procedure for adjusting the door is outlined below. NOTE: After performing any door adjustments the rear door window should be checked for proper alignment with the side roof rail weatherstrip and adjusted where required. In addition the door lock extension-to-striker engagement should be checked, as described on page 14, and adjusted, if necessary.

(See illustration at bottom of previous page)

- 1. If adjustment is being performed at center hinge pillar, remove lower hinge cover plate.
- 2. For "in" and "out" adjustment at center pillar, loosen hinge attaching bolts "A" at door hinge pillar; adjust door as required and tighten bolts.
- 3. For "up" and "down" adjustment, loosen hinge attaching bolts "B" at center pillar; adjust door as required and tighten bolts.
- 4. For "rearward" adjustment, prop door and remove upper or lower hinge attaching bolts "A" at door hinge pillar. (It is easier to adjust one hinge at a time). Cement a full waterproof shim to hinge strap and reinstall bolts.
- 5. Seal hinges as previously specified and reinstall hinge cover plates.

# REAR DOOR INNER PANEL SEALING

1956 PONTIAC SPECIAL SEDAN STYLES 2739, 2739D AND 2839SD

The drawings on next page shows the rear door inner panel areas which must be sealed to prevent entrance of water and possible damage to interior trim. Whenever any work is performed on the door when the weatherseal has been disturbed, the area must be resealed before the door trim assembly is reinstalled. NOTE: Each numbered step in the procedure on the next page refers to the corresponding numbered arrow in the drawing. The kinds of sealer to be used are explained in the description on the next page.





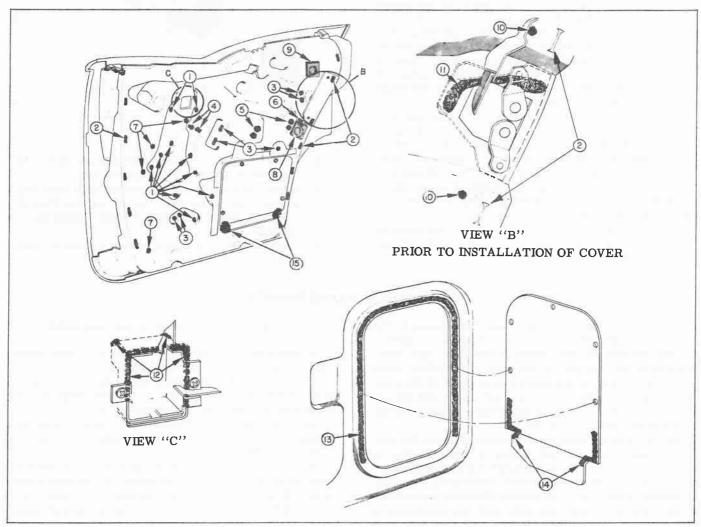
#### **SEALING OPERATIONS**

Apply body caulking compound at the following locations:

- 1. Over the window regulator attaching holes.
- 2. Over the trim assembly nail slots. NOTE: The two (2) nail slots shown at "2" in View "B" must be sealed prior to installing the lock connector assembly cover.
- 3. Over both the window front and rear guide lower attaching holes.
- 4. Over the window regulator lift arm stop attaching holes.
- 5. Over the arm rest attaching holes.
- 6. Over the window frame lower rear bumper attaching hole.
- 7. Over the wiring clip attaching holes.

Apply waterproof body tape at the following locations:

- 8. Over the access hole for the window sash channel cam rear attaching screw.
- 9. Over the access hole for the outside handle front attaching screw.



VIEW "B"

10. Prior to installing the lock connector cover apply body caulking compound over the attaching screw holes.

11. Prior to installing the lock connector assembly apply a ribbon of body caulking compound to the contacting surface of the connector assembly along a line over the front and upper attaching holes, as indicated in illustration.

#### VIEW "C"

- 12. On styles equipped with electrically operated window regulators apply body caulking compound in the upper rear corners, across the top and down the side joints of switch hole cover and inner panel. Sealer to be worked into openings to insure proper seal.
- 13. Apply a ribbon (approximately 3/16" diameter) of medium-bodied sealer across the top and down the side flanges to a point 1/2" beyond the access hole cover offset line to provide a seal between cover and inner panel.
- 14. Apply a ribbon of medium-bodied sealer to the contacting surface of access hole cover at the lower corners, as indicated in illustration.
- 15. After access hole cover is installed, seal lower corners of cover, at offset, with body caulking compound.





# REAR DOOR LOCKING MECHANISMS

2739, 2739D AND 2839SD

The rear door lock and striker incorporate the new inter-lock feature consisting of an extended lock bolt housing which engages a mating notch in the striker. With the inter-lock feature it is very important that the lock extension engages properly in the striker notch and that, where necessary, the correct striker emergency spacers are used to obtain proper engagement. See "DOOR LOCK STRIKER ADJUSTMENTS", on page 14.

The operation of the rear door locks on the Special Sedan Styles is the same as on other sedan styles, however, due to the new door design and the use of an inside locking rod-to-lock connector assembly and cover, new door lock service methods are required.

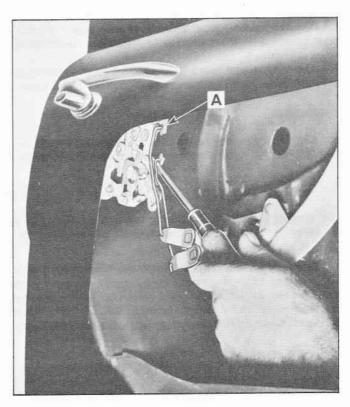
# REAR DOOR LOCK REMOVAL AND INSTALLATION

- 1. Raise door window; remove door trim assembly and inner panel access hole cover.
- 2. Through access hole, insert a screw driver between lock lever and connecting rod, as shown in illustration, turn screw driver to detach connecting rod from spring clip on lock lever.
- 3. Detach connecting rod from lock lever at "A".
- 4. Remove door lock attaching screws "A", indicated in illustration on page 31, from face of door lock pillar.
- 5. Lower lock between door panels and remove through access hole.
- 6. NOTE: Before installing door lock, apply a ribbon of caulking compound on the door lockfacing at the top and side joints of the lock bolt cover. After installation of lock, clean off any excess caulking compound on lock facing or door lock pillar.

To install door lock, reverse removal procedure. Check all operations of door lock before installing access hole cover

Install access hole cover. Seal door inner panel as specified in "DOOR INNER PANEL SEALING", page 27.





# REAR DOOR LOCK FREE-WHEELING ADJUSTMENT

Free-wheeling on rear door locks is a safety feature. When the inside locking rod is in the down position and the lock is set "in" free-wheeling, it prevents the door from being opened by the operation of the remote control handle.

The tool required to perform the free-wheeling adjustment can be made from a piece of rod approximately 1/8" in diameter. To make tool, cut rod to 7" length, then bend 3/8" of rod at one end to form right angle. The rear door lock may be adjusted "in" or "out" of free-wheeling as follows:

- 1. Lower door window; pull inside locking rod knob to "up" position and remove rear door lock upper attaching screw.
- 2. Insert adjusting tool through screw hole, as shown in illustration.
- 3. While observing through the window opening, with the aid of a light, engage hooked end of rod in loop of free-wheeling rod, as shown in illustration. Pull rod REARWARD to set lock "out" of free-wheeling and push rod FORWARD to set lock "in" free-wheeling.





## REAR DOOR OUTSIDE HANDLE

2739, 2739D AND 2839SD

The rear door outside handle is secured to the door outer panel by two (2) screws, which are removed and installed through two (2) access holes in the door inner panel. To remove the handle rear attaching screw it is necessary to first remove the door lock assembly. The handle push button shaft can be adjusted (screwed) "in" or "out" of the push button to provide proper contact with the door lock push button lever.

#### REMOVAL

- 1. Remove door trim assembly and access hole cover.
- 2. Remove door lock as previously described.
- 3. Remove rubber plug at rear access hole "B" and tape covering front access hole "B". See illustration on next page.
- 4. Through access holes "B" remove handle attaching screws, then remove handle and gaskets from door.

## INSTALLATION

1. Before installing handle assembly, apply 630AA Lubriplate or its equivalent on contacting end of handle

push button shaft.

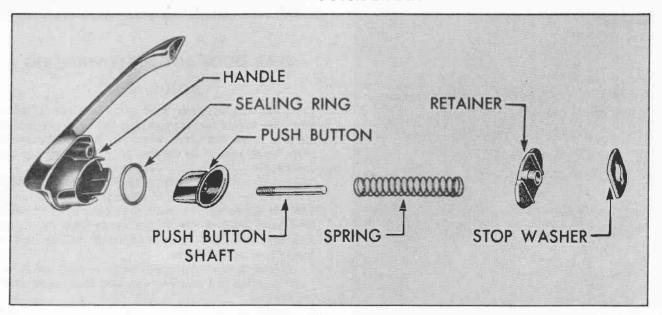
- 2. Install front and rear gaskets on handle and position handle on door outer panel, then install handle attaching screws.
- 3. Seal and install door lock as described and illustrated on page 29.
- 4. Adjust handle push button shaft so that shaft just contacts door lock push button lever.
- 5. Seal door inner panel access hole cover as specified in "REAR DOOR INNER PANEL SEALING", page 27. Reinstall door trim assembly and inside hardware parts.

# REAR DOOR OUTSIDE HANDLE PUSH-BUTTON SHAFT ADJUSTMENT

For proper lock operation the rear door outside handle push button shaft should just contact the door lock push button lever. The handle push button shaft can be adjusted, as described below, to provide the proper contact.

- 1. Remove door trim assembly and access hole cover.
- 2. Working through access hole turn handle push button shaft "in" or "out" until shaft just contacts the door lock push button lever when push button is NOT depressed.
- 3. Seal door inner panel access hole cover as specified in "REAR DOOR INNER PANEL SEALING", page 27. Reinstall door trim assembly and inside hardware parts.

# **REAR DOOR OUTSIDE HANDLE**



# DISASSEMBLY AND ASSEMBLY

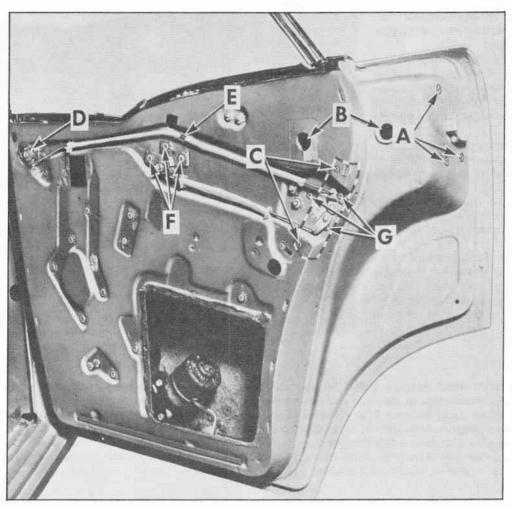
- 1. Remove handle assembly as previously described.
- 2. Depress retainer, then with a suitable tool, turn stop washer quarter turn. Remove stop washer, retainer, spring and push button and shaft from handle. Push button shaft may be removed from push button, if desired.
- 3. To assemble handle assembly, reverse disassembly procedure.
- Install handle assembly and adjust push button shaft as described under "REAR DOOR OUTSIDE HANDLE INSTALLATION", described above.





# **REAR DOOR LOCK CONNECTOR ASSEMBLY**

2739, 2739D AND 2839SD



## REMOVAL AND INSTALLATION

- 1. Raise rear door window. Remove door trim assembly and access hole cover.
- 2. Remove screws at locations "C" and remove lock connector cover indicated by dotted lines.
- 3. Remove inside locking rod lever attaching screw "D". Detach connecting rod from clip at "E", then remove lever from connecting rod and connecting rod from lock connector.
- 4. Remove door lock remote control screws "F", detach remote control from connecting rod and connecting rod from lock connector.
- 5. Through access hole detach both connector rods from

- lock. This may be accomplished by inserting a screw driver between connector rod and lock lever, as shown in illustration at top of page 29, and snapping rod from spring clip on lock lever.
- 6. Remove three (3) connector attaching screws "G", then lower connector between door panels and remove through access hole.
- 7. To install connector assembly, reverse removal procedure. Prior to installing connector cover, seal connector cover and door inner panel as specified under View "B" in "REAR DOOR INNER PANEL SEALING", page 27.

# REAR DOOR WINDOW AND WINDOW REGULATOR

2739, 2739D AND 2839SD

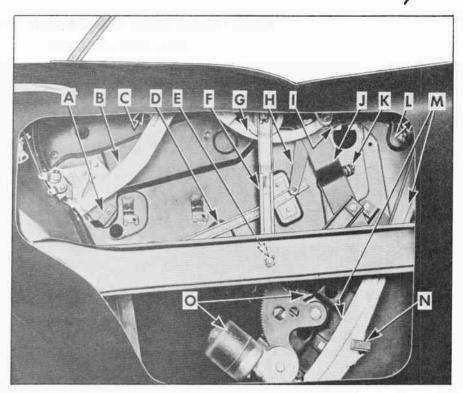
The rear door window and window regulator on the special sedan styles are of a new design requiring new service procedures. To obtain a thorough knowledge of the new window and window regulator the following illustrations and information should be studied to become familiar with the parts, their positions and functions.

The following list identifies major component parts of the rear door window with manual and electric window regulator assemblies. The parts may be located in the cut-away illustrations by letters and arrows.

