

## Group 23

# BODY AND SHEET METAL

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## Group 23

# BODY AND SHEET METAL

All Chrysler and DeSoto models, except Imperial, feature a "Unibody" type construction (Fig. 1) in which the body shell and the underbody (frame) are welded together from the dash panel rearward into one unit.

The Imperial Models use a conventional type body in which the body is bolted to the frame (Fig. 2).

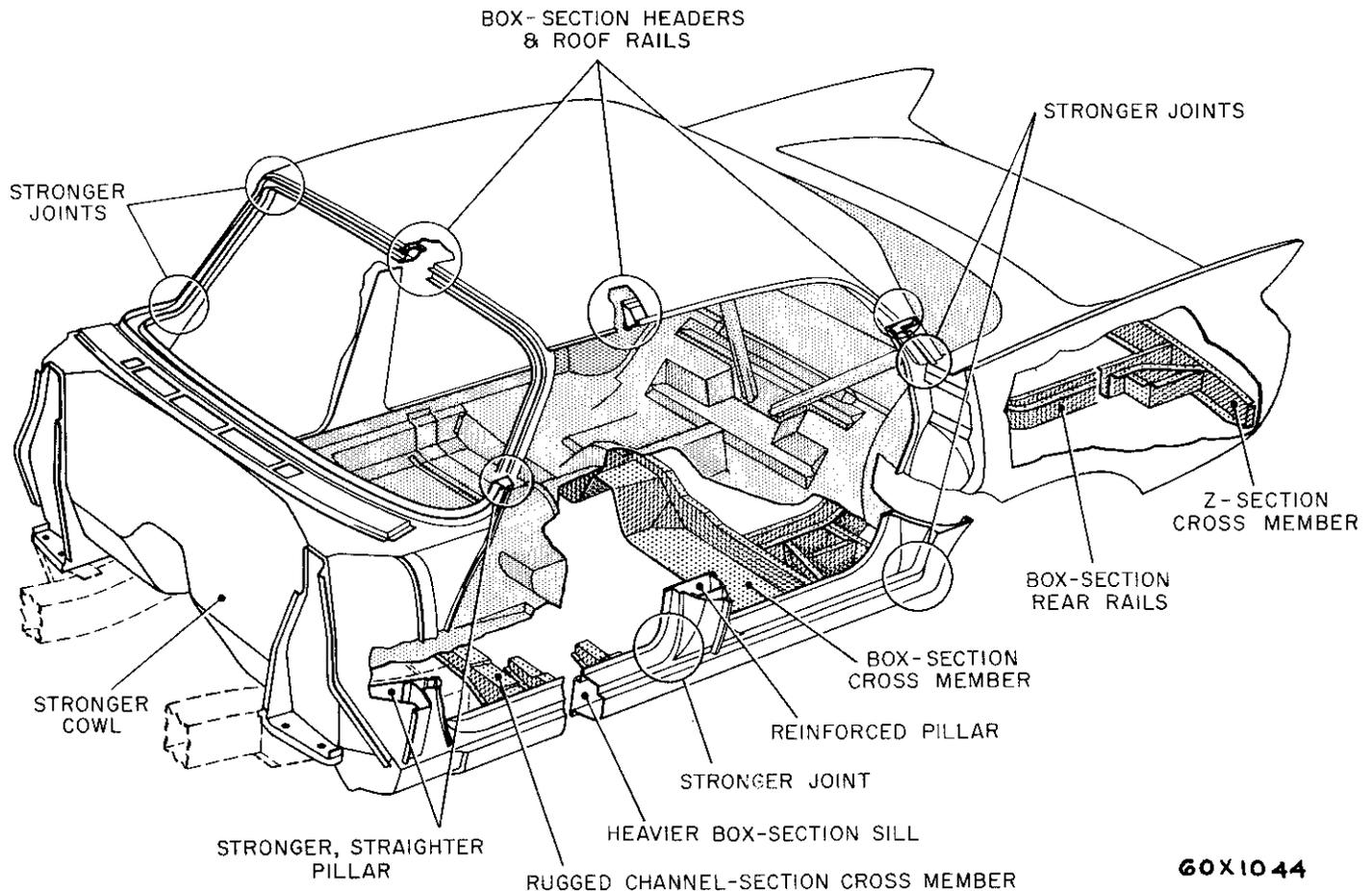
To achieve greater terminal rigidity and improve overall strength of the body-shell on the "Unibody" construction, two heavy-duty crossmembers, one under the rear seat area and the other at the extreme rear end of the body are welded to the box side rails extending from under the rear seat over the body

"kick-up" to the rear of the body. These box-section members with extra heavy reinforcements also attach the rear springs and axle assembly (Fig. 3).

The radiator yoke, fender side shields and cowl panels are attached to the body to add structural strength to the fore-structure and the body assembly.

An integral fore-structure assembly (Fig. 3) extending forward of the front passenger compartment is bolted to the "Unibody" with ten body bolts, eight of these lie in a fore-and-aft position and two in a transverse position.

The fore-structure, with box-section side rails and "Y" section reinforcements at the front-end, has



**Fig. 1—Basic Body Construction (Chrysler, DeSoto)**

three crossmembers. The first crossmember supports the diagonal struts for the front suspension control arms, the second crossmember supports the front engine mounts, and the number three crossmember supports the engine and transmission at the rear engine mount.

The heavy roof bows in the body have been added for greater strength to the roof panel. The front door hinge pillar is now one continuous piece from roof rail to the body sill. Sheet metal seams overlap for improved sealing. Metal cages welded to the outside of the cowl side panels enclose the retaining nuts for attaching fenders and hood hinge supports. Inner hinge reinforcements have been added to doors to keep doors aligned and maintain proper door adjustment.

The hood construction has been improved by the heavy hinge supports to eliminate hood flutter. The "Unibodies" are subjected to a 7 step corrosion and rust-proofing immersion and spraying operation. Each immersion covers the entire underbody internally and externally extending up to body and door sides.

On the Imperial models heavier section center-pillars, box section and roof rails, are added to improve the overall strength of the upper body structure. In the new body diagonal braces are welded to underside of floor pan to minimize flexing. Improved floor-pan design includes metal-to-metal welded lap-joint to eliminate dust and water leaks. "U" braces behind the rear seats and quarter panel are welded to floor-pan to increase body rigidity. The new step-down sill construction, life-guard door latches and six-way seat adjustment contributes to body safety, comfort and serviceability. See Figures 1 and 2 for basic body construction of these bodies.

### 1. MANUAL DOOR LOCK SYSTEM

All models are equipped with new design manual door locks. The major changes made in these locks are the use of a six tooth gear type rotor without "take-up", and having "free wheeling" outside handles when the lock is locked. Otherwise the locks and the inside and outside controls are similar to those on previous models.

Provision is made in these locks to adjust the outside handle linkage through a hex head bolt which

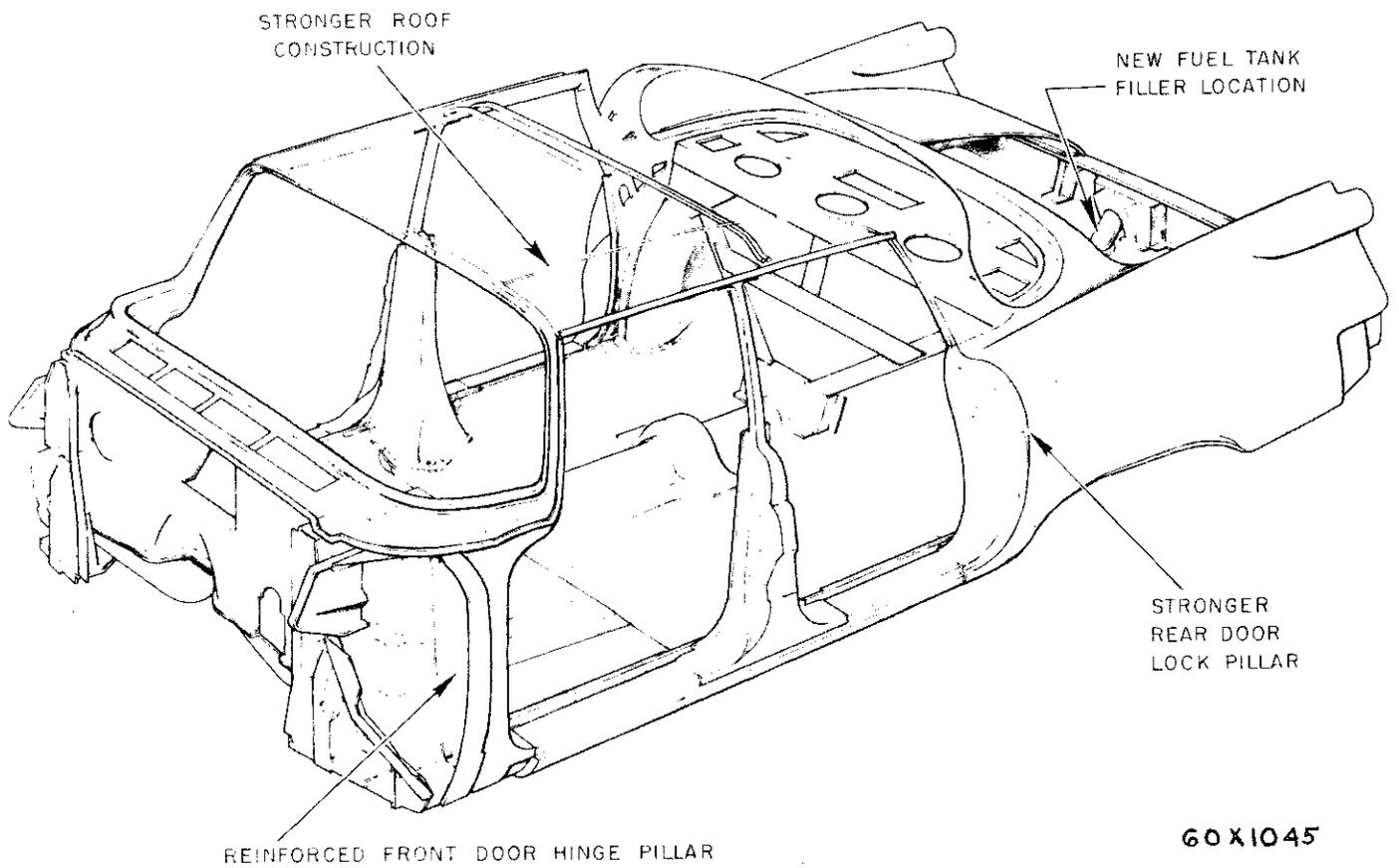


Fig. 2—Basic Body Construction (Imperial)