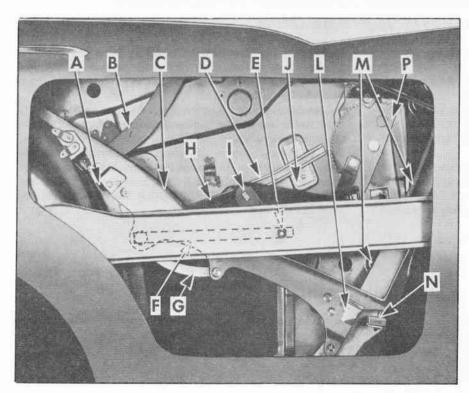
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Tisker

- A. Window Frame Lower Rear Bumper
   Limits down travel of rear of window (adjustable).
- B. Window Rear Guide Controls "in" and "out" position of rear of window (adjustable).
- C. Window Lower Sash Channel Frame
- D., Door Inner Panel Cam Guides regulator balance arms, which control "up" and "down" position of front of window. (Front end adjustable).
- E. Window Center Guide Shoe Maintains "in" and "out" position of upper portion of window. (Guide shoe adjustable).
- F. Window Center Guide Maintains "in" and "out" position of upper portion of window. (Guide shoe adjustable).
- G. Window Lower Sash Channel Cam-Provides attachment for regulator lift arm to window sash channel. (Rear of cam adjustable for "up" and "down" position of rear of window).



- H. Window Regulator Short Balance Arm The short and long balance arms lift and lower the front of the window by means of their attachment to the lift arm, inner panel arm and window frame pin.
- I. Window Regulator Long Balance Arm The short and long balance arms lift and lower the front of the window by means of their attachment to the lift arm, inner panel arm and window frame pin.
- J. Window Regulator Lift Arm Lifts window.
- K. Window Regulator Lift Arm Stop (On doors with electrically operated window regulators only) Cushions "up" and "forward" travel of window (adjustable).



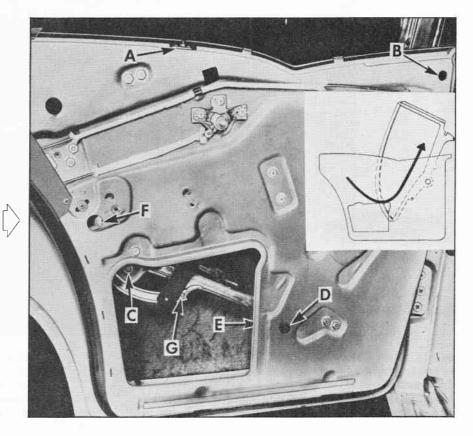
- L. Window Female Wedge Plate When window is in "up" position, engagement of female wedge plate with male wedge plate (at hinge pillar) provides additional support for upper and front portion of window. (Adjustable "fore" and "aft") NOTE: Male wedge plate, located on hinge pillar, is adjustable "in" and "out" and "up" and "down".
- M. Window Front Guide Assembly Includes Window Anti-Rattle Support Controls "in" and "out"
  position of lower front of window (Adjustable). With window in
  "down" position anti-rattle support supports upper portion of window.
- N. Window Front Guide Lower Bumper
   Limits down travel of front of window.
- O. Window Electric Motor and Regulator Assembly.
- P. Window Manual Regulator Assembly



# REAR DOOR WINDOW ELECTRIC AND MANUALLY OPERATED

## REMOVAL

- 1. Remove door trim assembly inner panel access hole cover, window stop "A" and window glass run channel inner, lower, front sealing strip.
- 2. Through access hole "B" loosen female wedge plate screw. Lower window, then through access hole remove wedge plate from front of window frame.
- 3. Remove bolt "C" and detach center guide from window lower sash channel frame. Position center guide so that it will not become detached from center guide shoe.
- 4. Insert a screw driver through access hole "D" and carefully spread spring clip on regulator balance arm. At the same time insert another screw driver, at location "E", and carefully pry regulator balance arm from window frame pin.
- 5. Through access hole "F" remove window sash channel cam upper screw. Remove lower screw "G", detach cam from regulator lift arm and remove from door. CAUTION: On doors with electrically operated window regulator, DO NOT OPERATE REGULATOR MOTOR after the window assembly is disengaged from the regulator. Operation of the motor with the load removed may damage the unit.



6. Liftwindow assembly from between door panels so that the lower sash channel comes out between the wide opening at front of panels, as indicated in inset of illustration.

## INSTALLATION

- 1. Prior to installing the window assembly apply a coat of #630AA Lubriplate or its equivalent at the following locations:
  - a. On the window lower sash channel frame lubricate the frictional surface on which the center guide rotates.
  - b. Lubricate the channel portion of the window lower sash channel cam, the inner panel cam and the center guide.

NOTE: See No. 2 under "REAR DOOR WINDOW REGULATOR AND GUIDE CHANNELS", page 62.

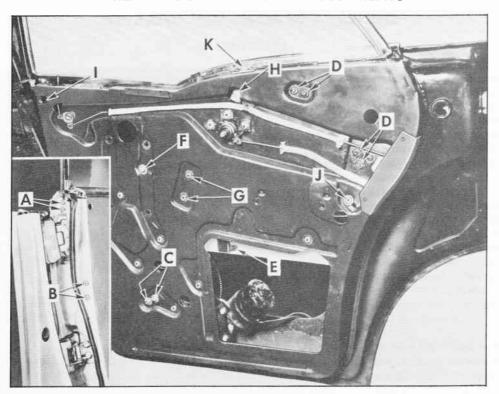
- 2. Install window between door panels. Start rear of window in first inserting lower sash channel frame through wide opening at front of panels. Make sure window engages properly with the front and rear window guides.
- 3. Position window sash channel cam on regulator arm. Install cam attaching screw "G". Through access hole "F" install cam upper attaching screw.
- 4. Check that spring clip is properly installed on regulator balance arm. If clip is damaged, replace with new clip.
- Line up hole in regulator balance arm with pin on win-

- dow frame, then with screw driver inserted through access hole "D", snap balance arm securely onto pin. IMPORTANT: Make sure spring clip on balance arm is properly engaged into notch of window frame pin. 5. Position center guide to window frame and install attaching bolt "C".
- 6. Install female wedge plate to outboard side of slot at front of window frame and tighten attaching screw by hand. Raise window to full "up" position. Install and adjust window stop "A". Back window off slightly (approximately 1/16"); position female wedge plate tight against male wedge plate and tighten attaching screw through access hole "B".
- 7. Check operation of window. Checkfor proper window frame contact with the side roof rail weatherstrip and window front frame weatherstrip contact with the front door window frame. If necessary, adjust window, as described and illustrated on page 34, to obtain proper weatherstrip contact.
- 8. Seal door inner panel as specified in "REAR DOOR INNER PANEL SEALING", page 27. Install inner panel access hole cover, door trim assembly and inside hardware.





## REAR DOOR WINDOW ADJUSTMENTS



IMPORTANT: The rear door assembly should be properly aligned in the body opening before adjusting the rear door window.

Adjustments have been provided to insure proper contact of the rear door window frame with the side roof rail weatherstrip and with the door glass run channel outer sealing strip; also for proper contact of the rear door window front frame weatherstrip with the front door window frame. Unless otherwise specified, the following window adjustments are for both manual and electrically operated windows.

1. "In" and "out" adjustment of the lower, front portion of the window:

FIRST LOOSEN male wedge plate screws "A" located at hinge pillar. Loosen front guide upper attaching screws "B", located on hinge pillar and lower attaching stud nuts "C". Adjust both upper and lower ends of the guide the same amount "in" or "out", as required, then tighten screws "B" and stud nuts "C". With window in FULL UP position tighten male wedge plate screws "A".

2. "In" and "out" adjustment of the rear portion of the window;

Loosen rear guide upper and lower stud nuts "D". Adjust both upper and lower studs the same amount "in" or "out", as required, then tighten stud nuts "D".

3. "In" and "out" adjustment of top of window frame. FIRST LOOSEN male wedge plate screws "A", located on door hinge pillar. Remove inner panel access hole cover and loosen center guide shoe jam nut "E". Adjust center guide shoe "in" or "out", as required, and retighten jam nut "E". With window in FULL UP position tighten male wedge plate screws "A".

4. "Up" and "down" adjustment of front of window. FIRST LOOSEN male wedge plate screws "A", located

on hinge pillar. On doors with electrically operated window regulators loosen regulator lift arm stop screw "F". Loosen inner panel cam screws "G"; position front of cam and window "up" or "down", as required, and retighten cam screws "G". With window in FULL UP position tighten male wedge plate screws "A". On doors with electrically operated window regulators, position regulator lift arm stop tight against lift arm and tighten attaching screw "F".

5. "Up" and "down" adjustment of rear of window. Through access hole "H" loosen window lower sash channel cam rear attaching screw. Position rear of window and cam "up" or "down", as required, and retighten cam screw through access hole "H".

6. "Fore and "aft" adjustment of window.

FIRST LOOSEN female wedge plate screw through access hole "I" and on styles with electrically operated window regulators, loosen window regulator lift arm stop screw "F". Operate window to desired position, then back window off slightly (approximately 1/16"). Position female wedge plate tight against male wedge plate and tighten wedge plate screw through access hole "I". On styles equipped with electrically operated window regulators position regulator lift arm stop tight against lift arm and tighten screw "F".

7. To limit the "up" travel of the rear of the window, adjust window stop "K".

8. To limit the "down" travel of the rear of the window loosen bumper attaching screw "J"; position bumper, as required, and retighten screw "J".

9. To correct a binding condition when the door is lowered, adjust the window front guide lower attaching screws "C" and/or the rear guide lower attaching screws "D" "in" or "out" as necessary to relieve binding condition. Retighten screws "C" and "D".





# **REAR DOOR WINDOW FRONT GUIDE**

2739, 2739D, 2839SD

#### REMOVAL AND INSTALLATION

- 1. Raise window. Remove door trim assembly and access hole cover.
- 2. On doors with electrically operated window regulators remove window center guide as described below.
- 3. Remove front guide upper attaching screws "B", indicated in illustration on previous page, located on hinge pillar, and lower attaching nuts and studs "C".
- 4. Remove guide, with attached anti-rattle support and

lower bumper, through access hole.

5. To install, reverse removal procedure. Adjust guide "in" or "out" for proper contact of the rear door window frame weatherstrip with the front door window frame.

Seal door inner panel as specified in "REAR DOOR INNER PANEL SEALING" page 27.

# REAR DOOR WINDOW CENTER GUIDE

2739, 2739D, 2839SD

#### REMOVAL AND INSTALLATION

- 1. Lower window. Remove door trim assembly and access hole cover.
- 2. Remove center guide-to-window lower sash channel frame attaching bolt, shown at "C" in illustration
- 3. Carefully detach guide from window frame, then slide guide off center guide shoe and remove from door. NOTE: If desired, center guide shoe may be removed by loosening jam nut at "E", indicated in illustration on previous page, and unscrewing shoe from weld nut on support.
- 4. To install, reverse removal procedure. IMPOR-TANT: When installing center guide on shoe assembly make sure anti-rattle spring clip is installed into guide channel with nylon shoe.

Before reinstalling inner panel access hole cover check the window frame contact along the side roof rail weatherstrip and, if necessary, adjust center guide shoe to obtain proper contact.

Seal door inner panel as specified in "REAR DOOR INNER PANEL SEALING", page 27.

# REAR DOOR WINDOW REAR GUIDE

2739, 2739D, 2839SD

## REMOVAL AND INSTALLATION

- 1. Raise door window. Remove door trim assembly and inner panel access hole cover.
- 2. Loosen rear guide upper and lower attaching stud nuts "D", indicated in illustration on previous page, and remove studs.
- 3. Disengage guide from shoes on window frame, then lower guide between door panel and remove from door through access hole.
- 4. Before installing rear guide lubricate the inboard

To install rear guide, reverse removal procedure. Make sure upper end of guide is between nylon shoes on window frame before securing guide to door inner panel.

Adjust guide studs "in" or "out" for proper contact of the rear of the window frame with the side roof rail weatherstrip and with the door glass run channel outer sealing strip.

Seal door inner panel as specified in "REAR DOOR

| and outboard surfaces of the guide with 630AA Lubri-<br>plate. | INNER PANEL SEALING'', page 27. |
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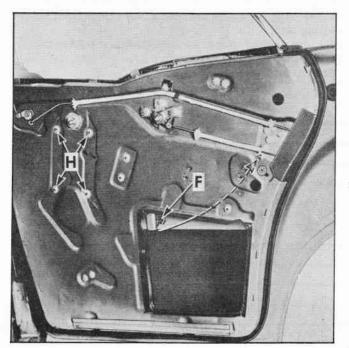


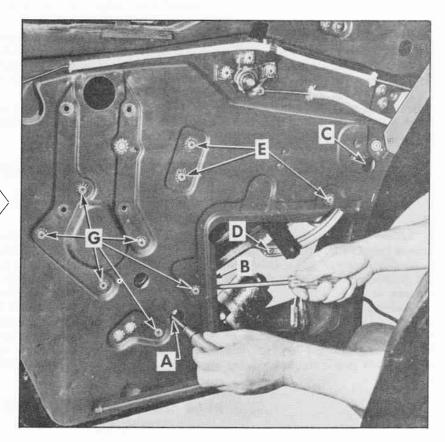
# REAR DOOR WINDOW REGULATOR (MANUAL & ELECTRIC)

2739, 2739D, 2839SD

## **REMOVAL**

- 1. Lower window; remove door trim assembly and inner panel access hole cover.
- 2. Insert a screw driver through access hole "A", as shown in illustration, and carefully spread spring clip on regulator balance arm. At the same time insert another screw driver, at location "B", as shown in illustration, and carefully pry regulator balance arm from window frame pin.
- 3. Through access hole "C" remove window sash channel cam upper screw. Remove lower screw "D", then detach cam from regulator lift arm and remove from door. CAUTION: On doors with electrically-operated window regulator, DO NOT OPERATE REGULATOR MOTOR after the window assembly is disengaged from the regulator. Operation of the motor with the load removed may damage the unit.
- 4. Lift window to "up" position; engage female wedge plate with male wedge plate, located on hinge pillar, then prop rear of window in "up" position.
- 5. Remove inner panel cam screws "E"; detach cam from regulator balance arm and remove from door.
- 6. On doors with electrically-operated windows, loosen center guide shoe jam nut "F". Detach guide shoe from support and remove shoe from guide. Swing center guide upward in direction of arrow to provide clearance for removing electrically operated regulator.