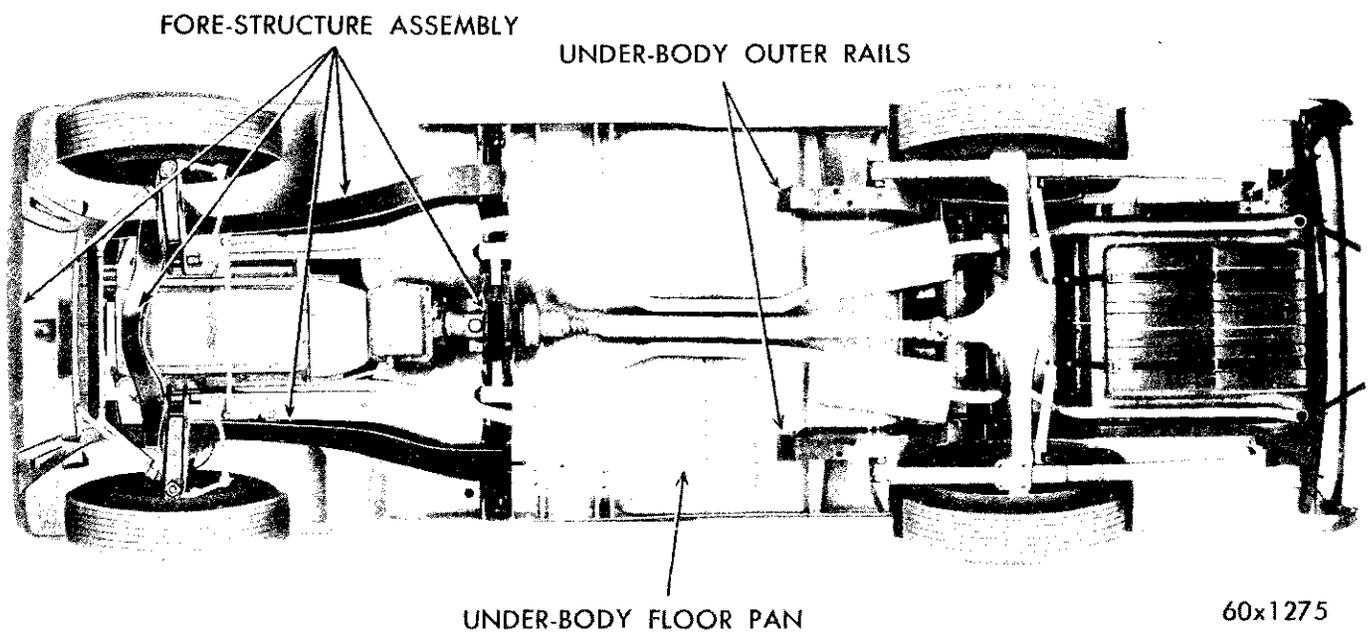


Fig. 3—Underbody Construction (Chrysler, DeSoto)

is exposed at the side of the lock rotor on the outside surface of the door shut face. This occurs on all doors—front and rear.

These locks also include a plastic wedge, above the rotor, which slides on the top of the striker plate to prevent up and down movement of the door when it is latched.

There are several important differences between front and rear door locks. The front locks are locked from the outside with the key and on the inside, locking is accomplished by pushing the remote control handle forward. Both these operations, in effect, disconnect the outside door handle control linkage from the lock mechanism so that in the locked condition the **outside handle moves freely without releasing the lock.**

The rear door lock works similarly but the inside locking control is a separate lever on the door inside surface (same as previous model cars). Locking the rear door “free wheels” the **outside handle**, but “blocks”, (prevents movement of) the door lock inside remote control handle.

In order to service the lock, to remove the door outside handles and the key cylinder, or to adjust the inside lock remote control, it is **necessary to remove door inside handles, arm rests, garnish moulding, trim panel and plastic water curtain.**

It is not necessary to do any untrimming to adjust the outside handle linkage since the adjusting screw is on the **outside surface of the lock face of the door.**

## 2. POWER DOOR LOCKS

The power-locking system uses engine vacuum as power source. There are four component parts to the basic unit:

- (1) A manual selector switch mounted on the instrument panel.
- (2) A vacuum actuator unit with lock actuating arm mounted in each door.
- (3) A vacuum distributor valve mounted under the instrument panel to the left of steering column on fire wall.
- (4) A vacuum reservoir mounted in the engine compartment on the right side of the radiator yoke.

## 3. SIX-WAY ADJUSTABLE FRONT SEAT (WITH MANUAL SEATS)

A new six-way adjustable front seat is now standard equipment on all models equipped with manual seats. With one new custom positioned front seat, each individual driver may decide the position and angle desired for the front seat.

The seat can be positioned vertically in any one of the locations regardless of its horizontal location. In addition the front and rear of the seat can be independently raised or lowered, permitting ramps is mounted on a six-way slotted base. Each base consists of a movable support plate connected to the seat track and a stationary support plate securely attached to the floor. The movable support plates are interconnected through two adjusting bolts. Horizontal slots in the movable support plate permit the seat assembly to be moved toward the front or rear. The curved vertical slots in the stationary support plate permit the seat assembly to be raised or lowered to one of three positions or tilted to one of four angles.

## 4. AUTOMATIC SWIVEL SEAT ASSEMBLY (ALL MODELS) (OPTIONAL EQUIPMENT)

The swivel seat assembly operates on a pivot assembly attached to the center rear portion of the seat base. A curved channel located on the front portion of the seat rides on two nylon rollers to insure a smooth, easy turning of the seat.

The automatic action, which swings the seat out when the door is opened and back to straight ahead position when door is closed, is accomplished by an actuating cable concealed under the floor carpet. One end of the cable is attached to the door at the lower hinge and the other end to a pivot plate under the seat. Two springs are also attached to the plate. A lighter seat opening assist spring is hooked to the inner side of the seat assembly. A heavier seat return spring is hooked to the fixed seat frame at the inner rear corner of the seat. A torsion bar balance spring attached to the lower door hinge counteracts the pull of the two springs so that the door opening effort is not increased.

## SERVICE DIAGNOSIS

# MANUAL DOOR LOCK SYSTEM

### 5. DOOR HARD TO OPEN OR STICKS

#### Possible Causes:

(a) Striker rubbing on door shut face or on lock rotor housing. Add or remove shims in back of striker to remove the interference.

(b) Lock striker not set at correct angle or position. Adjust striker so that top of lock housing moves parallel to bottom surface of striker teeth and door is not raised or pulled down as lock engages striker.

(c) Door moldings or trim interfere with door pillar. Relocate moldings being sure screw heads do not project.

### 6. DOOR HARD TO CLOSE

#### Possible Causes:

(a) Door seals incorrectly installed. Examine door seals for correct installation without high spots or other crowded conditions when door is in proper closed position.

(b) Rubber bumpers improperly installed. Check door rubber bumpers to make sure they are of proper thickness to fill gap between door and pillar surface when door is closed to proper position. Cut bumpers down if too thick.

(c) Hinges improperly installed. Make sure hinges are properly aligned and well lubricated.

(d) Striker plate out of adjustment. Adjust lock striker plate (as in 5(b) so that lock engages in second position when door surface is flush with pillar or adjoining sheet metal.

### 7. OUTSIDE HANDLE — DOES NOT RETURN

#### Possible Causes:

(a) Handle interferes with escutcheon, providing a rough feeling operation. Insert heavy screwdriver between handle and escutcheon and pry in direction to remove interference. This is a temporary fix until new handle can be installed.

(b) Spring in handle broken. Handle free, but does not return completely. If broken spring, install new handle.

(c) Interference in lock mechanism. Handle sluggish but shows no interference in handle mechanism and spring is operating correctly.

(d) Remove hardware and trim panel. Remove handle to lock link. If handle is still sticky, remove and replace with new handle.

(e) If handle is all right, remove and check for lack of lubricant or interference in pivot and spring of lock release lever (1) and attached levers and links. If lubrication will not free, attempt to remove burrs and loosen pivots. Failing to repair, replace with new lock.

### 8. REMOTE CONTROL HANDLE — DOES NOT RETURN TO NEUTRAL POSITION

#### Possible Causes:

(a) Interference between remote control handle and slot in arm rest through which handle projects. Look for interference between remote control handle and slot in arm rest through which handle projects. If interference exists, adjust panel to provide free travel of handle in slot.

(b) Handles that do not operate in slot in arm rest require examination for friction between panel and back of hub of handle. Check by pressing panel away from handle. If this effectively frees handle, remove hardware and trim panel and remove tapered coil spring from the remote control shaft.

(c) If handle still does not return with trim panel off, examine remote control mechanism for lack of lubrication, excessively tight anti-rattle clip on inner panel at the middle of remote-to-lock link, and lack of lubrication.

(d) If remote still cannot be made to return, remove lock and remote assembly and examine remote control assembly and lock assembly for damaged parts or tight pivots. Replace defective assemblies.

### 9. OUTSIDE HANDLE DOES NOT RELEASE LOCK

(a) Be sure that lock can be released with key and also the remote control handle on front doors. On rear doors, check also with the lock locking control knob. Check if one or the other of the two releasing systems does not unlock door.

(b) Loosen adjusting screw on door lock face and move screw down to lowest position then raise until handle is just flush with escutcheon.

(c) If outside handle does not move out when adjusting screw is at lowest position, it indicates that the handle to lock link is not connected at one end. Remove inside hardware and trim panel. Connect link to lock or handle as required, making sure that the clips hold it securely.

(d) If handle to lock link is found to be attached at both ends, remove lock and examine for bent or broken-off ratchet dog lifting arm lip K. If this is failed, install new lock.

**10. INSIDE HANDLE DOES NOT RELEASE LOCK**

(a) Remote control assembly out of adjustment. On front doors, remove trim panel and hardware and adjust remote control assembly forward until it will completely release the lock. Check to be sure it will lock also.

Reinstall the trim panel and hardware. Recheck with remote control handle to make sure the lock is operating correctly.

(b) On rear doors—remove trim panel and hardware. Loosen remote control attaching screws and with the lock locked move the remote control forward as far as possible without forcing or bending the lock-to-control link. Tighten the remote control attaching screws. Check to be sure that the lock will operate properly and will lock and unlock from the remote locking knob. Check to be sure lock operates satisfactorily.

**11. INSIDE HANDLE, FRONT DOOR — WILL NOT LOCK OR UNLOCK LOCK**

**Possible Causes:**

(a) Remote control assembly out of adjustment. If necessary, rearward adjustment of remote may be required to effect a compromise condition.

(b) If this does not result in the proper operation, check for a bent or binding link from remote control to lock.

(c) If the difficulty is in the lock—check for lack of lubrication, bent levers and loose pivots. If lock is damaged, replace with a new assembly.

**12. KEY WILL NOT LOCK OR UNLOCK FRONT DOOR**

**Possible Causes:**

(a) Key cylinder to lock link attachment off at lock or handle. If key will neither lock or unlock the

lock but inside remote control handle will, remove the trim panel and check for key cylinder to lock link attachment at the lock or handle.

(b) Bent levers, causing stiff operation of key. If lock will not unlock or lock and key operation is stiff, remove trim and check for poor lubrication in lock and bent levers. Straighten levers or if repair is not possible, replace with a new lock.

(c) Key will not unlock door—may be due to outside handle adjustment or sticking lock levers.

(d) Lock will not unlatch. If lock refuses to unlatch with outside handle operating freely, readjust outside handle.

**13. LOCK DOES NOT LATCH WHEN DOOR IS CLOSED**

**Possible Causes:**

(a) Inside or outside handle sticking or poorly adjusted, preventing lock from latching.

(b) Lock does not latch in extreme cold, but is all right at normal temperature. Remove lock and clean all grease out with kerosene and relubricate with medium engine oil. Replace in door and make all adjustments.

**14. FRONT DOOR LOCK DOES NOT KICK-OFF (UNLOCK) WHEN DOOR IS CLOSED AFTER LOCKING LOCK**

**Possible Causes:**

(a) This may be caused by improper outside handle adjustment.

(b) Bent lock lever.

(c) Lock levers bent and overriding one another. This is an obsolete lock and must be replaced.

**15. FRONT DOOR LOCK LOCKS AUTOMATICALLY WHEN DOOR IS CLOSED**

**Possible Causes:**

(a) Friction in lock levers on mating parts which can be overcome by lubrication and straightening bent parts.

(b) Obsolete lock which must be replaced.

(c) Remote control improperly adjusted.

**16. REAR DOOR LOCKING CONTROL DOES NOT LOCK OR UNLOCK DOOR LOCK**

**Possible Causes:**

(a) Bent lock levers require removal of trim panel and hardware and straightening bent parts.

(b) Loose or very tight pivot rivets in the locking control levers, replace lock.

(c) Obsolete lock—lever does not travel far enough to lock or unlock the lock. This requires a new lock.

(d) Outside handle improperly adjusted.