7. On door with electrically-operated window regulator detach regulator lead wires and remove regulator attaching screws "G". On door with manually-operated window regulator, remove regulator attaching screws "H". Position regulator balance arms in line with lift arm to facilitate removal of regulator through access hole. To remove electric motor from regulator assembly see "WINDOW REGULATOR ELECTRIC MOTOR ASSEMBLY", page 37.

# INSTALLATION

Before installing window regulator make sure regulator balance arm spring clip is properly installed on balance arm. If clip is damaged, replace with new clip.

1. To install window regulator, reverse steps 3 through 7 of the removal procedure.

- 2. To install regulator balance arm on window frame pin, line up hole in balance arm with window frame pin, then with a screw driver inserted through access hole "A", indicated above, snap balance arm securely on pin. NOTE: Make sure spring clip is properly engaged into notch of pin.
- 3. Check operation of regulator and window.
- 4. Install inner panel access hole cover. Seal door inner panel as specified in "REAR DOOR INNER PANEL SEALING", page 27. Install door trim assembly and door inside hardware parts.



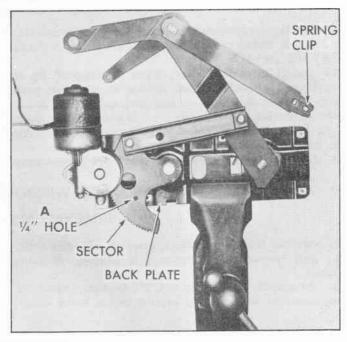
#### REAR DOOR WINDOW REGULATOR ELECTRIC MOTOR ASSEMBLY

2739, 2739D, 2839SD

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

#### REMOVAL AND INSTALLATION

- 1. Remove electric window regulator assembly from door and clamp securely in a vise, as shown in illustration. NOTE: The position of the regulator clamped in the vise will vary with the type of regulator and position of the lift arm. CAUTION: BE SURE TO PERFORM STEPS 2 AND 3 BEFORE ATTEMPTING TO REMOVE THE MOTOR FROM THE REGULATOR. The regulator lift arm, which is under tension from the counter-balance spring can cause serious injury, if the motor is removed without locking the sector in position.
- 2. Drill a 1/4'' hole through sector and back plate at location "A" indicated in illustration. NOTE: Location of hole in backplate will vary depending on position of sector. Do not locate hole less than 1/2" away from edge of backplate or sector.
- 3. Insert a 3/16" bolt through hole in backplate and sector and install nut to bolt. (Do not tighten nut.)
- 4. Remove the three (3) motor attaching bolts and remove motor assembly from regulator. NOTE: Clean



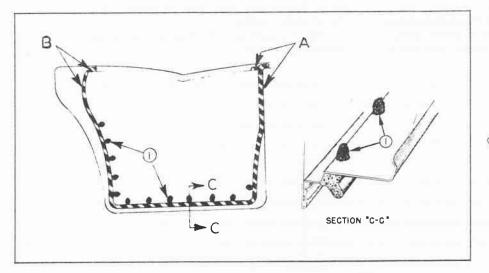
off steel chips from the regulator sector and motor pinion gear after drilling operation.

5. To install, reverse removal procedure. Regulator motor rubber pad should be cemented to inner panel side of motor. NOTE: Be sure to remove temporary nut and bolt from regulator after motor is installed.

#### REAR DOOR WEATHERSTRIPS

1956 PONTIAC SPECIAL SEDAN STYLES

The rear door weatherstrip is a one (1) piece mechanically-retained type with external clips formed from a wire insert extending through the length of the weatherstrip. The weatherstrip is secured to the door by snapping the weatherstrip clips into holes around the perimeter of the door. At locations "A" and "B" indicated in the illustration, tabs, which are an integral part of the weatherstrip are secured to the door panel by screws. After the weatherstrip is installed, sealer is applied through the inner panel access hole to the weatherstrip attaching clips along the bottom of the door and up the lock pillar. A weatherstrip located at the front of the rear door window frame provides a weatherseal between the rear door window and the front door window. The weatherstrip is cemented into a channel type retainer at the front of the window frame.



#### REMOVAL

- 1. Remove door belt finishing molding.
- 2. Remove screws securing weatherstrip tabs at locations "A" and "B" indicated in drawing.
- 3. Using a mechanically retained weatherstrip inserting tool or other suitable tool, carefully position tip of tool under weatherstrip at each clip location, and snap clips out of holes.





#### INSTALLATION

(Refer to drawing on previous page.)

1. Position weatherstrip on door; install clips into clip holes and install secure weatherstrip tabs at locations "A" and "B".

To install clips into holes, place "V-shaped" tip of weatherstrip inserting tool on loop of clip, then push clip into hole until it snaps into position. NOTE: Do not use excessive force or strike tool when pushing clips into holes, as it may distort shape of clip, resulting in improper weatherstrip retention.

2. Remove door trim assembly and inner panel access

hole cover. Working through access hole apply mediumbodied sealer over and around weatherstrip attaching clips, indicated at "1" in section "C-C". Seal all clips along door bottom, lower clip at hinge pillar and five (5) clips up lock pillar.

3. Seal and install inner panel access hole cover as specified in "REAR DOOR INNER PANEL SEALING", page 27. Reinstall door trim assembly and inside hardware parts.

#### REAR DOOR WINDOW FRAME WEATHERSTRIP

#### REMOVAL AND INSTALLATION

- 1. Operate window to raised position and open door.
- 2. Pull weatherstrip downward to remove from retainer.
- 3. To install, first apply a 1/8" diameter ribbon of an approved weatherstrip cement to the lower six (6)

inches of weatherstrip retainer. Install weatherstrip in retainer. Installation of weatherstrip will drag cement along balance of retainer resulting in a good bond with little or no clean up.

### **CENTER PILLAR**

1956 PONTIAC SPECIAL SEDAN STYLES 2739, 2739D AND 2839SD

## CENTER PILLAR FINISHING CAP

- 1. Remove two (2) screws from top of finishing cap and remove finishing cap from center pillar.
- 2. To install, position finishing cap on top of center pillar and install two (2) attaching screws.

## CENTER PILLAR COVER REMOVAL AND INSTALLATION

- 1. Remove center pillar finishing cap and front and rear finishing molding as previously described.
- 2. Turn back floor mat or carpet; remove three (3) screws securing edge of cover to floor pan and remove cover from center pillar. On 2839SD style remove the rear quarter corner lamp switch.
- 3. To install cover, reverse removal procedure.

### CENTER PILLAR FRONT AND REAR FINISHING MOLDINGS

#### REMOVAL AND INSTALLATION

- 1. Remove center pillar finishing cap.
- 2. Remove three (3) screws securing finishing molding
- to hinge pillar and remove molding from center pillar.
- 3. To install molding, slide molding down over center
- pillar flange and over edge of pillar cover starting at top of center pillar.
- 4. Install molding attaching screws using an awl to locate screw holes.

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### HEADLINING ASSEMBLY

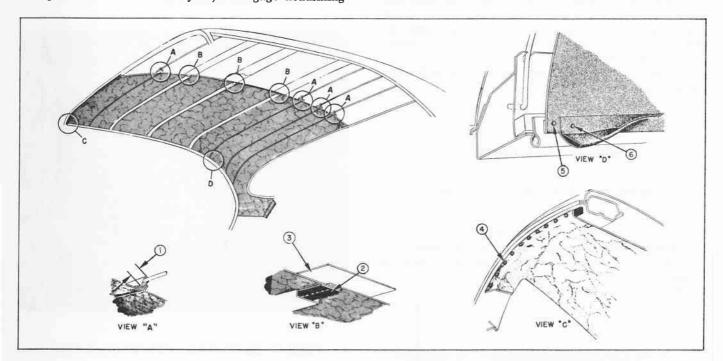
2739, 2739D AND 2839SD

The headlining assembly is secured to the body by listing wires which are inserted through listing pockets sewed to the headlining. The ends of the listing wires are inserted into holes in the side roof rail. In addition, the edges of the headlining are cemented and tacked or stapled to trimsticks installed to the roof rail along the door, windshield, and back window opening. On the 2839SD style, the headlining is secured to the body by three (3) exposed channel type bows in addition to the listing wires, as shown in the drawing below which illustrates a headlining installed on a 2839SD style. NOTE: Be sure hands are clean before beginning work on interior trim.

#### REMOVAL

- 1. Before removing the headlining, the following hardware and trim assemblies must be removed:
  - a. Rear seat cushion and rear seat back
  - b. Rear view mirror
  - c. Sunshade assemblies
  - d. Windshield and back window garnish moldings
  - e. Dome lamp or corner lamp assembly
  - f. Coat hooks
  - g. 2739, 2739D Wire on binding at side roof rails
  - h. 2839SD Side roof rail finishing moldings
- 2. On 2839SD styles, detach the rear end of the rear quarter trim panel to gain access to the headlining in the quarter area. On all styles, disengage headlining

- from cementing surfaces at the rear quarter area.
- 3. Remove tacks or staples securing edge of headlining over windshield, door and back window opening. On 2839SD styles, loosen screws securing ends of exposed bows to side roof rail.
- 4. Carefully disengage ends of front headlining listing wire from holes in side roof rails. Proceeding rearward disengage remaining listing wires and roof bows and roll up the headlining with the listing wires on the outside.
- 5. Carefully remove headlining with listing wires and exposed bows from body and place on a covered bench.



#### INSTALLATION

- 1. If listing wires and/or roof bows were removed from headlining, carefully install the wires and/or roof bows to the headlining. Typical listing wire installation is shown at one (1) in View "A", and foundation and roof bow installation at two (2) in View "B".
- 2. On 2839SD styles, check installation of barrier strip indicated at three (3) in View "B". If necessary, cement strips to deadener.
- 3. Lift the complete headlining assembly into the body, then starting at the rear and working forward, tilt listing wires to the rear, insert ends of wires into holes in side roof rail and swing wires to upright position to engage notch in rail. On 2839SD styles, hook exposed bow over screws partly driven into side roof rail

trimstick.

- 4. Carefully stretch out and center headlining, then tighten roof bow attaching screws.
- 5. Starting at the windshield opening, carefully pull headlining snug, then cement and stay tack headlining to tacking strip as shown at four (4) in View "C". Perform same operation at back window opening and along side roof rail indicated at five (5) in View "D".
- 6. After headlining is free of all wrinkles and tack draws, permanently tack all areas of headlining which were previously stay tacked. On 2739, 2739D styles, install wire-on-binding as shown at six (6) View "D".
- 7. Install previously removed parts.





#### SEATS

### FRONT SEAT ASSEMBLY

2739, 2739D AND 2839SD

Three types of seat adjusters will be used on the 1956 Special Sedan:

- 1. horizontal seat adjuster
- 2. manually operated horizontal and vertical
- 3. power operated six-way tilt type seat

The following pages outline the removal and installation of the front seat assembly and major component parts.

## FRONT SEAT SIDE AND SEAT BACK OUTER PANELS

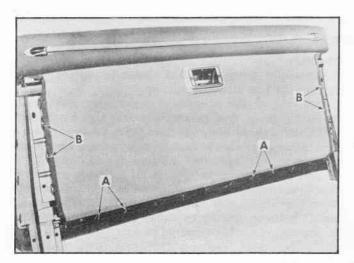
#### REMOVAL AND INSTALLATION

- 1. Remove two screws attaching outer panel to seat back frame and remove panel.
- 2. Loosen set screw on knob at left lower side panel and remove knob. NOTE: On manually operated horizontal and vertical type seat, remove vertical control handles.
- 3. Remove two screws at front of lower side panel and three screws at rear. Pull front of panel upward and outward to clear brackets and remove from seat assembly. NOTE: On power operated seats disconnect switch block from switch.
- 4. To install upper and lower panel, reverse the removal procedure.

#### FRONT SEAT BACK

#### REMOVAL AND INSTALLATION

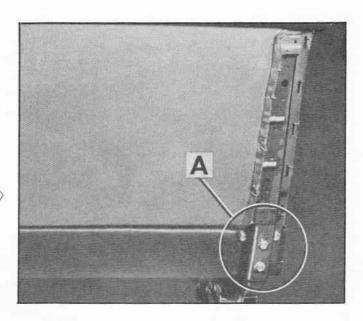
- 1. Remove front seat side and outer panels.
- 2. Remove seat back frame to seat bottom frame bolts "A" at each lower rear corner of the seat frame and remove seat back.
- 3. To install, reverse removal procedure.



### ASH TRAY ASSEMBLY AND ROBE CORD

#### REMOVAL AND INSTALLATION

- 1. To remove ash tray assembly, remove ash tray cup and remove two screws securing the escutcheon to the seat back frame.
- 2. To remove robe cord, remove robe cord escutcheon attaching screw at each end of cord and remove cord from seat back.
- 3. To install, reverse procedure.