#### 17. THE WHOLE DOOR RATTLES (OR CHUCKS) WHEN DRIVING

**Possible Causes:**

(a) Check for presence of door rubber bumpers in holes provided back of door flange or on "B" pillar. Replace if missing.

(b) Check lock striker adjustment and correct if not holding door flush to adjacent sheet metal.

(c) Loose rotor—if inside and outside rotor are not tightly riveted together, re-rivet or replace lock if damage is evident.

(d) Welds broken and rotor cover loose. Replace lock.

## POWER DOOR LOCKS

### WARNING

Do not apply air pressure anywhere in the system.

#### 18. SYSTEM INOPERATIVE

**Possible Causes:**

(a) Hose off manifold to tank.

(b) Faulty tank—if there is no vacuum on distributor connection to tank, replace tank.

(c) Hose off tank to distributor.

(d) Hose off distributor to switch.

(e) Hose off distributor to main tees.

(f) Faulty switch—remove small diameter hoses from switch, operate switch in lock or unlock positions—if there is no vacuum on hose connections, replace switch.

(g) Faulty distributor—remove main door feed hose from distributor, operate switch in lock or unlock position—if there is no vacuum on hose connection, replace distributor.

(h) Plugged or pinched hose.

#### 19. FAILURE TO LOCK (UNLOCK OPERATION SATISFACTORY)

**Possible Causes:**

(a) Hose off Red connection on switch.

(b) Hose off Red connection on distributor.

(c) Faulty distributor (lock valve stuck)—remove door feed hose off Red connection on distributor, push switch to lock position—if no vacuum replace distributor.

(d) Hose off any fitting in Red line to actuator.

(e) Broken hose connection on actuator—replace actuator.

(f) Leak in hose to door—replace hose.

#### 20. FAILURE TO UNLOCK (LOCK OPERATION SATISFACTORY)

**Possible Cause:**

Same cause and correction as (Failure to Lock) except hose has no marking.

#### 21. DOORS OPERATE THE OPPOSITE OF THE SWITCH OPERATION

**Possible Causes:**

(a) Hose lines reversed on switch.

(b) Hose lines reversed on distributor.

(c) Switch mounted in reverse position.

#### 22. DOORS ON ONE SIDE LOCK WHEN DOORS ON OTHER SIDE ARE UNLOCKED

**Possible Cause:**

Door hose lines connected improperly to tees in side cowl.

#### 23. ONE DOOR OPERATES THE OPPOSITE FROM THE OTHER DOORS

**Possible Causes:**

(a) Hose connected improperly to tee in side cowl.

(b) Hoses connected improperly on actuator.

#### 24. ONE DOOR FAILS TO OPERATE

**Possible Causes:**

(a) Faulty actuator linkage.

(b) Faulty lock.

## AUTOMATIC SWIVEL SEAT ASSEMBLY

#### 25. SEAT DOES NOT SWIVEL OUT WHEN DOOR IS OPENED

**Possible Causes:**

(a) Broken cable near attachment to lower door hinge—remove old cable; file the  $\frac{5}{8}$ " diameter hole

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in pillar under seal and cable retainer bracket vertically up or down, as may be required such that the centerline of the new location of the cable is  $\frac{5}{32}$ " above the centerline of the bottom door hinge attaching bolt holes. (On Imperial only, the hole in the pillar should be vertically located exactly in the center of the cutaway portion of the flange on the lower door hinge, body-half.)

(b) Triangular-shaped pawl, #13, on top of release mechanism does not slide back around the latch shaft, #14, (to be checked with door closed)—bend tab, #15, of catch actuating lever towards the rear of car until the pawl is from  $\frac{1}{16}$ " to  $\frac{1}{4}$ " away from the bottom of slot in catch plate.

(c) Inboard top half of seat back hangs on center arm rest (in raised position)—remove seat assembly; bend the inner nylon roller support pin on lower seat frame up with a piece of heavy gage steel tubing with an inside diameter of  $\frac{1}{16}$ ". DO NOT MAR SURFACE on which rollers operate.

(d) Underneath portion of front part of seat cushion trim rubs on a tab sticking up on the release mechanism causing a tear of the seat fabric—replace seat trim and install a plastic plug over tab.

(e) Top half of rear royalite cover, #19, over rear position of ramp binds on the seat cushion trim—tap cover down with rubber mallet.

(f) Seat trim edges on bottom of cushion hang up on royalite cover at front edge of lower seat frame—cut off excess non-showable material; or screw down royalite cover with flat head sheet metal screw on lower frame; or fasten trim up tighter with additional hog rings after drilling holes in cushion frame to accept them.

(g) Seat trim on inner vertical edge of cushion sticks to trim on center arm rest—wash contacting surfaces with MoPar Fabric Cleaner and apply talcum powder; if sticking condition still exists, move center arm rest toward other seat if space allows; or shorten assist spring by cutting off one end of spring about 1" back from hook and bend a new hook; or remove hog rings from inside vertical trim to the seat frame and take out some of seat padding in the offending area and reinstall hog rings.

(h) Pivot assembly binds—loosen nut on bottom of assembly until smooth operation returns.

(i) Broken, missing, or stretched seat opening assist spring—replace or shorten spring as described above.

(j) Nylon stabilizer on seat cushion frame, #16, sticks to steel ramp on rear seat frame rail—check

for broken spring inside nylon wedge, clean and lubricate mating surfaces of wedge and ramp.

## 26. SEAT DOES NOT CLOSE INTO COMPLETELY LATCHED POSITION WHEN DOOR IS SHUT

### Possible Causes:

(a) Trim or ramp interferences—rework as required.

(b) Cable (seat half) too tight—adjust jam nuts, #6, further back on door half cable housing.

(c) Latch shaft does not fully re-engage into catch plate slot of release mechanism—gently hammer latch shaft, #14, towards front of car until pin properly slides into catch slot.

(d) Burrs on catch plate and catch actuator plate bind the assembly up to such an extent that the latch shaft does not stay engaged in catch plate—remove catch plate and support assembly and file parts to provide smooth action. Check upon reassembly for proper adjustment of actuator rod, #11.

(e) Actuator rod bent, causing the same condition as a bound-up release mechanism (the flattened, slotted end of rod must be in the same plate as the round portion directly adjacent to it)—unscrew shoulder bolt, #10, swing rod out, and bend back to correct position. Reassemble and check for proper operation of release mechanism.

(f) Pivot actuating arm, #1, binds on lower seat frame pivot bracket, #21, (to be checked with seat cushion removed and seat half cable and return spring disconnected)—file top or bottom surface of pivot bracket, #21, or file down the nylon between effected parts; or remove weld flash on bottom of bracket; or file bottom hole in bracket, #21, so that when assembled the bushing is parallel to vertical surface of lower seat rear frame member.

(g) On six way electric seat track cars only, the release mechanism sticks in the "released" position—seat stabilizer rod, #20, must be adjusted with main body or the bar towards the floor pan as shown on attached drawing and accordingly must be adjusted in 360 degree increments. If bar is installed so that the major portion is away from the floor, the bar causes the actuator lever, #15, to hang up in the door open position.

(h) Ramp and nylon stabilizer maladjusted to such an extent that latching will not occur—remove washer (s) between ramp and frame; remove seat assembly and move stabilizer horizontally forward and retighten 2 screws securely; or hammer ramp down only as last resort.

(i) Seat return spring stretched or broken — replace.

**27. SEAT DOES NOT LATCH WHEN SWUNG MANUALLY INTO CLOSED POSITION WITH DOOR REMAINING FULLY OPEN**

(a) Triangular-shaped pawl, #13, on release mechanism is advanced too far into slot of catch plate, preventing latch shaft from seating in slot—loosen shoulder bolt, #10, and pivot release mechanism towards center of car.

(b) Same condition as in Paragraph 27 (c).

(c) Release handle sticks in the up or release position—check for interferences between handle and trim or side shield and check for broken latch spring.

(d) Latch shaft binds on slot in catch plate—check

for burrs on catch plate and remove same if required.

**28. DOORS REQUIRE EXCESSIVE EFFORT TO OPEN**

(a) Door half cable emerges from pillar in wrong location—remove cable and lower hole in pillar as described in Paragraph 26 (a).

(b) Door half cable installed with links or sharp bends under carpet—check hold-down clip, #7, on floor pan tunnel to see that it clamps over locating tape on cable housing. If cable slips through clip, apply layers of friction tape until adequate thickness is obtained.

(c) Door hinges bind—thoroughly lubricate hinge pin and door check arm cam surface and roller or check for misalignment of the axis of one hinge pin to the other.

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## BODY MAINTENANCE

**29. CLEANING INTERIOR UPHOLSTERY (All Models)**

Most stains can be removed quite easily from fabrics while they are fresh and have not hardened and set into the fabric. An exception is mud or clay, which should be allowed to dry so that most of it can be brushed off. It is also very helpful, though often not possible to know the nature of the staining matter so that the proper solvent may be used. Most common stains can be removed with a dry cleaning solvent, such as water solution containing one cup per gallon of a laundry type detergent. Thus, if the nature of the staining matter can only be guessed at and a dry cleaning fluid does not remove the stain, it should then be cleaned with one cup per gallon of laundry type detergent in water.

When using a detergent, **do not use one containing a bleach** as this could discolor the fabric. As most detergents contain a certain amount of bleach, caution should be exercised as to the amount used.

Some of the more common upholstery stains can be removed as follows:

(1) **Candy, Chocolate or Ice Cream Stains.** Scrape off as much of the staining matter as possible with a dull knife. Clean with a one-half of 1% solution of a laundry type detergent in warm water.

**General Instructions:** Use a piece of **clean** cotton cheesecloth approximately 3" x 3". Squeeze most of liquid from the fabric and it is less likely to leave

a ring. Wipe the soiled fabric very lightly with a lifting motion. Always work from the outside toward the center of the spot. Turn the cheesecloth over as soon as one side becomes stained to prevent working the staining matter back into the cleaned portion of the fabric. Use a new piece of cheesecloth as soon as both sides become stained.

(2) **Grease, Oil, or Tar Stains.** Scrape off as much of the staining matter as possible with a dull knife. Clean the fabric using the recommended cleaner. Be sure the cleaner manufacturer's instructions are followed. Follow General Instructions as listed in No. 1 above.

If grease, oil or tar stains cannot be removed satisfactorily with fabric cleaner on a certain type of fabric, use carbon tetrachloride cleaning fluid. The same procedure can be followed as with fabric cleaner.

(3) **Lipstick or Rouge Stains.** First work white vaseline into the staining matter to loosen it. Then clean with fabric cleaner as recommended in No. 2 above.

(4) **Mud or Clay.** Allow the mud or clay to dry completely. Then, brush it off with a soft bristled brush. Clean with a one-half of 1% solution of detergent in water as recommended in No. 1 above.

When cleaning by any of the methods outlined above, never squeeze the liquid from the cleaning

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cloth back into the container of cleaning fluid, and never dip the cleaning cloth back into the container of cleaning fluid after the cloth has contacted the stain. Be sure that the cleaning fluid has no impurities and is not discolored before using it. If particles of the staining matter become locked between the fibres of the fabric, it may be necessary to use a clean, soft bristled brush instead of the cheesecloth with the cleaning fluid.

#### **α. Cleaning of Vinyl Interior Trim**

The following are recommendations for cleaning plastic trim:

(1) **Grease, Oil, or Tar Stains.** These stains should be cleaned as soon as possible or they will migrate into the plastic and leave a permanent discoloration on the plastic surface. These stains should be cleaned with either fabric cleaner as recommended above.

(2) The stain grained vinyl should be cleaned as soon as it appears to be getting dirty. Otherwise the dirt particles will get rubbed into the small grain crevices and be almost impossible to remove. The dirty vinyl trim should be cleaned with a piece of clean cotton cheesecloth dipped in a sudsy solution of a non-alkaline detergent in water. If the vinyl plastic trim still does not clean up, a clean brush with many fairly stiff bristles should be used in place of the cheesecloth.