### FRONT SEAT BACK-OF-BACK TRIM

#### REMOVAL AND INSTALLATION

- 1. Remove the seat back assembly from body.
- 2. Remove ash tray assembly from seat back.
- 3. Remove hog rings attaching seat back trim to seat back frame retainers "A". NOTE: Do not remove hog rings attaching seat back front trim material to the frame.
- 4. Remove hog rings attaching seat back trim to retainers "B" along sides of seat back. NOTE: The seat trim material is sewed to the bolster along the top of the seat back and is not removable unless the front portion of the seat back trim is removed.
- 5. To install, reverse removal procedure.





#### FRONT SEAT—MANUALLY OPERATED—HORIZONTAL

#### REMOVAL AND INSTALLATION

- 1. With seat in full forward position, loosen sill plates, turn back floor carpet and remove two (2) rear seat adjuster to floor pan bolts from rear of each adjuster.
- 2. With aid of helper, pull entire seat assembly rear-

ward to disengage seat adjuster front legs from brackets and remove seat assembly from body. CAUTION: Do not lift on side panels to remove seat.

3. To install, reverse removal procedure.

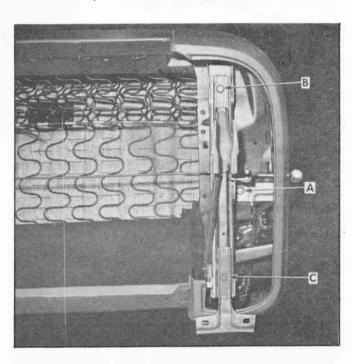
# FRONT SEAT ADJUSTERS REMOVAL AND INSTALLATION

- 1. Remove seat assembly from body and place upside down on covered bench.
- 2. Remove seat side panels.

same relative position.

- 3. Remove seat adjuster to seat bottom frame bolt "A". Move sliding mechanism rearward and remove attaching bolt "B". Move sliding mechanism forward and remove attaching bolt "C".
- 4. With seat adjuster detached from seat bottom frame, disengage locking rod and remove seat adjuster. NOTE: If a new locking rod is installed, remove the slack from the rod and its attaching parts by using a suitable tool and crimping the rod near the right seat adjuster. This operation is performed to insure a proper locking and unlocking action of the right seat adjuster when operating the control handle on the left seat adjuster.

  5. To install, reverse removal procedure. NOTE: When bolting seat adjusters to seat bottom frame, make certain the left and right adjusting mechanisms are in the



#### FRONT SEAT—MANUALLY OPERATED—HORIZONTAL AND VERTICAL

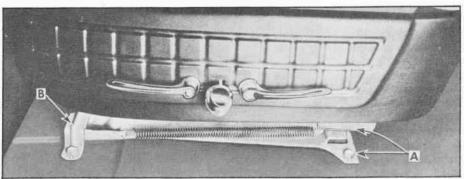
#### **SEAT ASSEMBLY**

## INCLUDING SEAT ADJUSTERS REMOVAL AND INSTALLATION

- 1. Operate seat to extreme forward and raised position and remove control knob and handles from left seat adjusters.
- 2. Remove front seat side panels.
- 3. Remove front seat adjuster to seat bottom frame bolts from the front and rear of each adjuster, then remove seat assembly from body.
- 4. To install, reverse removal procedure. NOTE: When installing seat adjuster to seat bottom frame bolts, install front bolts first to prevent tipping of seat assembly.

## LESS SEAT ADJUSTERS REMOVAL AND INSTALLATION

- 1. With seat in the extreme forward and raised position, loosen sill plates, turn back floor carpet and remove seat adjuster to floor pan bolts "A" from both adjusters.
- 2. With a helper, pull seat assembly rearward to disengage the seat adjuster front legs from floor pan brackets "B", then remove seat assembly from body. CAUTION: Do not lift on side panels to remove seat.
- 3. To install assembly, reverse removal procedure.





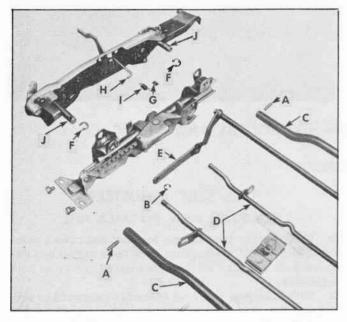


#### FRONT SEAT MANUAL ADJUSTERS-HORIZONTAL AND VERTICAL

The illustration opposite identifies the major operating parts of the manual horizontal and vertical seat adjuster.

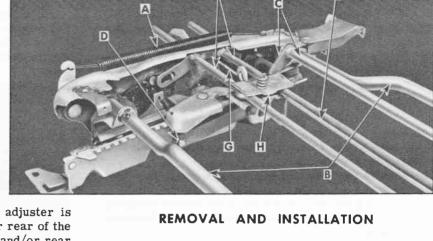
- A. Counter Balance Spring
- B. Front and Rear Vertical Equalizing Rods
- C. Vertical and Horizontal Equalizing Rod and Link Assembly
- D. Control Rod Link Retaining Ring
- E. Front and Rear Vertical Control Rods
- F. Auxiliary Locking Rod
- G. Auxiliary Locking Rod Extension
- H. Control Rod Spacer

The manual horizontal and vertical seat adjuster is designed to raise or lower the front and/or rear of the front seat assembly by operating the front and/or rear control handles at the left seat side panel. In addition the seat assembly may be moved fore or aft by pushing down the horizontal control knob and moving the seat assembly to the desired position.

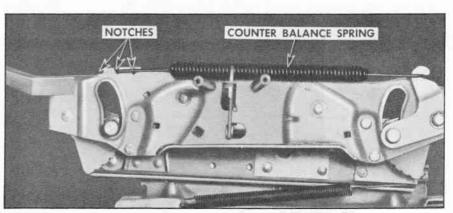




A counter-balance spring located at the top of each seat adjuster assists in raising the rear of the adjuster and seat assembly. The spring tension may be adjusted by placing the front hook of the spring in one of three (3) positions (notches) provided at the front of the seat adjuster. The forward position increases the spring tension, providing greater assistance in raising the rear of the seat. The rear position decreases the spring tension providing less assistance in raising the rear of the seat.



- 1. Operate seat to the extreme forward and raised position, and remove rear seat adjuster to floor pan attaching bolts. Operate seat to the down position and remove complete assembly including adjusters from body, and place upside down on covered bench.
- 2. Remove control handles and knob, and remove seat side panels from seat assembly.
- 3. Using drift punch, carefully drive out both vertical equalizing rod pins "A". NOTE: The opposite illustration shows the left seat adjuster disassembled.
- 4. Remove vertical and horizontal equalizing rod link retaining ring "B".
- 5. Remove seat adjuster to seat frame attaching bolts.
- 6. Carefully pull seat adjuster to disengage it from vertical equalizing rods "C" vertical control rods "D", horizontal and vertical equalizing rod link "E", and auxiliary locking rod.
- 7. To remove upper section of seat adjuster from lower section, remove retaining rings "F".
- 8. When removing upper section of left seat adjuster, remove locking nut "G" from auxiliary locking rod extension "H" and disengage extension from latch. In addition disengage spring "I" from latch.
- 9. Carefully pull upper section of seat adjuster from lower section until shafts "J" are disengaged from holes in lower section.
- 10. To install reverse removal procedure. NOTE: Position both adjusters to the same relative position before beginning assembly of adjusters.







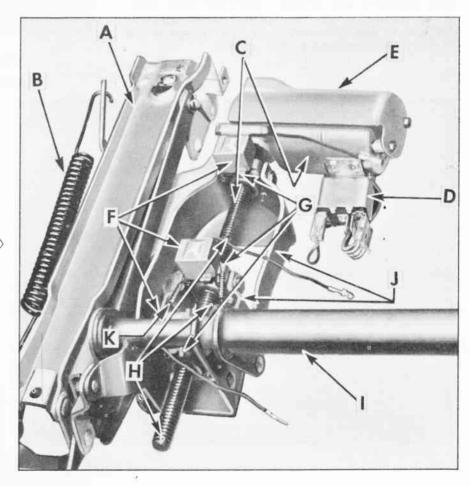
#### FRONT SEAT ASSEMBLY

#### (EQUIPPED WITH 6 WAY TILT-TYPE POWER OPERATED SEAT ADJUSTERS)

1956 bodies may be equipped with the new power operated six (6) way (tilt-type) seat adjusters. The new seat adjusters provide three (3) basic seat movements: 1. horizontal; 2. vertical; and 3. forward and rearward tilt. The adjusters are operated by an actuator assembly consisting of a twelve (12) volt reversible motor and relay, and a gear box and jack screw. The regulator motor is controlled by a three (3) button switch located on the front seat left side panel. Three spinning nut and solenoid assemblies located on the regulator jack screw transmit movement to the seat adjusters by means of a torque tube assembly and links. In each of the spinning nut assemblies is a free-wheeling spinning nut which is mounted in ball bearings and free wheels (rotates) with the jack screw unless locked out of free-wheeling by the solenoid located on top of the spinning nut. When the spinning nut is locked out of free-wheeling the spinning nut assembly moves forward or rearward on the jack screw; thereby, transmitting movement to the seat adjusters by means of the connecting links and torque tube assembly. NOTE: The seat assembly may be removed from the adjusters, as described on page 44, to perform trim operations on the seat or to replace a seat adjuster actuator solenoid. When an adjuster, torque tube, actuator or spinning nut assembly is to be removed, the seat assembly (including seat adjusters and actuator) should be removed from the body, as described on this page.

- A. Seat Adjuster Assembly Right
- B. Seat Adjuster Counter Balance Spring
- C. Seat Adjuster Actuator Assembly
- D. Seat Adjuster Actuator Motor Relay
- E. Seat Adjuster Actuator Motor Cover
- F. Seat Adjuster Actuator Spinning Nut Solenoids
- G. Seat Adjuster Actuator Spinning Nut Assemblies
- H. Seat Adjuster Actuator Roll Pins (on jack screw)
- I. Seat Adjuster Torque Tube As-
- J. Seat Adjuster Spinning Nut Mounting Supports
- K. Seat Adjuster Center Spinning Nut Anti-Creep Spring

IMPORTANT: Whenever performing service operations on the adjuster assembly DO NOT apply more than moderate hand pressure to adjusters. Excessive force applied to adjusters may cause a binding condition which can result in improper operation of the adjuster assembly and possible damage to the assembly.



# FRONT SEAT ASSEMBLY INCLUDING SEAT ADJUSTERS AND ACTUATOR ASSEMBLY REMOVAL AND INSTALLATION

- 1. Operate seat to raised position.
- 2. Under front of seat disconnect adjuster control wire harness from adjuster feed wire harness and detach control harness from clip on floor pan.
- 3. Remove seat adjuster to floor pan bolts, then with aid of helper lift seat assembly, with adjusters and actuator assembly attached, from body. CAUTION: Do not lift on side panels to remove seat.
- 4. To install, reverse removal procedure.

IMPORTANT: When installing seat assembly to body, carefully align seat adjuster attaching holes with attaching holes in floor pan to prevent possible binding of seat adjuster linkages. Seat adjusters should be parallel when properly aligned.

After installation of seat assembly check all six (6) operations of seat to extreme limit of each position.

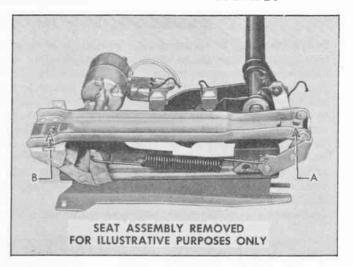




#### FRONT SEAT ASSEMBLY LESS SEAT ADJUSTERS AND ACTUATOR ASSEMBLY

#### REMOVAL AND INSTALLATION

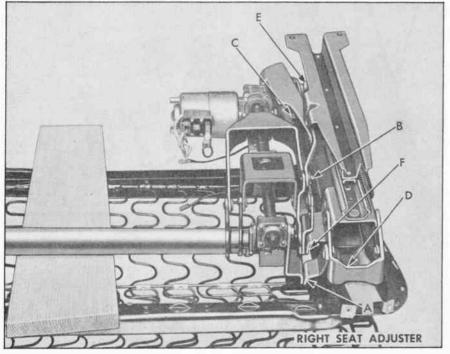
- 1. Operate seat to fully raised position and midway between full forward and rearward horizontal positions. Remove both right and left seat side panels.
- 2. Under front of seat disconnect control wire harness from adjuster feed wire harness.
- 3. At both adjusters remove front and rear seat adjuster-to-seat frame attaching bolts at locations "A", "B" indicated in illustration.
- 4. Tilt seat assembly rearward and remove control wire harness from spring clips along front of seat bottom frame.
- 5. With aid of helper carefully lift seat assembly (less seat adjusters and actuator assembly) from body.
- 6. To install, reverse removal procedure. After installation of seat assembly, check all six (6) operations of seat to extreme limit of each position.



## FRONT SEAT ADJUSTER REMOVAL AND INSTALLATION

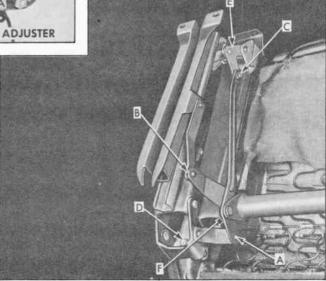
- 1. Remove seat assembly (including seat adjusters and actuator unit) as previously described. Place seat assembly upside down on a covered bench.
- 2. Remove counterbalance spring from adjuster being removed. Support torque tube assembly, as shown in illustration, on side of seat from which adjuster is being removed.

  3. Remove cotter keys and washers
- at "A", "B" securing adjuster links to torque tube assembly and cotter key and washer, indicated at "C" securing torque tube link to adjuster.
- 4. Remove both front and rear seat adjuster-to-seat frame attaching bolts at locations "D" and "E".



5. Lift adjuster (slightly), then carefully work adjuster outboard to disengage from torque tube at "F", "A" and "B". Disengage link from adjuster at "C" and if removing right adjuster, remove cotter key and washer and disengage actuator assembly from support pin, shown at "F" in illustration at top of next page.

6. To install, reverse removal procedure.



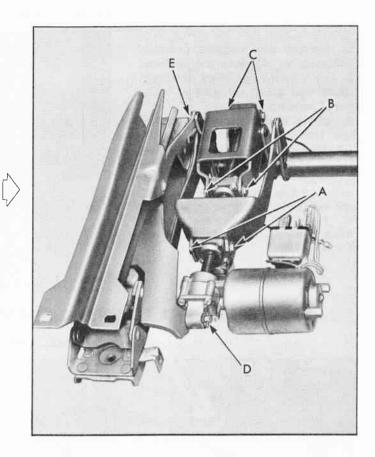


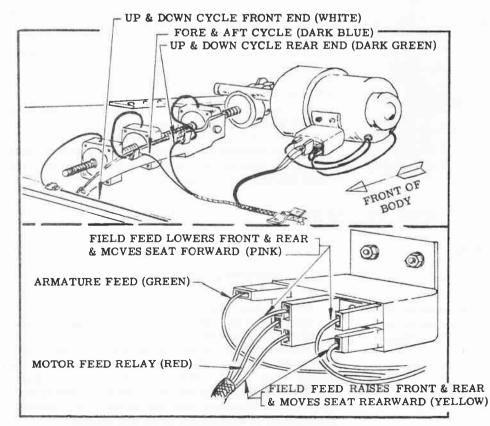


#### FRONT SEAT ADJUSTER ACTUATOR ASSEMBLY

#### REMOVAL AND INSTALLATION

- 1. Operate seat midway between forward and rearward horizontal position. Operate front of seat to up position and rear of seat midway between up and down position.
- 2. Remove seat assembly (including seat adjusters and actuator assembly) as previously described. Place assembly upside down on a covered bench. Remove both right and left counterbalance spring.
- 3. Check that all spinning nut attaching screws, indicated at "A", "B" and "C" are accessible for removal. If screws are not accessible, hook up control harness feed wire to power and ground seatframe; hook up control switch, then operate actuator to position spinning nuts so that all screws are accessible.
- 4. Disconnect the three (3) spinning nut solenoid feed wires at connectors. Disconnect the control harness feed wires from the motor relay.
- 5. Remove anti-creep spring from center spinning nut, remove shoulder screws at "A", "B" and "C" securing spinning nuts to mounting supports.
- 6. Remove cotter key and washer "D" securing actuator to support pin.
- 7. Raise spinning nut mounting supports to vertical position. Raise front of actuator sufficiently to allow unit to be removed from support pin "F", then remove actuator assembly from seat.





8. To install, reverse removal procedure. Connect relay and solenoid wires as indicated in drawing opposite. After installation of seat assembly check all six operations of seat to extreme limit of each position.

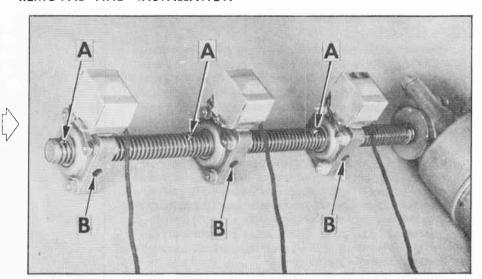




### FRONT SEAT ADJUSTER ACTUATOR SPINNING NUT ASSEMBLY—INCLUDING SOLENOIDS

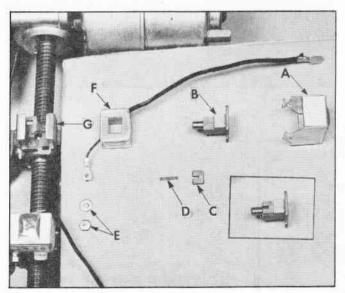
#### REMOVAL AND INSTALLATION

- 1. Remove seat adjuster actuator assembly as previously described.
- 2. As a bench operation carefully drive roll pins, indicated at "A", out of jack screw.
- 3. Insert a drift punch or suitable tool into spinning nut frame mounting hole "B", rotate spinning nut frame slowly until drift punch engages in locking notch of spinning nut, then unscrew complete spinning nut assembly from jack screw.
- 4. To install spinning nut assemblies, reverse removal procedure.



#### FRONT SEAT ADJUSTER ACTUATOR SPINNING NUT SOLENOIDS

#### REMOVAL AND INSTALLATION



- 1. Remove seat assembly (less seat adjusters and actuator assembly) as previously described. Detach solenoid feed wire at connector.
- 2. Remove solenoid cover "A" by carefully bending down tabs at bottom of cap and pulling upward.
- 3. Remove solenoid plunger "B", plunger shunt "C" and shunt spring "D".
- 4. Remove nut and washer "E" securing solenoid ground wire to spinning nut frame.
- 5. Carefully push solenoid "F" forward or rearward and remove from retainer "G" on spinning nut assembly.
- 6. To install, reverse removal procedure. Inset in illustration shows plunger shunt and shunt spring in proper position on plunger for assembly. Solenoid plunger should move "up" and "down" freely; if necessary, move solenoid slightly forward or rearward to allow free movement of plunger. Before installing seat assembly, hook up feed wire with control harness and check operation of solenoid

#### **REAR SEAT ASSEMBLY**

## REAR SEAT CUSHION REMOVAL AND INSTALLATION

- 1. To remove the rear seat cushion, lift the front edge of the cushion far enough to disengage the locating tabs on the bottom of the cushion frame from the retaining holes in the floor pan.
- 2. Slide the cushion forward (from under seat back) and remove from body.
- 3. To install, reverse removal procedure.

## REAR SEAT BACK REMOVAL AND INSTALLATION

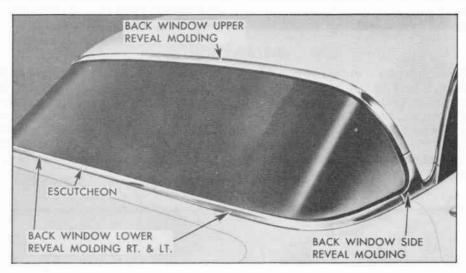
- 1. Remove rear seat cushion.
- 2. Bend down the body tabs adjacent to the floor pan and along the wheelhouse.
- 3. Pull seat back out at bottom and raise up to disengage the top of the seat back from hangers along the parcel shelf panel. Remove seat back from body.
- 4. To install, reverse removal procedure, making certain that all attaching tabs and hooks have industrial tape applied to them to act as an anti-squeak.



## REAR END BACK WINDOW ASSEMBLY

2739, 2739D, 2839SD

The back window consists of a large, one-piece glass secured in the body opening by a one-piece rubber channel. The illustration below shows the glass and back window reveal moldings installed in the body. The removal and installation of the moldings and the glass is outlined and illustrated in this section.



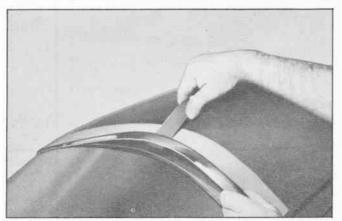
#### BACK WINDOW REVEAL MOLDINGS

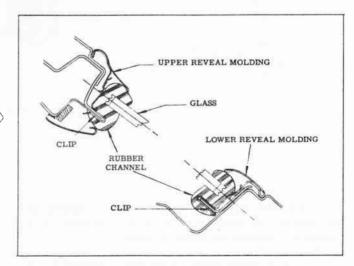
The back window upper and lower reveal moldings are secured to the body by clips installed to the pinchweld flange and channel retainer as indicated in the drawing below. Each back window side reveal molding is secured by bolt and clip assemblies with attaching nuts on the inside of the body.

#### REMOVAL AND INSTALLATION

- 1. Apply masking tape to body surface adjacent to the back window upper and lower reveal moldings and place protective covering over the rear compartment lid.

  2. On inside of body, remove rear seat cushion and back, and on 2839SD style, the right and left side roof rail rear finishing molding. Remove garnish moldings.
- 3. At right and left corner of back window, turn back inner lip of rubber channel to expose two (2) nuts securing the back window side reveal molding, then remove attaching nuts.
- 4. Loosen rear end of side roof rail weatherstrip and remove screws securing back window side reveal molding, then carefully disengage molding from back window upper and lower reveal and side roof rail molding.





- 5. Insert a suitable flat-bladed tool between upper reveal molding and panel as shown and carefully pry molding from clips installed to pinchweld flange.

  6. Slide back window lower reveal molding escutcheon to left reveal molding, then starting at the rear end of
  - to left reveal molding, then starting at the rear end of the molding, insert flat-bladed tool between top portion of molding and channel and carefully pry each molding from clips installed to channel retainer. In addition, disengage front end of molding from slide-in clip secured to the body.
  - 7. To install moldings, reverse removal procedure.





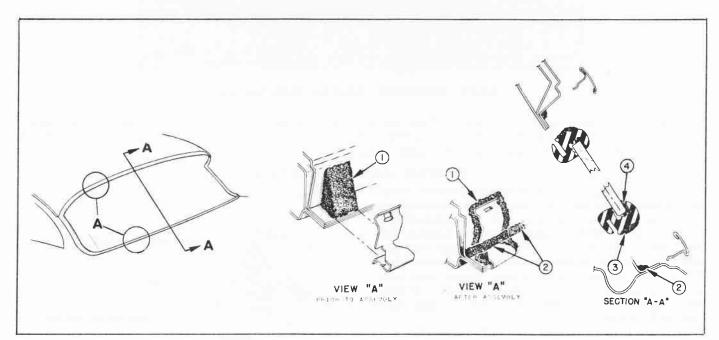
#### **BACK WINDOW GLASS**

#### REMOVAL

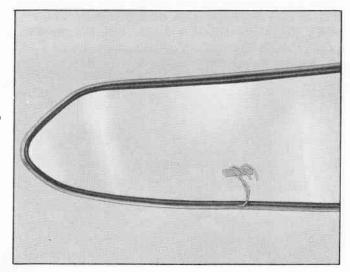
- 1. Place protective covering over rear compartment lid.
- 2. On inside of body, remove rear seat cushion and back and back window garnish moldings, then carefully break seal between inner lip of rubber channel and pinchweld flange around perimeter of glass.
- 3. Remove back window reveal moldings as outlined
- in "Back Window Reveal Moldings."
- 4. From inside of body, carefully push upper edge of window and channel outward until lip of rubber channel is disengaged from pinchweld flange.
- 5. With aid of helper, lift complete assembly from body opening and place on covered bench, then remove channel from glass.

#### INSTALLATION

- 1. Clean original sealer from back window body opening and rubber channel. Check body pinchweld flange and channel retainer for irregularities and correct if present. Check back window gutter and drain hoses for any obstructions and clean out if necessary.
- 2. Check installation of clips at pinchweld flange and channel retainer. If replacing clips, apply mediumbodied sealer to opening rabbet as shown at one (1) in View "A".
- 3. Insert strong cord into pinchweld cavity of rubber channel, tie ends together and tape them to bottom center of glass as shown in illustration below the drawing.
- 4. Apply bead of medium-bodied sealer to corner of back window opening rabbet, as indicated at two (2) in Section "A-A" and View "A" in drawing below, completely around perimeter of opening.



- 5. Apply bead of medium-bodied sealer to base of rubber channel as indicated at three (3) in Section "A-A" completely around perimeter of glass.
- 6. With aid of helper, place back window assembly into body opening. While helper is applying pressure to outside surface of glass, carefully pull ends of string to seat lip of rubber channel over pinchweld flange and channel retainer.
- 7. Install back window reveal moldings. Apply weatherstrip cement between rubber channel and glass as indicated at four (4) in Sections "A-A".
- 8. Clean off excess cement and install previously removed parts.



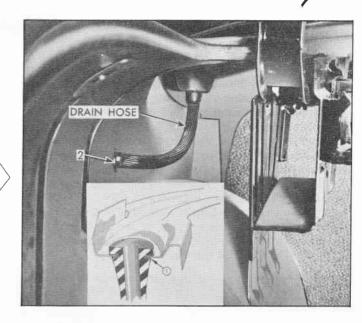




#### BACK WINDOW GUTTER DRAIN HOSE

#### REMOVAL AND INSTALLATION

- 1. From inside rear compartment, remove drain hose from hole in quarter inner panel. (View taken through rear compartment.)
- 2. Inside of body remove rear seat cushion and back, side roof rail rear finishing molding and back window side garnish molding. With suitable tool carefully loosen cemented end of hose from drain gutter and remove hose from body.
- 3. To install hose, apply weatherstrip cement to end of hose as indicated at one (1). In addition, apply weatherstrip cement around hose, as indicated at two (2), to seal opening at the quarter inner panel, then install previously removed parts.