#### **b. Removal of Dirt from White Plastic Trim Panels**

The white plastic trim should be cleaned in the same manner as other vinyl interior trim, however, if the dirt has been rubbed into the grain so that it is not possible to remove with the detergent solution, a cleaner may be used. Any abrasive cleansing material will cause the material to peel. To clean use plain water or water with a mild soap solution.

### **30. PAINT FINISH CARE (ALL MODELS)**

#### **α. Dark Spots Appearing on Paint (Metallic)**

This condition can be caused by foreign particles that are carried through the air and settle on the flat surfaces of the paint.

If any of this foreign substance, containing acid-like particles, is allowed to remain on the paint for any length of time, it may result in a spotting condition. This spotting condition is caused by the reaction of such particles with the aluminum, used in all metallic paints, causing the aluminum flakes to disappear, leaving the base color. These same acid-like particles can also attack a non-metallic paint, but it will usually result in an etched condition rather than a discoloration.

In view of this, it is advisable to wash cars frequently to prevent the possibility of such conditions occurring.

#### **b. Foreign Material in Paint**

In instances where minute particles of foreign material have embedded themselves in the horizontal surfaces of the paint, they are quite likely abrasives, such as metal particles, that have been carried through the air.

If these particles are allowed to remain on the paint surfaces for any length of time in the presence of moisture, a chemical reaction will take place, resulting in the metal particles eating into the paint surface. Early removal of this material by a thorough washing will prevent this from happening.

**When the above described condition is encountered in the field, it is often mistakenly diagnosed as rust coming up from the metal below the paint.**

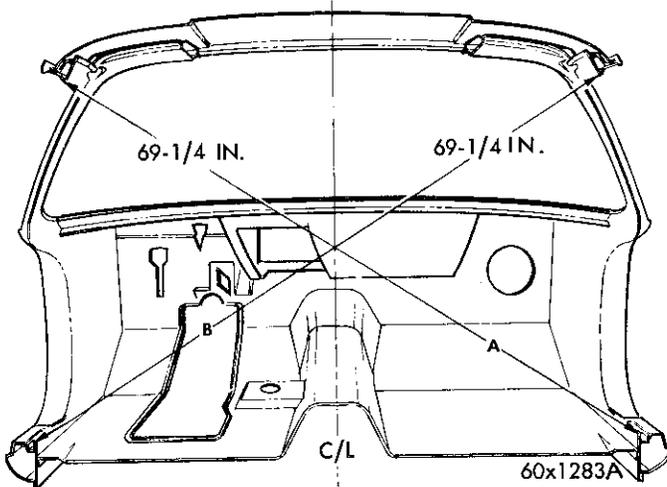
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## **MAJOR BODY SERVICING**

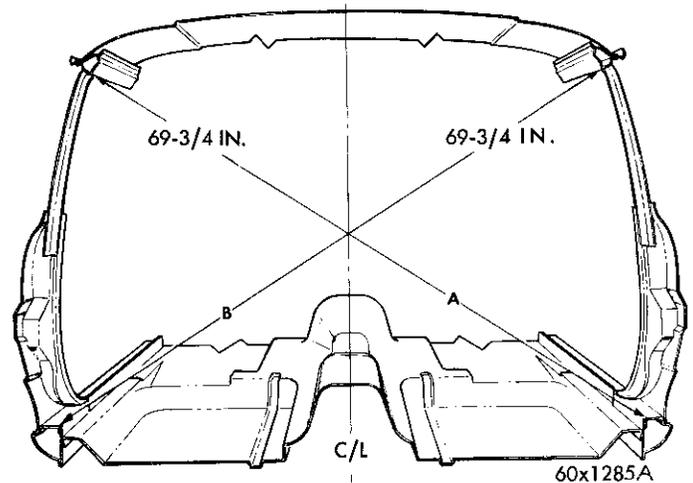
Servicing the "Unibody" should not present any unusual difficulties or necessitate additional equipment other than that required for the conventional and body repair. The use of heavy duty jacks and application of heat must be carefully controlled because of the difference of the gauge of the metal in the sub-frame of a unibody and the stress points devel-

oped in a single welded unit construction. It is possible to pull damaged areas back into alignment with the use of light-weight jacks and hydraulic body equipment without heating the metal.

Any attempt to cold-straighten a severely bent floor pan side rails or brackets may cause ruptures of the welds or cracks in the bent part. Whenever



**Fig. 4—Aligning Body at Centerline of Front Pillar, (Windsor, DeSoto)**



**Fig. 6—Aligning Body at Centerline of Center Pillar (Windsor, DeSoto)**

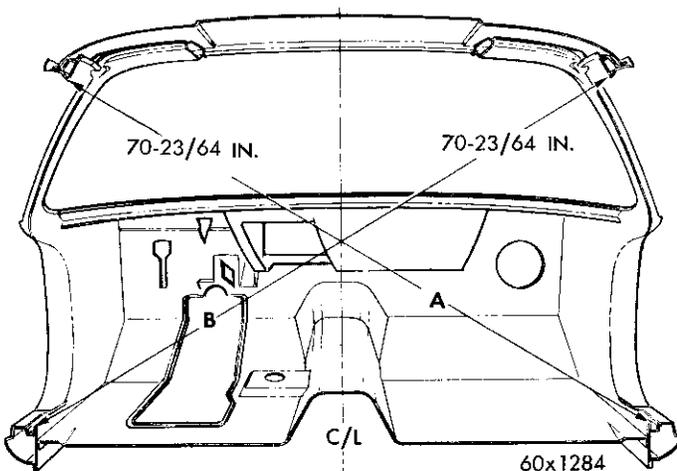
heat is used to facilitate repair, the part or area should never be heated more than a dull red.

To align or square up the Unibody, take two opposite diagonal measurements between the body pillars, as shown in Figures 4, 5, 6, and 7. To check the frame body alignment, measure the distance between the points connected by line "A". Compare this measurement with the distance between the points connected by line "B". Compare all corresponding diagonals in this manner. The distance between the points connected by any two corresponding diagonals should be within  $\frac{1}{4}$  inch.

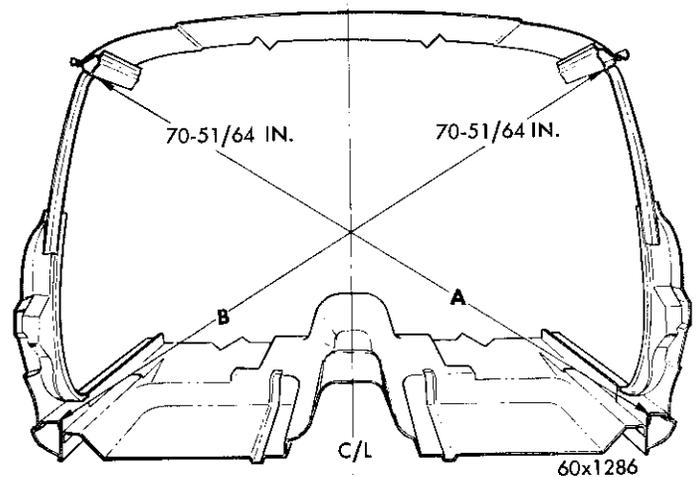
Place the vehicle on a level floor. Suspend a plumb bob directly under the center of points indicated in Figures 8 and 9 and mark the floor at these points. Repeat the procedure on each side of vehicle. The marks made on the floor will represent the various

points which can be checked diagonally. Use a measuring tram for these measurements. Take the measurements between reference points such as crease lines or weld joints which are diagonally opposite each other on the two pillars being measured. Since all measurements should be made from the bare metal, remove all interior trim from the checking points.

In some cases, it is difficult to obtain proper body alignment when repairing a body that is damaged on both sides. In these cases, horizontal and vertical measurements can be taken from a body of the same body style. Once these basic dimensions are taken and established on the damaged body, alignment can be made by diagonal measurements taken from the measuring points on two pillars (Figs. 4, 5, 6 and 7).



**Fig. 5—Aligning Body at Centerline of Front Pillar (Saratoga, New Yorker)**



**Fig. 7—Aligning Body at Centerline of Center Pillar (Saratoga, New Yorker)**

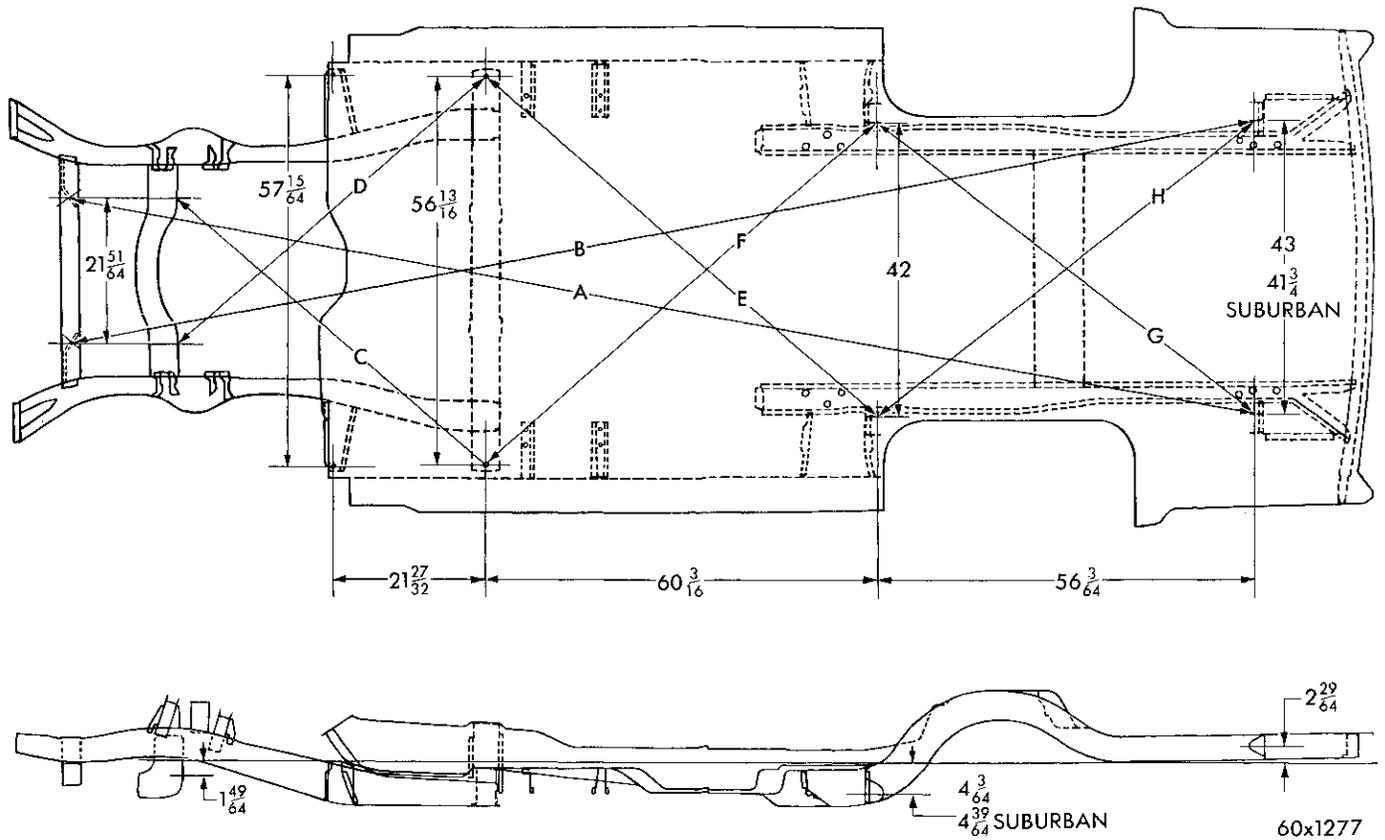


Fig. 8—Frame to Underbody Alignment  
(Windsor, DeSoto)