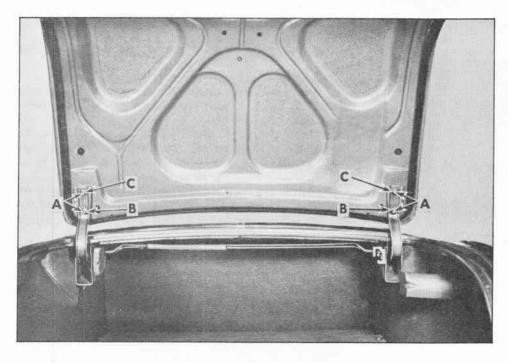


### REAR COMPARTMENT

#### REAR COMPARTMENT LID

The rear compartment lid is secured to the body by two (2) hinges which incorporate torque rods to assist in opening the rear compartment lid and hold it in the up position when the lid is opened.

#### REMOVAL AND INSTALLATION



- 1. Open lid and place protective covers along front edge of compartment opening.
- 2. Disengage wiring from compartment lid and scribe location of hinge straps on lid inner panel.
- 3. Remove the two (2) bolts located at each hinge strap at "A" and with the aid of a helper remove rear compartment lid.
- 4. To install the rear compartment lid, reverse the removal procedure, making sure that the hinge straps line up with the scribe marks on the lid inner panel.

#### **ADJUSTMENTS**

- 1. To adjust compartment lid forward or rearward, or from side to side in the body opening, loosen lid guide attaching screws and both hinge strap attaching bolts "A", then adjust lid as required and tighten bolts and guide attaching screws.
- 2. To adjust compartment lid at hinge area up or down, install shims between lid inner panel and hinge straps as follows:
  - a. To raise front edge of lid at hinge area, place

- shim between lid inner panel and forward portion of one or both hinge straps at "B".
- b. To lower front edge of lid at hinge area, place shim between lid inner panel and rearward portion of one or both hinge straps at "C".
- 3. To check lid lock bolt engagement with striker, see "Rear Compartment Lid Lock Bolt and Striker Engagement Check."

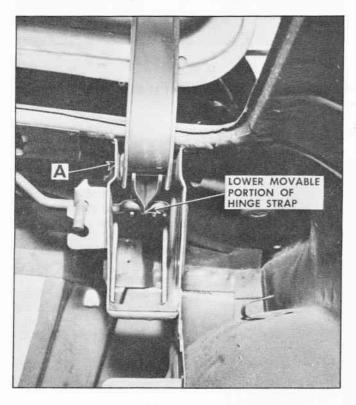




#### **REAR COMPARTMENT LID HINGE**

#### **REMOVAL**

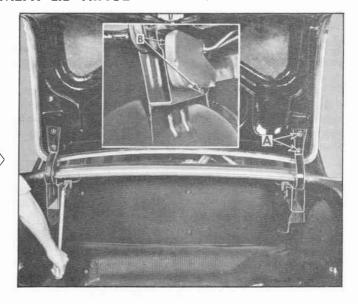
- 1. Protect body finish along upper portion of the rear compartment opening with a suitable covering and provide a support for the lid on the side where the hinge is to be removed.
- 2. Scribe location of the hinge strap on the compartment lid inner panel and remove two (2) bolts "A", securing the lid to the hinge strap.
- 3. At the left hinge remove torque rod cover retained by two (2) screws indicated at "B".
- 4. Using a suitable length of pipe, disengage the torque rod from the retaining notches at the inboard face of the opposite hinge box. NOTE: Suitably mark the notch from which the torque rod was disengaged.



#### **ADJUSTMENTS**

The torque rods on the rear compartment lid hinge assemblies can be adjusted to obtain the desired effort required to open and close the lid. With the torque rod set in Position #1, a decrease in the effort required to open the lid can be had by adjusting the torque rod to Positions #2 or #3. A corresponding increase in the effort required to close the lid results from this adjustment. With the torque rod set in position #3, a decrease in the effort required to close the lid can be had by adjusting the torque rod to Positions #2 or #1. A corresponding increase required to open the lid results from this adjustment.

It is not necessary to adjust the left and right hand torque rods at the same time or to the same final position of adjustment. If adjustment is required at the left torque rod, it is necessary to first remove the torque rod cover retained by two (2) screws.



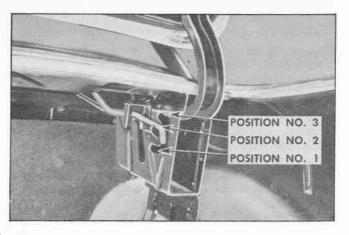
- 5. Disengage the torque rod from the lower movable portion of the hinge strap and remove torque rod.
- 6. Bend up retaining tab "A" and remove hinge retaining pin.
  - 7. Remove hinge from the hinge box.

#### INSTALLATION

- Position hinge in the hinge box and install the hinge pin.
- 2. Bend down the hinge pin retaining tab.
- 3. Install the hinge strap to the compartment lid, making sure that the strap lines up with the scribe marks on the lid inner panel.
- 4. Install the "U-Shaped" end of the torque rod to the hinge box, making certain that the outer end of the rod is engaged in the hole on the outboard face of the hinge box.
- 5. Engage the torque rod to the lower movable portion of the hinge strap and engage the other end of the rod to the previously marked notch on the inboard side of the opposite hinge box.

NOTE: The center of the rubber silencer should be positioned at the crossover point of the rods.

- 6. Install the torque rod cover to the left hinge box.
- 7. Check the alignment of the rear compartment lid and remove the protective covering.







#### REAR COMPARTMENT LID LOCK CYLINDER

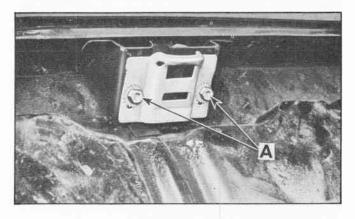
#### REMOVAL AND INSTALLATION

The key-operated lock cylinder is secured to the rear compartment lid outer panel by a sliding retainer located between the lid outer and inner panels.

- 1. Through the rear compartment lid inner panel opening, indicated by arrow "A", insert a suitable hooked tool to pull the lock cylinder retainer away from the lock cylinder.
- 2. Remove the lock cylinder and gasket from the outer panel of the rear compartment lid.
- 3. To install, reverse removal procedure after weathersealing lock cylinder gasket to the lid outer panel.

## REAR COMPARTMENT LID LOCK REMOVAL AND INSTALLATION

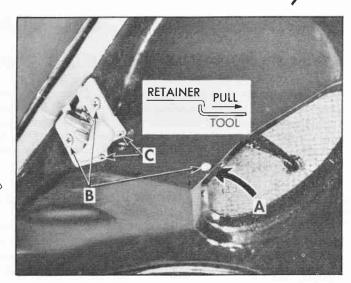
- 1. Remove the rear compartment lid lock cylinder.
- 2. Remove lid lock to lid inner panel screws "B".
- 3. Remove cover plate to lid inner panel screws "C", and remove the complete lock and cover plate assembly from lid.
- To install, reverse removal procedure.



#### **ENGAGEMENT CHECK**

To check amount of engagement of the rear compartment lid lock bolt with lock striker, follow the procedure outlined below:

- 1. Insert small quantity of modeling clay or its equivalent to bottom of lock bolt slot as shown in illustration, then close lid with moderate slam.
- 2. Open lid and measure distance between the base of "U" in lock bolt and base of "U" in clay. This dimension should be 1/8" to 5/32". If distance is greater, install emergency spacer between lock striker and support.



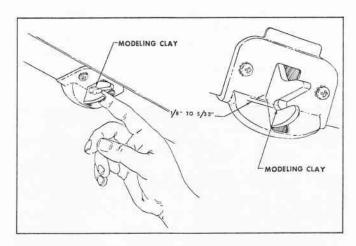
# REAR COMPARTMENT LID LOCK STRIKER REMOVAL AND INSTALLATION

### 1. Scribe location of striker and remove two (2) at-

- 1. Scribe location of striker and remove two (2) attaching bolts "A", then remove striker.
- 2. To install, position striker within scribe marks and reverse removal procedure.

#### **ADJUSTMENTS**

- 1. To adjust striker up or down, loosen bolts "A", adjust striker as required, then tighten bolts.
- 2. To adjust striker forward, loosen bolts "A" and install emergency spacer between striker and support then tighten bolts.



#### REAR COMPARTMENT LID WEATHERSTRIP

#### REMOVAL AND INSTALLATION

The rear compartment lid weatherstrip consists of a cemented-on type weatherstrip with the butt joint located at the bottom center of the lid. To remove weatherstrip break cement bond with suitable tool and clean off original cement from compartment lid. To install weatherstrip, position weatherstrip color mark at top center of lid, then apply an approved weatherstrip cement following the manufacturer's directions and install the weatherstrip to the lid. Be sure to cement both ends of weatherstrip when forming butt joint at bottom center of lid.



### **ELECTRICAL SECTION**

#### WINDOW CIRCUIT TROUBLE SHOOTING PROCEDURE

The windows are operated by 12-volt, individual, reversible direction motors. Each motor has an internal circuit breaker to prevent overloading of the motor when it has completed a cycle of operation. Other components of the circuit are protected by a circuit breaker in the feed wire circuit.

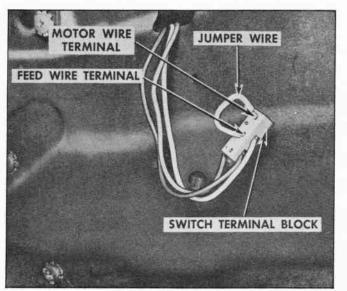
When a switch is operated, current flows to one of two motor leads. When a door window switch is pushed upward, the motor operates to raise the window. When a door window switch is pushed downward, the motor operates in a reversed direction to lower the window.

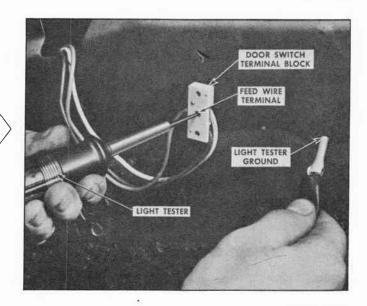
#### CHECKING PROCEDURE

Failures in a circuit are usually caused by open circuits or short circuits. Open circuits are usually caused by breaks in the wiring, faulty connections, 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. A light tester can be used for locating open circuits or short circuits.

If the light tester indicates current at one terminal of a wire but does not indicate current at the other, there is an open circuit or a short circuit in the wire. To check for an open circuit or a short circuit between two terminals of a component, the component must first be actuated to connect the two terminals electrically.

- A. Checking for current at circuit breaker.
  - Connect one light tester lead to battery side of circuit breaker and ground other light tester lead. If tester does not light, there is no current at battery side of circuit breaker.
  - 2. To check circuit breaker, disconnect switch feed wire from breaker, and with light tester check for current at switch side of circuit breaker. If tester does not light, there is no current flowing through circuit breaker.
- B. Checking for current at a door window switch.
  - Connect light tester to center terminal of switch terminal block.
  - 2. Ground light tester ground lead to body metal.
  - If tester does not light, there is no current at terminal block.





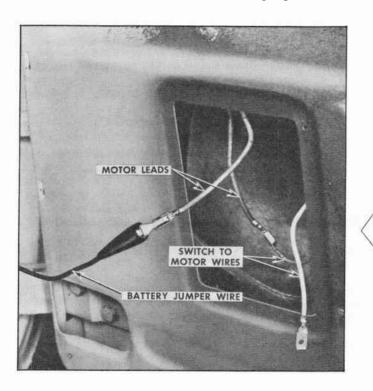
- C. Checking a door window switch.
  - Place a #12 jumper wire on the switch terminal block between the center terminal (feed) and one of the two motor wire terminals. If motor operates, the switch is defective.
  - 2. Connect the jumper wire between the center terminal (feed) and the other motor wire terminal on the switch terminal block. If motor operates, the switch is defective.

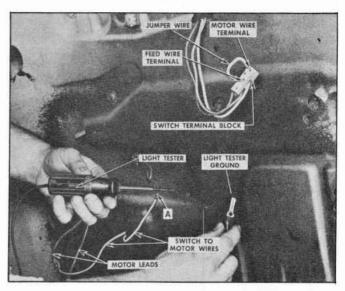






- D. Checking the wires between a door window switch and a door window motor.
  - Place a #12 gauge jumper wire on the switch terminal block between the center terminal (feed) and the terminal of the motor wire to be checked.
  - 2. Disconnect the end of the motor wire "A" from the motor lead and connect wire "A" to the light tester.
  - Ground the light tester ground lead to the body metal.
  - 4. If the tester does not light, there is no current at wire "A" terminal contacting light tester.





- E. Checking a door window motor.
  - Check the ground of the motor. Motor is grounded to door inner panel through regulator frame attaching screws.
  - Disconnect motor leads from wire harness, then connect one end of #12 gauge jumper wire to battery positive pole and the other end to the lowering cycle motor lead terminal. If motor fails to operate, motor unit is defective or a mechanical stoppage exists in the window system.
  - 3. Disconnect the jumper wire from the lowering cycle motor lead terminal and connect it to the raising cycle motor lead terminal. If motor fails to operate, motor unit is defective or a mechanical stoppage exists in the window system.

#### TYPICAL CONDITIONS

The following typical conditions and corrections have been listed as an aid for eliminating electrical failures in the electrically-powered windows. The right and left rear door window circuits are essentially the same as the right door window circuit, therefore all references to the right door window circuit will also apply to the right and left rear door window circuits.

It should be noted that multiple failures in the circuit may lead to a combination of conditions, each of which must be checked separately.

- A. Right door window will not operate from right door window switch but will operate from master switch. The trouble is located in the circuit between the circuit breaker and the right door window motor lead terminals.
  - 1. Check feed wire from circuit breaker to right door window switch.
  - 2. Check operation of right door window switch.
  - Check two motor wires from right door window switch to right door window motor leads.
- B. Right door window will not operate from master switch, but will operate from right door window switch. The left door window will operate from master switch.