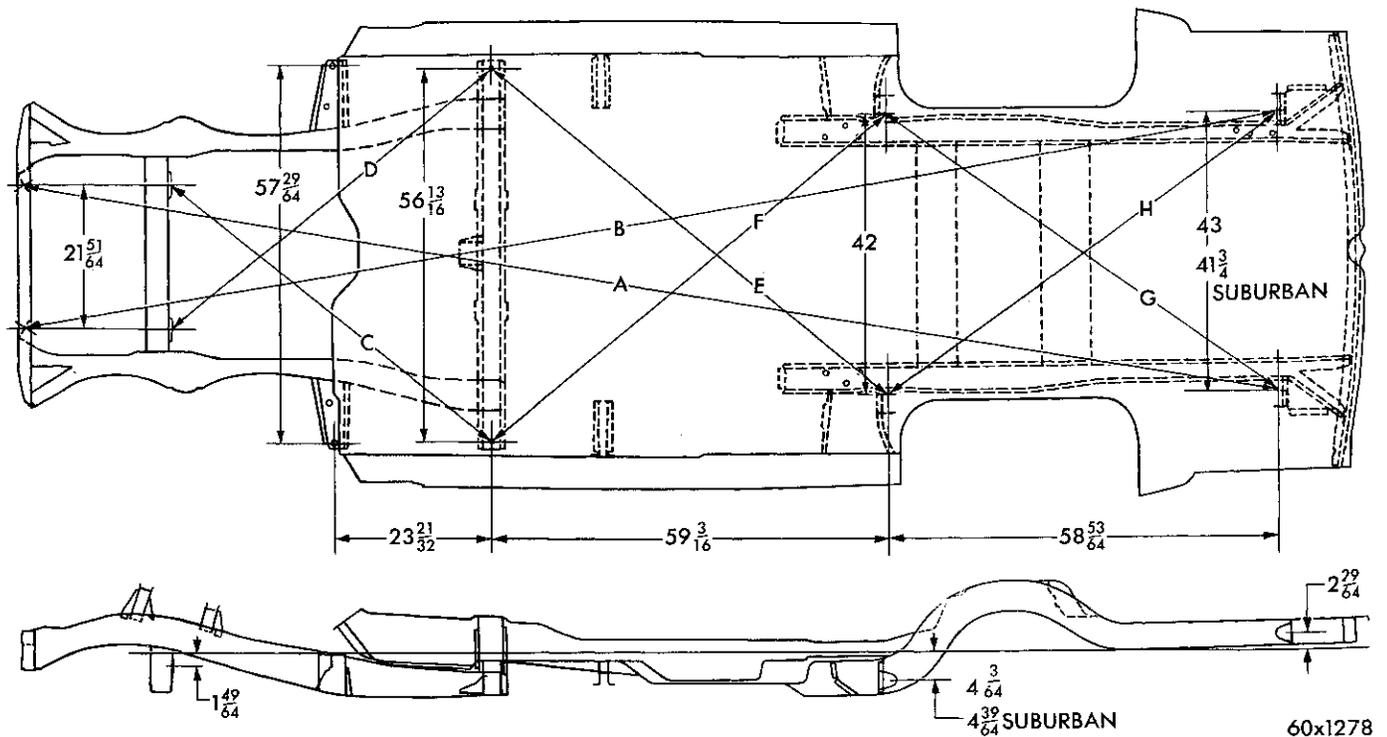
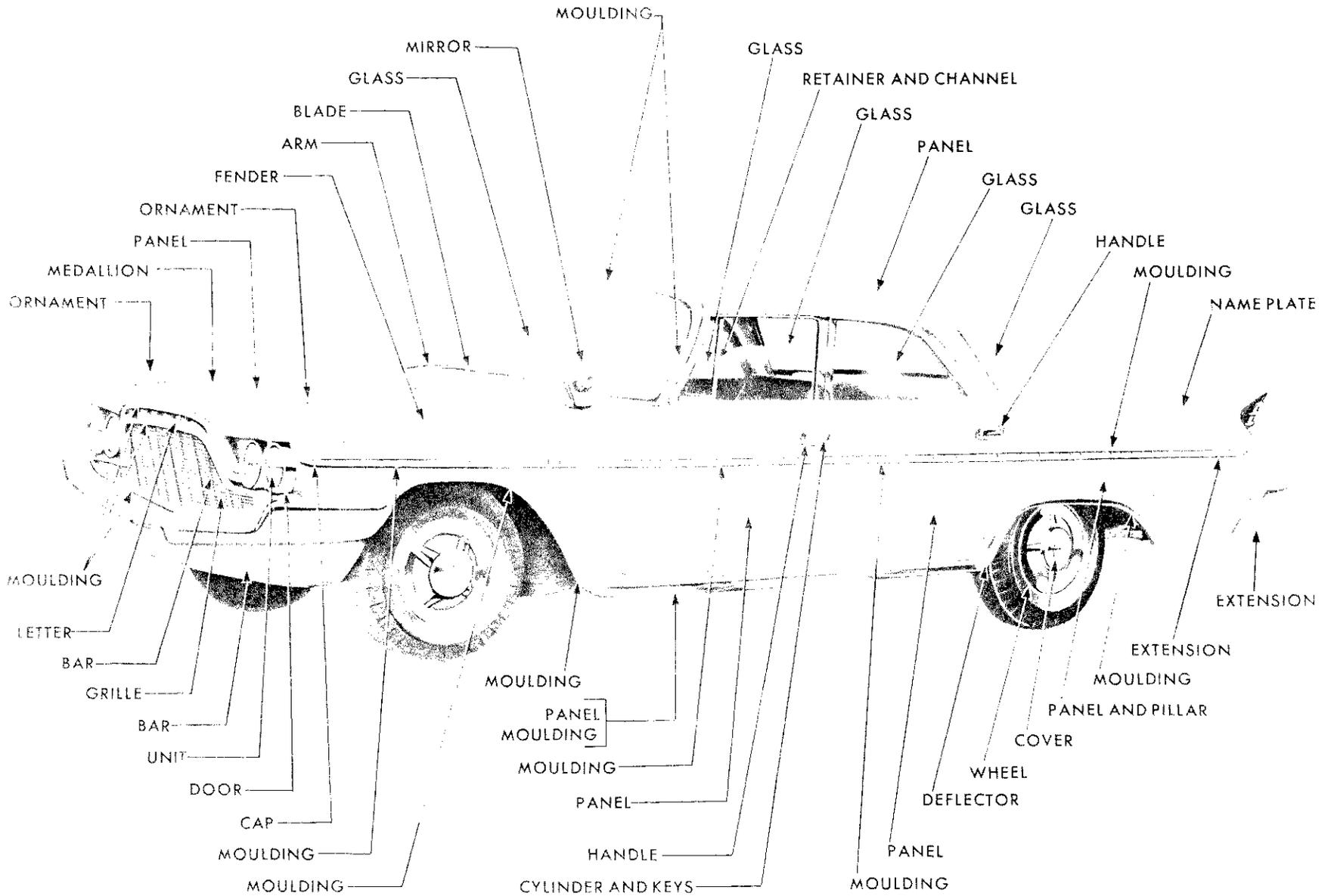
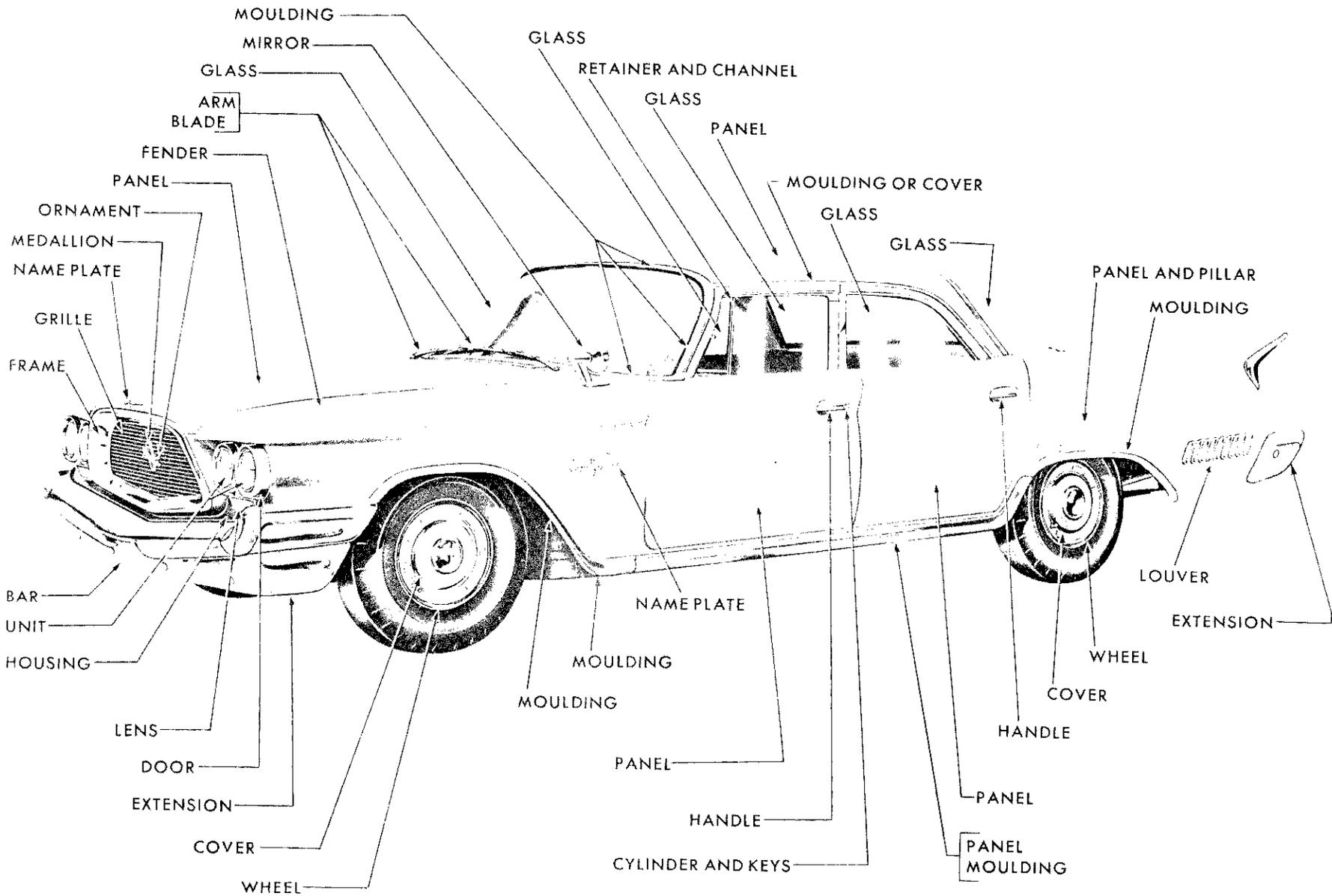


Fig. 9—Frame to Underbody Alignment  
(Saratoga, New Yorker)



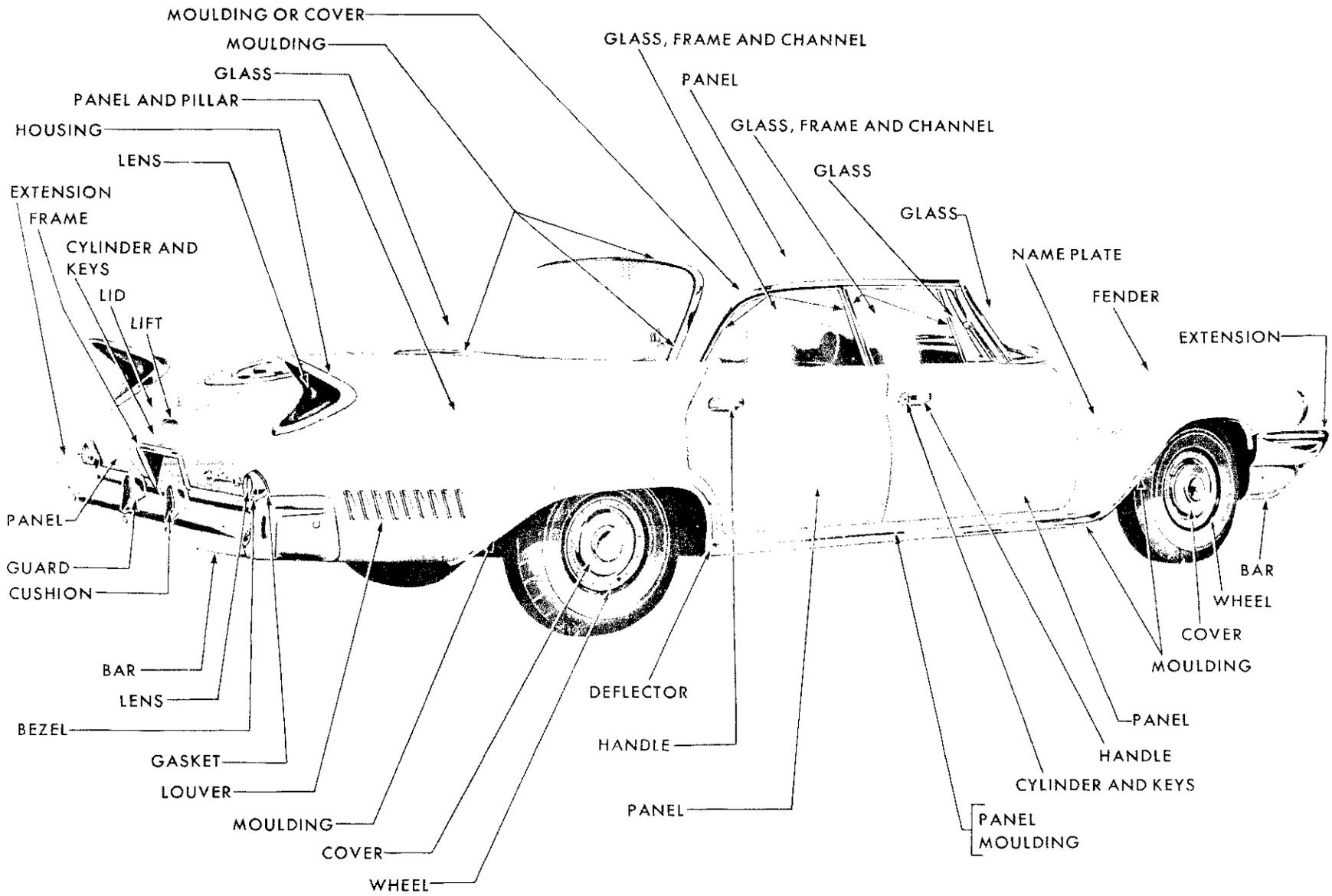
60x1143

Fig. 10—Body Nomenclature (DeSoto)



60x1151

Fig. 11—Body Nomenclature (New Yorker)



60x1152

Fig. 12—Body Nomenclature (New Yorker)

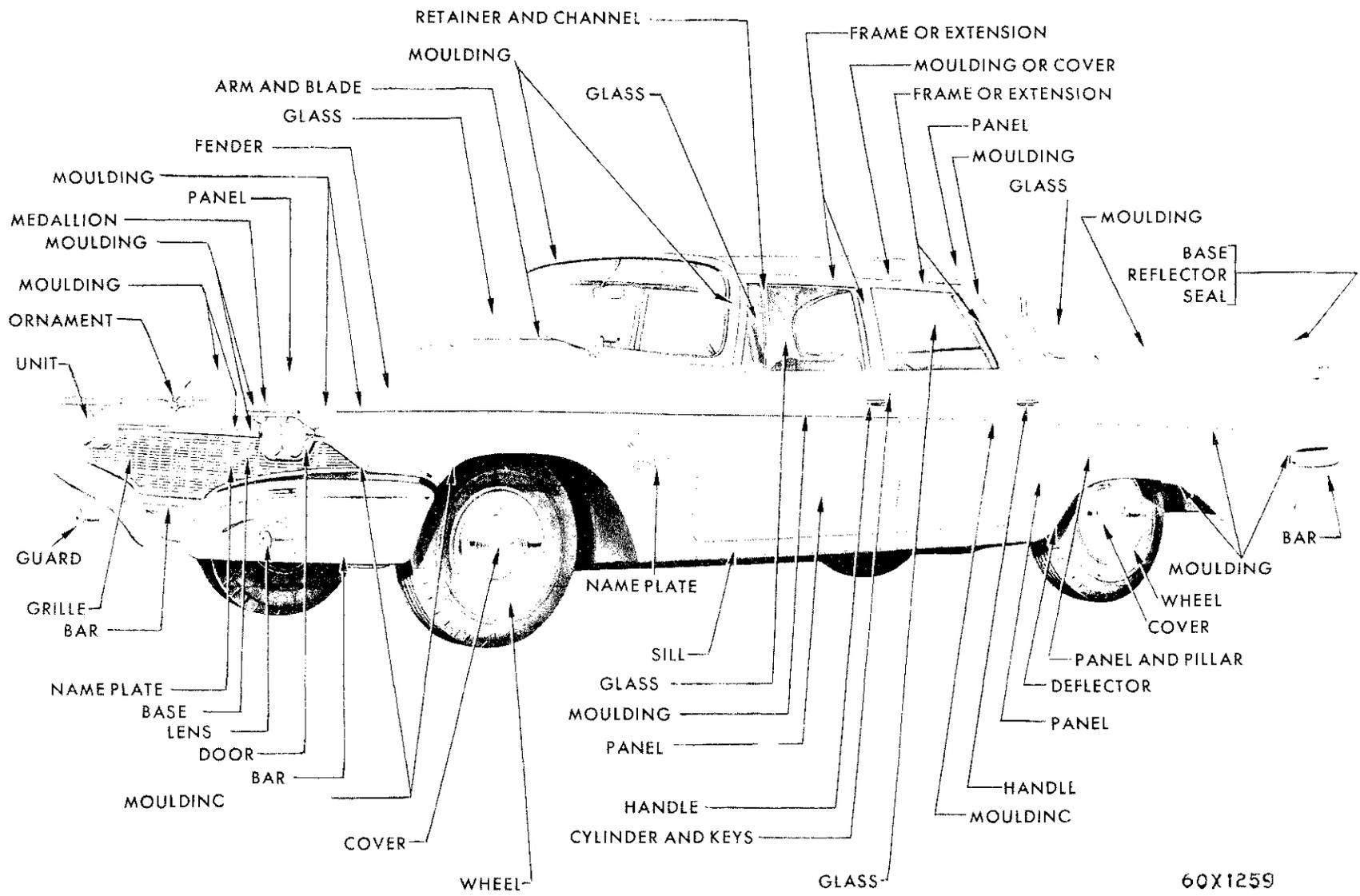


Fig. 13—Body Nomenclature (Imperial)



When two opposite diagonal measurements are not the same, the body should be forced in the direction of the short diagonal. The distance to force that part of the body will be a little more than one half the difference in the two diagonal checking points to compensate for "spring-back".

Door openings are checked in the same manner as the body. Horizontal, vertical, and diagonal checking points are established on all four sides of the door opening that is being measured.

Body bolt inspection and tightening should be performed regularly. Imperial models have 12 body bolts (except the convertible which has 14 bolts). Chrysler and DeSoto models have 10 Unibody to fore structure bolts.

If tightening bolts and screws located on such an assembly as deck lid, doors, hood, radiator support, and front end does not eliminate squeak or rattles, the trouble is probably caused by misalignment and adjustment procedures.

### 31. REPLACEMENT OF BODY PANELS SUB-ASSEMBLIES (ALL MODELS)

**NOTE:** When repairing damaged panels and other body parts, it may be less expensive to replace rather than repair a damaged panel or parts. The decision to replace rather than repair a panel should be based on the cost of replacement (parts plus labor) as against cost of repairs (labor) only. Satisfactory decisions can be derived only by becoming familiar with the various replacement panels and sub-assemblies available.

With proper equipment, an experienced body repair man can repair a damaged area in a body panel by one of three methods:

(1) External or surface damage that can be bumped out or refinished.

(2) External damage that can be repaired by removing a complete panel and installing a service panel.

(3) Extensive damage necessitating the removal of the outer panels and the realignment or replacement of sections of the fore-structure. **When performing repairs of this type, measure sufficient overlap to assure an adequate area for a strong welded surface.**

In cases where only a portion of a panel requires replacement, a section of a service panel can be used. Complete service panels are available if the area is extensively damaged.

If a complete panel requires replacement, refer to Figures 10, 11, 12, 13 and 14, which show some of the hidden weld joints and sealer locations. The following procedure is one of several methods that can be used for cutting out and replacing a portion of the quarter panel.

Rough out and shape as much of the damaged area as possible. Measure the piece of metal to be cut out. This measurement should be taken from a definite point such as a moulding or bead.

Make the corresponding measures on the service panel. Be sure measurements are taken from the same points. Scribe a line around the area to be cut from the service panel.

Drill a  $\frac{1}{4}$  inch hole at any one corner of the scribe line as a starting point for cutting. Use a suitable cutting tool and cut the new piece out along the scribed line.

Straighten the edge of the piece that was cut out, and position it over the damaged area as a template. Secure the cut out section of the service panel over the damaged area of the body, and scribe a line around the panel. Cut out the damaged area.

If the piece to be replaced is at the pillar or at any point where the panel is spotwelded to other parts of the body, such as the body side panels, lower edge or wheel housing assembly, the damaged piece should be split at the weld if possible. To split a spotweld, drive a sharp chisel between the two pieces of metal at the weld. In difficult cases, a spotweld may be broken by drilling a  $\frac{1}{4}$  inch hole into the center of the weld.

Straighten the cut edge of the panel. Fit the service panel portion into the cut out area in the body panel. Be sure that the two panels do not overlap. Tack-weld at intervals, let the metal cool, and make a continuous weld around the two pieces. Wet asbestos putty may be used to prevent the heat from traveling. Weld about 6 inches at a time. Stagger the welds to prevent excessive distortion.

Hammer the weld below the contours of the surface not more than  $\frac{1}{16}$  inch with a grooving dolly.

Metal-finish the repair area and file it smooth, taking care to produce the correct contour.

Grind the welded area, clean, and tin.

Fill in with solder, taking care that sufficient solder is applied so that the final metal finish will not have indentations.

Metal-finish the panel to prepare it for painting.

Although this procedure is used here for quarter panel repairs, it can be applied to other sections of the body as well.

**32. ALIGNING DOORS (ALL MODELS)**

All models are equipped with a newly designed cam and roller type door hinges providing full or intermediate check of door opening with tapped floating hinge plates located behind the hinges in body pillars for the centering or aligning of doors.

(1) Make a thorough inspection of the door before attempting adjustment. A properly fitted door has evenly spaced gaps on all sides.

(2) Test the engagement of the door latch with the striker plate.

(3) If the door raises as the latch passes over the plate, the plate is too high and must be lowered.