The trouble is located in the circuit between the feed wire terminal of the master switch and the right door window motor lead terminals.

- 1. Check operation of master switch.
- 2. Check two motor wires from master switch to right door window motor lead terminals.





C. Right door window will not operate from master or right door window switches. The left door window operates from master switch.

The trouble is located between the feed wire terminals of both switches and the right door window motor.

- Check for mechanical stoppage in right door window.
- Check operation of master and right door window switches.
- Check motor wires from master and right door window switches to right door window motor leads.
- 4. Check operation of right door window motor.
- D. Right and left door windows will not operate from master switch, but right door window will operate from right door window switch.

The trouble is located between the circuit breaker and the master switch motor wire terminals.

- Check feed wire between circuit breaker and master switch.
- 2. Check operation of master switch.

E. Left door window will not operate but right door window will operate from master and right door window switch.

The trouble is located between the feed wire terminal on the master switch and the left door window motor.

- Check for mechanical stoppage of left door window.
- 2. Check operation of master switch.
- Check motor wires from master switch to left door window motor leads.
- 4. Check operation of left door window motor.
- F. All electrically-powered windows will not operate.
  - 1. Check battery.
  - 2. Check circuit from battery to ammeter.
  - 3. Check wire from ammeter to circuit breaker.
  - 4. Check circuit breaker.
  - Check wire from circuit breaker to window switches.
  - 6. Check operation of window switches.

NOTE: For reference to above typical conditions, see electric wiring diagram on page 58.

#### SEAT CIRCUIT TROUBLE SHOOTING PROCEDURE

#### STYLES EQUIPPED WITH POWER OPERATED SIX WAY TILT TYPE SEAT ADJUSTER

The power-operated six-way tilt-type seat adjusters are operated by an actuator assembly which consists of a twelve (12) volt reversible type motor with a built-in circuit breaker, a relay, gear box with jack screw and three (3) spinning nut assemblies which include solenoids as shown in the illustrations. The motor assembly is controlled by a three (3) button switch located on the left front seat side panel.

The seat actuator includes a separate spinning nut assembly with a solenoid for each of the three basic movements of the seat: 1. up and down front edge, 2. up and down rear edge, 3. fore and aft.

When the front button of the seat control switch is pushed up or down, current flows to the "up and down front edge solenoid", actuating the solenoid and locking the spinning nut out of freewheeling. Simultaneously current flows to one of the motor field coils and to the relay assembly, closing the contacts between the relay power source and the armature motor lead, thereby operating the seat adjuster motor. When either of the other two (2) adjustments is desired and the switch is operated, the affected solenoid is actuated and the motor assembly operates in the same manner as outlined above.

#### CHECKING PROCEDURES

It may be necessary to use only one or all of the procedures outlined to locate an electrical failure in the circuit, depending on the nature of the failure. If the location of the failure is evident, follow only the steps outlined to check the affected wire or component. If the location of the failure is not evident, follow the procedure as outlined. Before performing the checking procedures, check the seat adjusters and seat actuator assembly for mechanical failure. In addition, study the seat circuit diagrams located in this section to become familiar with the seat circuit. NOTE: The illustrations show the seat adjuster removed from the seat assembly for illustrative purposes only.

- A. Checking for current at circuit breaker.
  - Connect one light tester lead to battery side of circuit breaker and ground other light tester lead. If tester does not light, there is no current at battery side of circuit breaker.
  - To check circuit breaker, disconnect switch feed wire from breaker, and with light tester check
- for current at switch side of circuit breaker. If tester does not light, there is no current flowing through circuit breaker.
- B. Checking for current at the seat control switch.
  - 1. Connect one light tester lead to feed terminal of switch block and ground other tester lead to



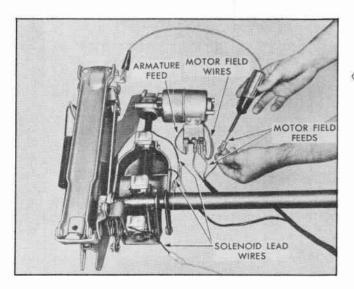


body metal.

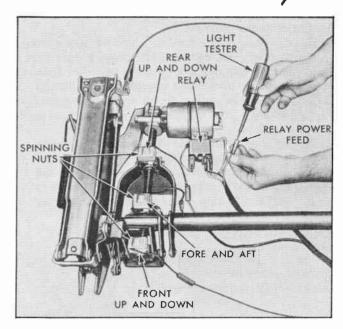
- If tester does not light, there is no current at switch block. Failure is caused by an open or short circuit between the switch block and circuit breaker.
- C. Checking for current at seat adjuster relay feed.
  - 1. Disengage feed connector from relay assembly.
  - Insert one light tester lead into the connector relay power feed slot, as shown, and ground other light tester lead.
  - If tester does not light, there is no current at end of feed wire. Failure is caused by an open or short circuit between the end of wire and switch block.

NOTE: In the following operations which specify the seat control switch to be actuated, a switch which 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 procedure for making the jumper wire and the switch locations to be connected to obtain a specific movement of the seat are outlined on page 56. If jumper wire is used, number the locations on switch block as indicated in the illustration.

- D. Checking the seat control switch.
  - 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, original switch is defective.
  - 3. Check all six movements of seat adjuster.



- H. Checking the wire between the solenoid and switch.
  - Disconnect end of harness wire from connector of solenoid to be tested.
  - 2. Connect one light tester lead to end of harness wire and ground other lead.
  - 3. Operate switch to energize wire being tested. If tester does not light, there is no current at end of harness wire. Failure is caused by an open or short circuit between end of wire and switch.



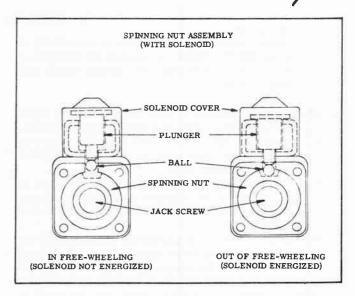
- E. Checking the motor field feed wires between the seat control switch and relay assembly.
  - Insert one light tester lead into field feed connector slot, as shown below at left, and ground other lead.
  - Actuate seat switch to energize field wire being tested.
  - If tester does not light, there is no current at end of wire. Failure is caused by an open or short circuit between end of wire and switch. Check other field wire in the same manner.
- F. Checking the relay assembly.
  - ${\bf 1.} \ \ {\bf Disconnect\ armature\ lead\ from\ relay.}$
  - Connect one end of light tester to armature feed stud on relay and ground other light tester lead.
  - Actuate seat control switch to energize one of the motor field feeds. If the tester does not light, the relay is defective.
  - 4. If the tester lights in step 3, check the other motor field feed, in the same manner. If tester does not light, relay is defective.
- G. Checking the motor assembly.
  - Disconnect armature feed and one of the motor field feeds from the relay assembly.
  - Connect one end of a #12 gauge jumper wire to the battery positive pole and the other end to the armature feed and one of the field feeds. IMPORTANT: To prevent damaging the motor, do not energize motor with jumper wire for more than two (2) minutes.
  - 3. If motor does not operate, check the other motor field feed in the same manner. If motor does not operate in any direction, connect a ground wire from motor housing to body metal and energize armature and field feed. If motor does not operate, it is defective. NOTE: Certain component parts of the motor are available for service replacement as in the past.

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- Checking the solenoid.
  - 1. Check installation of solenoid ground wire.
  - Connect one end of a #12 gauge jumper wire to the battery positive pole and the other end to the solenoid lead being checked. IMPORTANT: To prevent damaging the solenoid, do not energize solenoid with jumper wire for more than two (2) minutes.
  - Operate switch to actuate adjuster motor and solenoid being checked.
  - 4. If adjusters do not function (spinning nut remains in freewheeling), the solenoid is defective.

    NOTE: Certain component parts of the solenoid are available for service replacement.



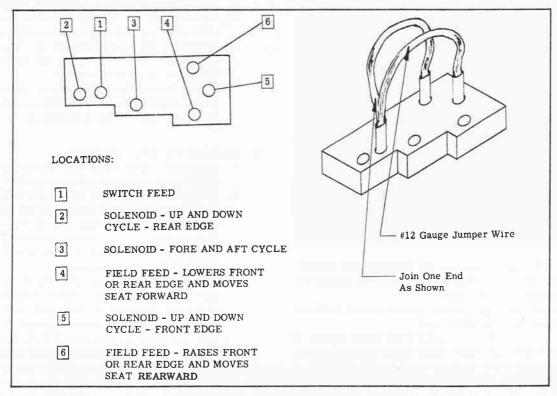
#### 3-WAY JUMPER WIRE

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 the drawing. 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 motorfield wire locations and one of the solenoid locations have to be connected.

The switch locations to be connected to obtain a specific seat movement are outlined below:

- A. To raise front edge of seat, place jumper in locations 1, 6, and 5.
- B. To lower front edge of seat, place jumper in locations 1, 4, and 5.
- C. To raise rear edge of seat, place jumper in locations 1, 6, and 2.
- D. To lower rear edge of seat, place jumper in locations 1, 4, and 2.
- E. To move seat forward, place jumper in locations 1, 4, and 3.
- F. To move seat rearward, place jumper in locations 1, 6, and 3.







#### TYPICAL CONDITIONS

#### CONDITION

#### CAUSE

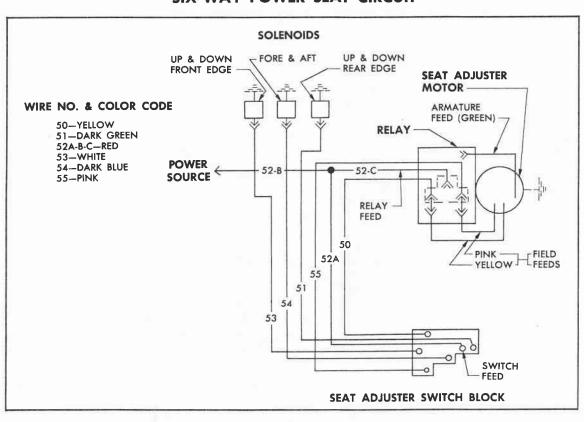
#### CORRECTION

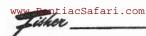
- Seat adjuster motor does not operate.
- Short or open circuit between power source and motor.
- 2. Defective motor.
- Check circuit from power source to motor to locate failure.
- Check motor. If defective, repair or replace as required.

- 2a. Seat adjuster motor operates, but seat adjusters are not actuated.
  - b. 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 adjusted.
- Short or open circuit between switch and affected solenoid.
- 2. Defective solenoid.
- Check circuit from switch to solenoid to locate failure.
- Check solenoid. If defective, repair or replace as required.

- 3a. Seat adjuster motor operates and seat adjusters move front and rear edge of seat up and rearward, but will not move the seat down and forward.
- Seat adjuster motor operates and seat adjusters movefront and rear of seat down and forward, but will not move the seat up and rearward.
- Short or open circuit between one of the motor field wires and seat control switch.
- 2. Defective field coil in motor.
- Check circuit between affected motor field wire and seat switch,
- Check motor. If defective, repair or replace as required.

#### SIX-WAY POWER SEAT CIRCUIT

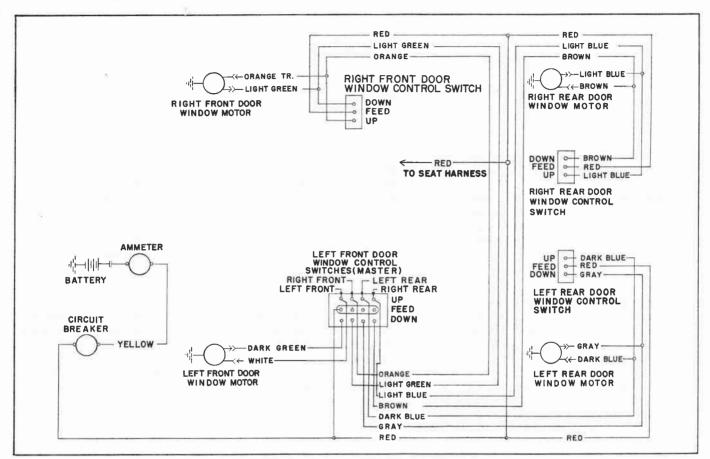




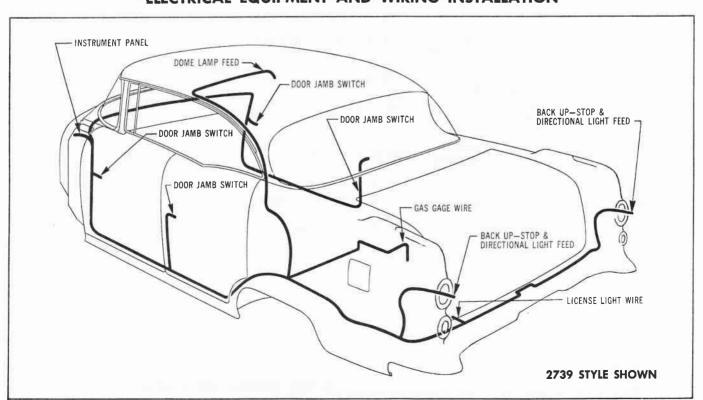


### WIRING DIAGRAM

#### **POWER WINDOWS**



#### **ELECTRICAL EQUIPMENT AND WIRING INSTALLATION**





### **BODY LUBRICATION**

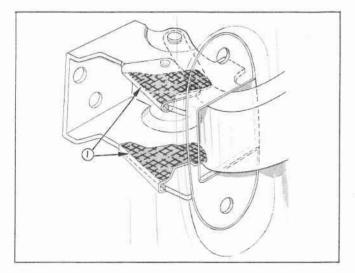
2739, 2739D, 2839 SD

The movable mechanical hardware parts of a Fisher Body are lubricated at the factory to insure proper and quiet operation. Because of the frequent use of some parts such as door locks and door lock strikers, it is important that these readily accessible parts be lubricated at least twice a year. Other body parts should be lubricated whenever access to the parts is available.