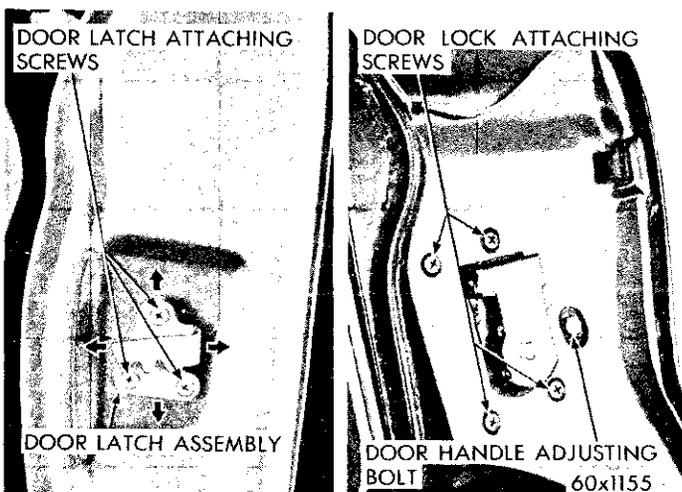
(4) The striker plate, as shown in Figure 15, can be moved "in" or "out" and controls the tightness of the door against the body.

(5) The "up" and "down" adjustment will determine the actual point of engagement between the door lock rotor and the lower portion of the striker plate.

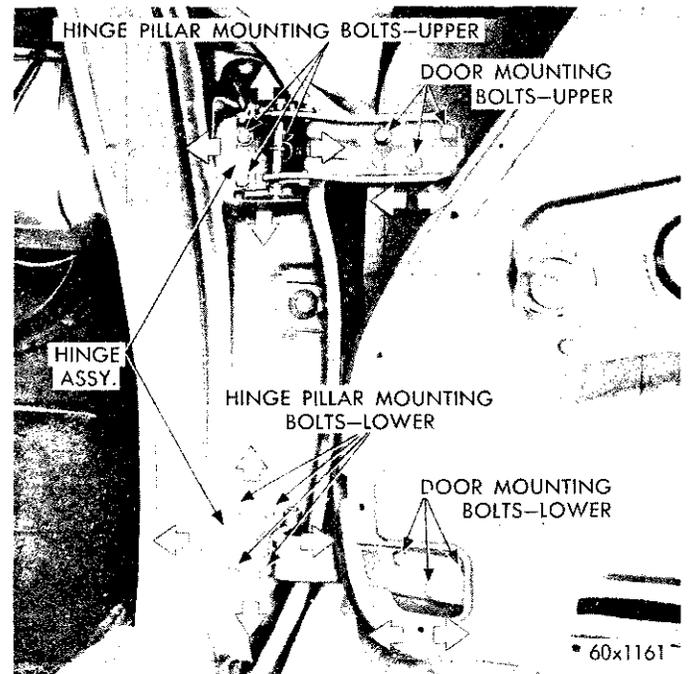
(6) Each hinge is attached to two floating plates, one located at the front pillar and the other at the door panel.

(7) "Up" or "down" adjustment of the door can be made at the front pillar or in the door itself. "Forward" or "Rearward" adjustment can be made only at the door. "In" or "out" adjustment can be made at the front pillar only.

(8) After the door has been fitted properly to the opening, adjust the striker plate as necessary.



**Fig. 15—Door Lock Rotor and Striker Plate Assembly**



**Fig. 16—Front Door Hinge Assembly (Typical)**

**33. TO RAISE OR LOWER DOOR (FRONT DOORS)**

(1) To raise or lower the door, remove the trim panel.

(2) Then, place jack under door as near the hinge as possible. (This will hold the weight of the door as hinge bolts are loosened.)

(3) Scribe a line around the upper and lower hinge.

(4) Loosen the upper and lower hinge bolts, as shown in Figure 16.

The amount of vertical movement in the door is limited; however, the amount of movement can be



**Fig. 17—Checking Seal of Door (Typical)**

determined by the scribed line previously made.

(5) Raise or lower the jack until the desired clearance is obtained then tighten the hinge bolts securely.

(6) Check the scribe lines to make certain the rear portion of the door did not move forward or rearward during above operation.

**34. MOVING THE DOOR FORWARD OR BACK (FRONT DOOR)**

(1) Moving the door forward or back is accomplished by loosening either the upper or lower hinge bolts. (See Fig. 16.)

(2) To move the upper portion of door forward or back (trim panel removed), loosen upper hinge bolts and either pull or push the upper portion of the door in the desired direction.

(3) Tighten hinge bolts and inspect the fit.

(4) When correct, reinstall the door trim panel.

(5) To remove the lower portion of the door forward or back (trim panel removed), loosen lower hinge bolts and either pull or push the lower portion of the door in the desired direction.

(6) Tighten hinge bolts and check the fit.

(7) When correct, reinstall the door trim panel.

**35. FITTING THE FRONT DOOR FLUSH WITH ADJACENT PANELS**

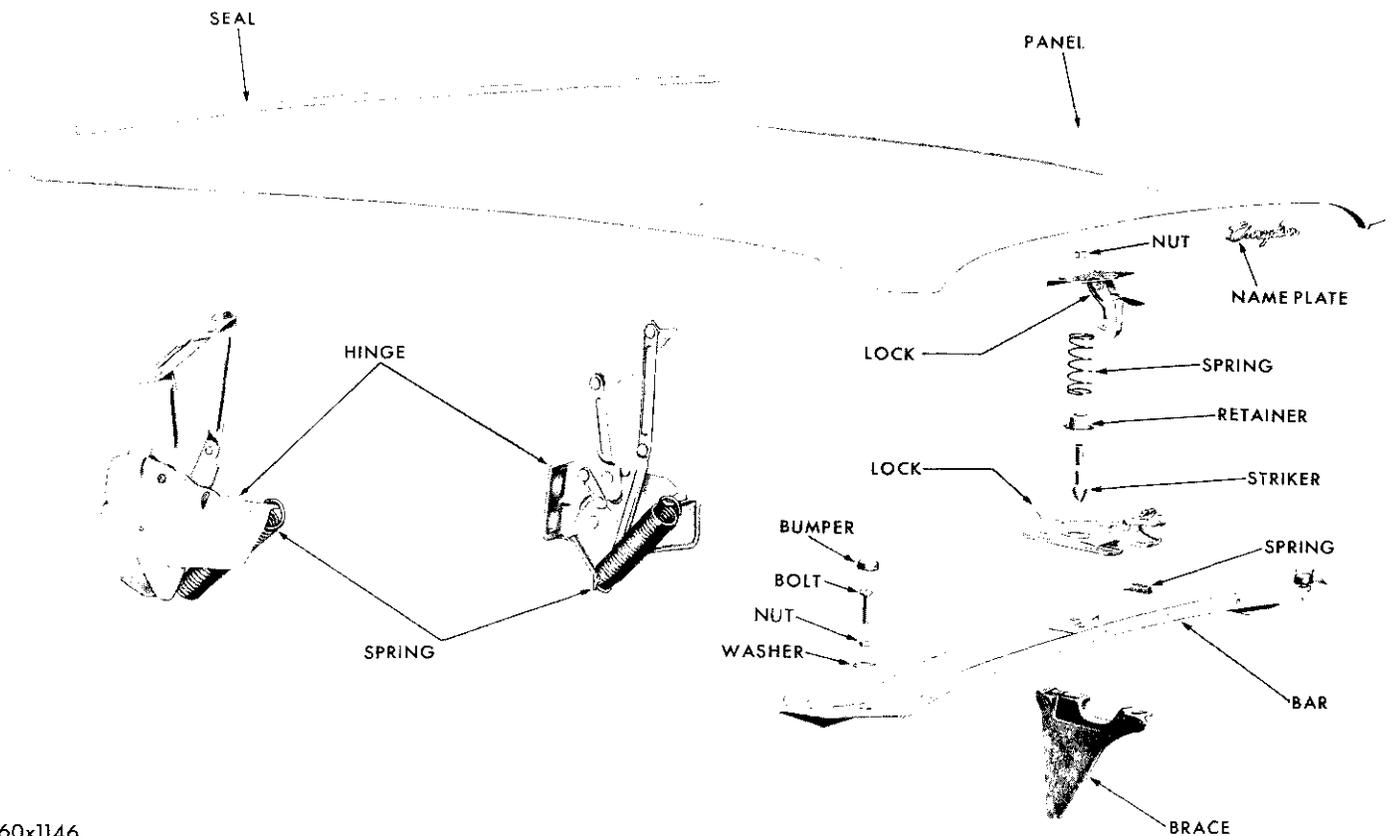
(1) If the door is not flush with adjacent panels, correct by loosening the four hinge bolts (on front door pillar or three hinge bolts on rear door pillar).

(2) It should be remembered that when loosening the upper hinge and pulling "out" or pushing "in" on the front upper corner of the door, the lower corner of the door will be moved inward or outward also. The opposite corners of the door will also be affected in a similar manner when the lower hinge is moved "in" or "out". This applies to both front and back doors.

**36. FINAL DOOR STRIKER PLATE ADJUSTMENT**

(1) After the door has been centered in its opening and all hinge bolts have been tightened to 18 to 20 foot pounds, test the door for easy opening and closing.

(2) To obtain easy operation, move the striker



60x1146

**Fig. 18—Hood Assembly (Exploded View)  
(Chrysler, DeSoto)**

plate in or out, up or down as necessary until easy operation is obtained, and the door fits snugly against the weatherstrip.

(3) Be sure the top surface of the striker plate is parallel with the bottom of the door latch nylon wedge in rotor housing.

(4) The striker plate is properly positioned when the door has a very slight lift as it is closed.

(5) This also prevents door noise when the car is in motion.

(6) If proper adjustment cannot be obtained, the use of shims between the latch plate and pillar should be used.

(7) The shims are available in  $\frac{1}{32}$  and  $\frac{1}{16}$  inch thickness. (The shims are used to bring the latch plate closer to the door for full engagement.)

(8) The door weatherstrip seal can be checked by holding a heavy piece of paper (similar to a shipping tag) against the lock pillar and then closing the door.

(9) A slight drag should be felt as the paper is being pulled out. (Refer to Fig. 17.)

(10) If no drag is felt, move the striker plate in closer.

(11) This paper test should be made all around the door at about six-inch intervals.

(12) If no drag is felt on the paper, make the necessary adjustments to either or both hinge pockets or striker plate.