#### BODY PARTS WHICH SHOULD BE LUBRICATED TWICE A YEAR

#### INSTRUMENT PANEL COMPARTMENT DOOR HINGE

Apply one (1) or two (2) drops of dripless oil to the male and female hinge straps at locations indicated at one (1) in the illustration. Wipe off excess lubricant.

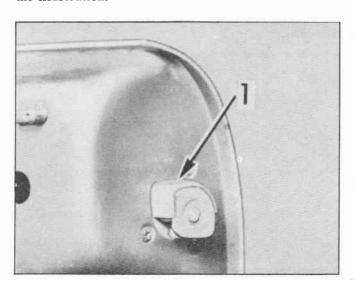


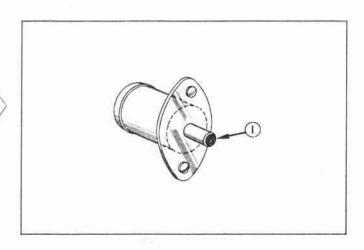
#### FRONT DOOR HINGE HOLD-OPEN CLIPS

Wipe off dirt and apply a light coat of #630 AA Lubriplate or its equivalent to clips indicated at one (1) in the illustration.

#### DOOR JAMB SWITCH

Apply a light coat of #630 AA Lubriplate or its equivalent to surface of switch plunger indicated at one (1) in the illustration.





#### DOOR LOCK

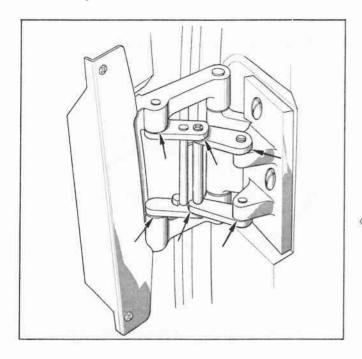
Wipe off dirt and apply a thin coat of stick type lubricant on surface of lock bolt housing indicated at one (1) in the illustration. Wipe off excess lubricant.





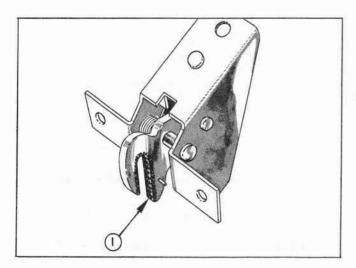
#### DOOR LOCK STRIKER

Wipe off dirt and apply a thin coat of stick type lubricant to top surface of lock bolt striker teeth indicated at one (1) in the illustration. After lubrication, close door several times and remove excess lubricant along the side edge of teeth.



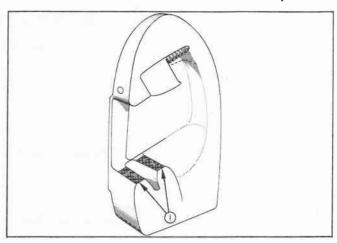
## REAR COMPARTMENT LID HINGES AND TORQUE RODS

Apply #630 AA Lubriplate or its equivalent to hinge and torque rods at points indicated by arrows in the illustration.



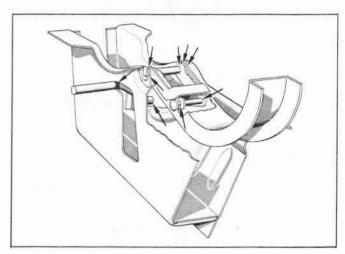
#### GAS TANK FILLER DOOR

Apply one (1) or two (2) drops of dripless oil to hinge points indicated at one (1) in the illustration. Wipe off excess lubricant.



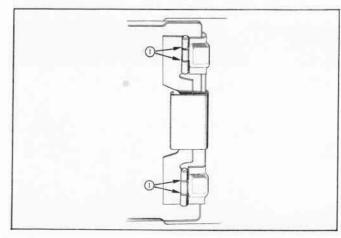
#### REAR DOOR HINGE AND HOLD-OPEN ASSEMBLY

Wipe off dirt and apply one (1) or two (2) drops of the mixture specified below to points indicated by arrows in the illustration. Wipe off excess lubricant. Mixture is made up in a proportion of 1 lb. of #630 AA Lubriplate to 2 quarts of mineral spirits.



#### REAR COMPARTMENT LID LOCK BOLT

Apply #630 AA Lubriplate or its equivalent along area indicated at one (1) in the illustration. Wipe off excess lubricant.



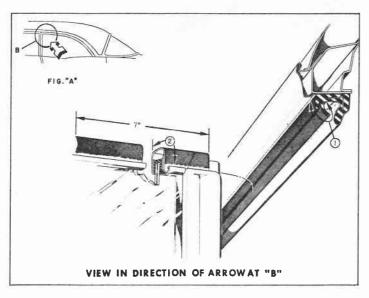


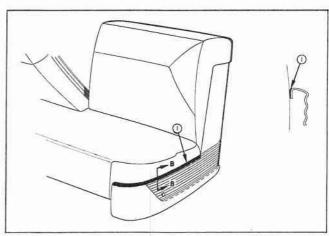


#### FRONT SEAT SIDE PANELS

Apply a light coat of stick type lubricant along upper edge of front seat side panel indicated at one (1) in section "B-B". Wipe off excess lubricant.

The panel should be lubricated twice a year, or whenever an objectionable noise due to friction between the side panel and seat trim is present.





#### SIDE ROOF RAIL WEATHERSTRIP

Apply a silicone rubber lubricant to surface of side roof rail weatherstrip indicated at one (1) in drawing opposite. Lubricant is to be applied along length of weatherstrip. In addition, apply lubricant to the top and inboard surface of the rear door window frame sash channel as indicated at two (2). Apply lubricant to the upper front corner of the frame extending from the forward edge rearward for a distance of seven (7) inches.

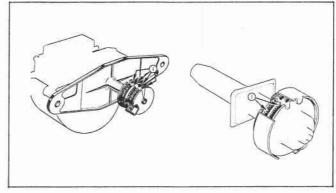
#### BODY PARTS WHICH SHOULD BE LUBRICATED WHEN ACCESS TO PARTS IS AVAILABLE

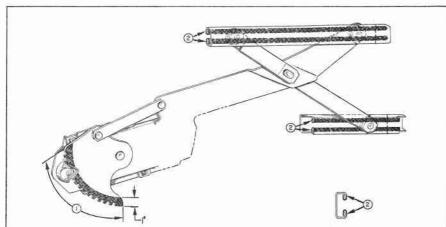
## WINDSHIELD WIPER MOTOR AUXILIARY DRIVE AND WIPER TRANSMISSION PULLEYS

Apply #630 AA Lubriplate or its equivalent to locations indicated at one (1) in the illustration.

#### **DOOR LOCK PARTS**

Lubricate the moving parts of the door lock with a lubricant mixture made up in proportion of 1 lb. of #630 AA Lubriplate to 2 quarts of mineral spirits.





## FRONT DOOR WINDOW REGULATOR AND CAM CHANNELS

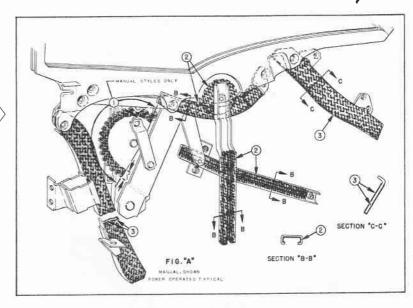
On manual regulators, apply a coat of #630 AA Lubriplate or its equivalent to rack portion of regulator sector as indicated at one (1) in the illustration. On all cam channels, apply #630 AA Lubriplate to channel portion of cam as indicated at two (2).





## REAR DOOR WINDOW REGULATOR AND GUIDE CHANNELS

On manual regulators apply a coat of #630 AA Lubriplate or its equivalent, to rack portion of regulator sector as indicated at one (1). In addition, apply lubricant to the front, center and rear guides as shown at two (2) and three (3) in Sections "B-B" and "C-C".



| NOTES |
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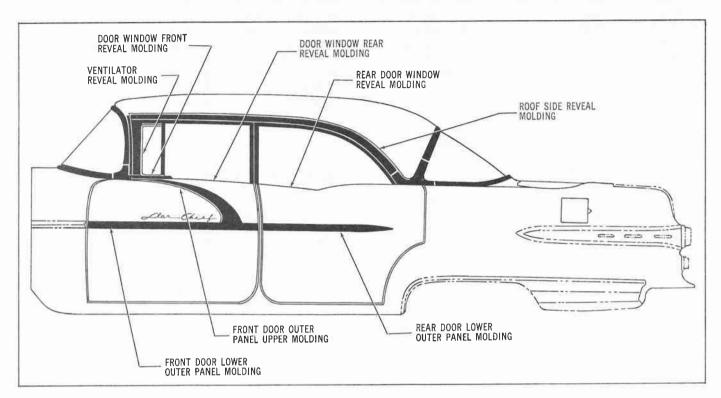
### **EXTERIOR MOLDINGS**

2739, 2739D AND 2839SD

The door exterior moldings are secured to the door by a combination of self-tapping metal screws, snap-on clips, clips and bolt and clip assemblies.

Before removing a molding which has to be pried from a body panel, apply a strip of masking tape to the painted surface adjacent to the molding to prevent possible damage to the paint finish.

When installing exterior moldings using retainers with self-tapping metal screws, snap-on clips, clips or bolt and clip assemblies, apply medium-bodied sealer around the attaching holes in the body panels.



#### REMOVAL AND INSTALLATION

## FRONT DOOR LOWER OUTER PANEL MOLDING

The molding is secured to the door outer panel with clips and one (1) screw clip at each end of the molding. To remove molding, remove screws securing each end of the molding to the door hemming flange, then with a suitable flat-bladed tool, pry molding from clips attached to the door outer panel. To install, reverse removal procedure.

# FRONT DOOR OUTER PANEL UPPER MOLDING

2739 AND 2739D

The molding is secured to the door outer panel with clips, bolt and clip assembly at rear of door and a clip and stud assembly at the front of molding. To remove molding, remove door trim assembly and access hole covers to gain access to molding attaching nut. Through access hole, depress prongs of clips to allow molding and clips to be removed from door outer panel. Then pry front clip with molding from door outer panel. To install, reverse removal procedure. NOTE: Install new stud and clip assembly at front of molding.

### DOOR WINDOW FRONT REVEAL MOLDING

The molding is located along the bottom of the door ventilator. The molding is secured at the front and rear by self-tapping metal screws. To remove molding, lower door glass, remove finishing panel and molding attaching screws. Remove screw extending through ventilator division channel and molding, and loosen ventilator bracket-to-door outer panel screws, then remove molding from door. To install, reverse removal procedure.

## FRONT DOOR OUTER PANEL UPPER MOLDING

2839SD

The molding is secured to the door outer panel with clips, bolt and clip assemblies at rear of molding and two (2) self-tapping metal screws located under the door front reveal molding. To remove molding, remove door front reveal molding to gain access for removal of upper screws. Remove door trim assembly and inner panel access hole covers to gain access to molding attaching nuts. Through access hole, depress prongs of clips to allow molding and clips to be removed from door outer panel. To install, reverse removal procedure.



Zisker

(Refer'to illustration on previous page.)

# DOOR WINDOW REAR REVEAL MOLDING

The molding is secured to the return flange of the door outer panel with self-tapping metal screws. To remove molding, remove door trim assembly and large access hole cover. Detach window sash cam from window, then lower glass sufficiently to remove reveal molding attaching screws. Loosen rear screw of front reveal molding and remove rear molding. To install, reverse removal procedure.

# DOOR VENTILATOR REVEAL MOLDING

The molding is secured to the door hinge pillar extension by self-tapping metal screws. To remove molding, remove door ventilator assembly and molding attaching screws. Carefully bend out molding screw tabs sufficiently to detach molding from hinge pillar. To install, reverse removal procedure.

# REAR DOOR LOWER OUTER PANEL MOLDING

The molding is secured to the door outer panel with clips, bolt and clip assembly at rear of door and a clip and stud assembly at the front of molding. To remove molding, remove door trim assembly and access hole cover to gain access to molding attaching nut. Through access hole, depress prongs of clips to allow molding and clips to be removed from door outer panel. Then pry front clip with molding from door outer panel. To install, reverse removal procedure. NOTE: Install new stud and clip assembly at front of molding.

#### REAR DOOR WINDOW REVEAL MOLDING

The molding is secured to the return flange of the door outer panel by self-tapping metal screws. To remove molding, remove rear door window to gain access to the self-tapping screws. To install, reverse removal procedure.

### **ROOF SIDE REVEAL MOLDING**

The molding is secured to the underside of the side roof rail by screws. To remove molding, remove side roof rail weatherstrip and molding attaching screws, then disengage rear end of molding from back window side reveal molding. To install molding, clean off original sealer. then apply a ribbon of mediumbodied sealer along length of molding and across the front edge, as indicated at one (1) in section "B-B" and view in direction of arrow "C". Install molding to roof rail, then apply a ribbon of sealer along length of weatherstrip as indicated at two (2) and weatherstrip cement to front edge, as indicated at three (3). Install weatherstrip and clean off excess sealer.

Fisher Body Division Product Service Activity Litho. in U.S.A.