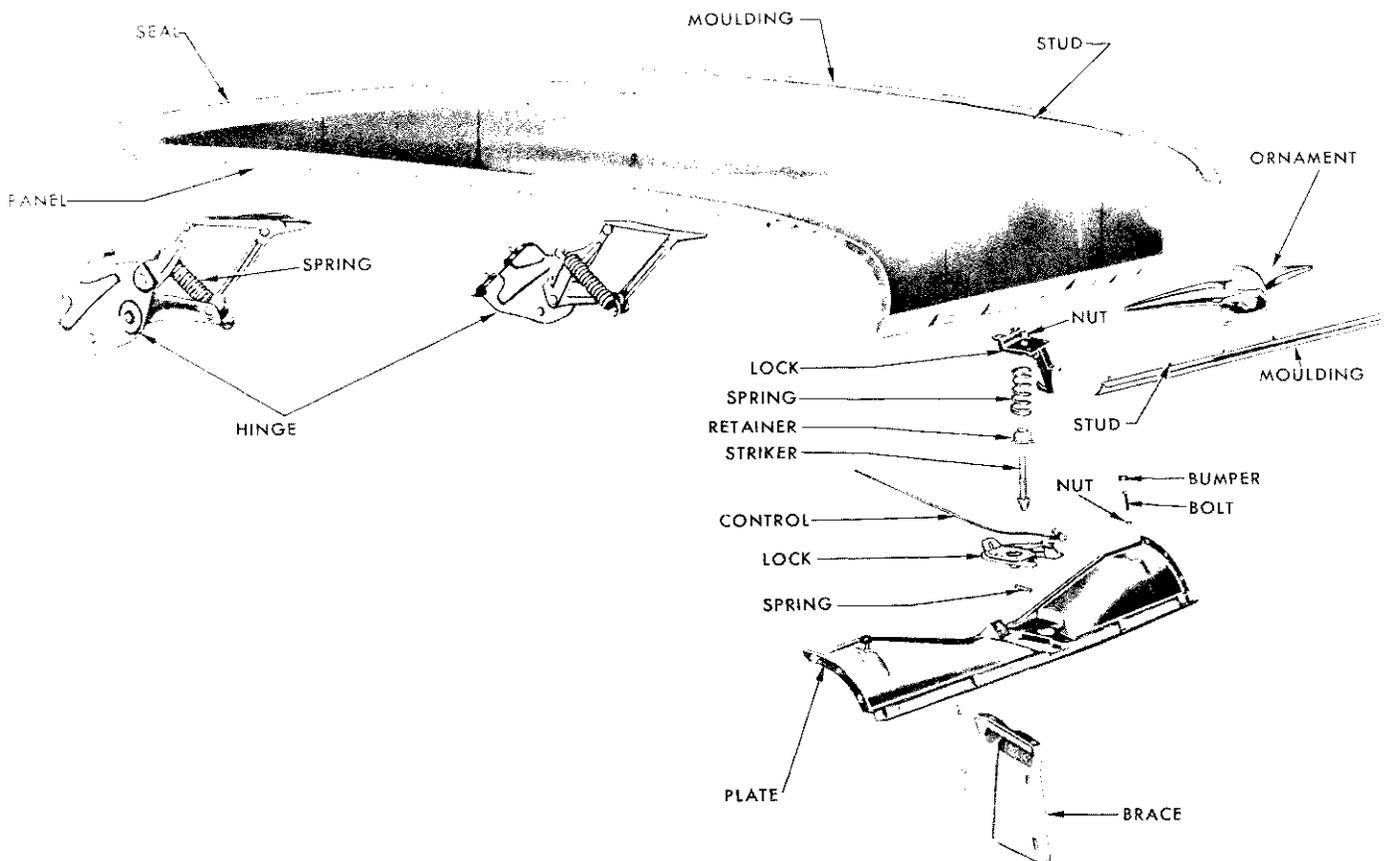
### 37. REAR DOOR ADJUSTMENTS

(1) To move door up or down in body opening or to move door in or out to bring door panel flush with body, proceed as follows:

(2) Loosen the hinge attaching bolts at the rear door hinge ("B") pillar.

(3) Move the door as required to obtain proper fit with door opening.

(4) Tighten the bolts securely.



60x1147

Fig. 19—Hood Assembly (Exploded View) (Imperial)

**38. HOODLOCK, HOOD AND HINGE REMOVAL**  
(Figs. 18 and 19)—(ALL MODELS)

The hoodlock is manually operated by a cable and wire assembly located under the instrument panel in the driver's compartment. To open, pull on the cable knob enough to allow hood to snap up to the safety catch. Push down slightly on hood, then trip the safety catch with the fingers to release the hood.

**a. Adjustment of the Hood Striker and Lock Assembly**

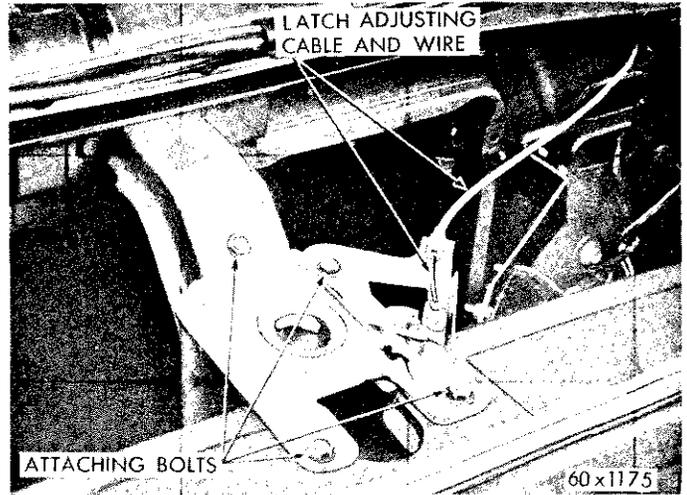
The hood striker assembly is mounted on a plate which is attached to the hood by four bolts, as shown in Figure 20. The bolt holes in the plate are elongated to allow the striker to be adjusted to front and rear. The hoodlock plate is fastened by four bolts, in slightly oversized holes, which allow the lock-plate to be shifted slightly in any direction. The striker stud is threaded at the lock-plate and is secured by a locknut. (See Fig. 20.)

The hood latch assembly (Fig. 21), is attached to the radiator bar and yoke bracket assembly with four attaching bolts. To adjust the control cable and wire assembly the control knob must be pushed all the way in to make sure the latch is in release position before hood latch adjustment is made. Shorten or lengthen wire as the case may be to release or lock hood assembly.

To adjust the striker (to lengthen or shorten) loosen the locknut and turn the striker in or out with a screwdriver until the correct adjustment has been obtained. After making new adjustment that requires a shifting of the hood or fender, always check the hood striker for correct length and the lockplate assembly for alignment.

**b. Removal and Installation of Hood**

Should it become necessary to remove the hood for



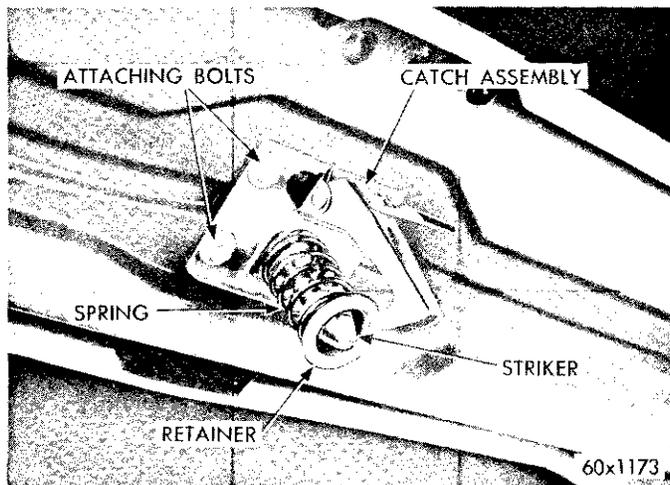
**Fig. 21—Hood Latch and Control Cable Assembly**

engine removal and installation. (Refer to Fig. 22.)

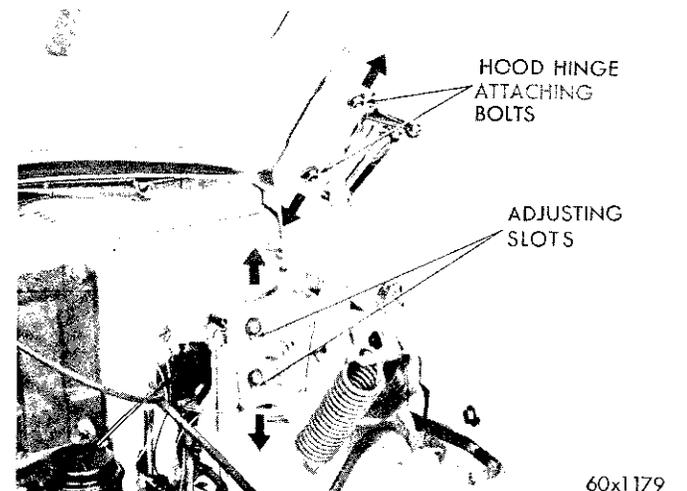
**NOTE:** Before removing the bolts, mark the outline of the hinges on the hood, using a soft pencil or wax crayon. This will aid in the hood alignment when reinstalling.

- (1) Raise the hood and remove the bolts and washers attaching the hood to the hinge arms (both sides). Leave one bolt and washer on each side finger loose.
- (2) Brace the hood in such a manner that the hood will not slide to the rear and damage the painted surface of the cowl or fenders.
- (3) After the hood is braced properly, remove the last two bolts and washers. Lift hood up and away from car.

When installing the hood, the same precautions as taken above, should be followed.



**Fig. 20—Hood Striker Assembly**



**Fig. 22—Hood Hinge Adjustment**

Lift the hood and slide into position, brace securely, then install the attaching bolts and washers. Just snug down. Do not tighten. Align hood with marks previously made, then tighten attaching bolts securely.

#### c. Aligning the Hood

An important thing in the alignment of the hood to fenders is the mounting of the body to frame. Unequal torquing of the body bolts will result in enough body distortion to cause misalignment of hood and fenders.

The upper hinge mounting stud holes are elongated for forward and rearward hood adjustment (Fig. 22). The hood hinge mounting bolt holes in the dash panel are elongated for up or down adjustment of the hood.

#### d. Excessive Space Between Rear Edge of Hood and Cowel Panel

(1) To correct this condition, prop the hood open to relieve tension on the hinge springs.

(2) Loosen the bolts attaching the hood to the hinge plate, move hood rearward until correct spacing has been obtained, then tighten attaching bolts securely and check fit of hood. (Refer to Fig. 22.) When moving the hood forward or rearward, it is suggested that the hood latch adjustment be checked.

**NOTE: Do not remove the prop from under the hood until the hood attaching nuts have been tightened.**

#### e. Hood Binding at Cowel Panel

(1) Prop the hood open to relieve tension on the hinge springs.

(2) Loosen the bolts attaching the hood to the

hinge plate. Move hood forward until correct spacing has been obtained, then tighten attaching bolts securely and check fit of hood. (Refer to Fig. 23.) When moving the hood forward or rearward, it is suggested that the hood latch adjustment be checked.

**NOTE: Do not remove the prop from under the hood until the attaching nuts have been tightened.**

#### f. Unequal Spacing Between Rear of Hood and Fenders

(1) Loosen the four hinge to hood attaching bolts on each side of hood.

(2) Shift the hood (at rear) in the direction of the wide space, until spacing appears to be equal on each side.

(3) Tighten the hinge to hood bolts, lower hood and check for correct fit.

If the spacing is correct on one side but too little or too much on the other side, loosen the bolts attaching hood to hinge and the diagonal strainer on the side to be adjusted. (If the hood needs to be moved out, insert a large screwdriver between the upper hinge plate and the hood flange. Force the hood out as required while holding pressure on screwdriver, tighten bolts securely.

To move the hood in, apply pressure on the outside edge of hood, then tighten bolts securely. Lower hood and check hood for proper fit.

#### g. Hood Projects Beyond Front of Fender

Location is correct at the cowl but the hood projects beyond the front fender and the fender to door spacing is too close. The fender can be moved forward with a standard bumper jack, having a 10½ inch long piece of steel welded to its base.

(1) Loosen the bolts that hold the front fender to the cowl side panel.

(2) Place the extended end of jack against the hinge bracket on the side cowl panel, and the lifting lug of the jack against the upper section of the radiator support.

(3) Extend the jack carefully, checking the clearance between the rear edge of fender and the leading edge of the front door. When the spacing between the door and the fender is correct, tighten the fender to cowl bolts securely.

(4) Remove jack and lower the hood.

#### h. Excessive Space Between Leading Edge of Front Door and Edge of Fender

(1) Loosen the fender to cowl bracket stud nuts and the fender to cowl side panel bolts.



60x1315

Fig. 23—Aligning Hood at Cowel Panel

(2) Install the drawbar by hooking one end of the bar over the hood hinge support bracket on the cowl and the other end over the radiator support.

(3) Tighten the turnbuckle until the fender to door spacing is correct at the front pillar. Also, check to see if the front of the fender is flush with the front of the hood. When the correct fitting has been obtained, tighten the bolts previously loosened and remove tool.

The turnbuckle drawbar referred to above, can be constructed from two  $\frac{5}{8}$ -inch sections of round steel stock, threaded at one end. On the other end, a 90 degree bend about  $2\frac{1}{2}$  inches from the end. Be sure the overall length of the drawbar is enough to reach from the hood hinge support bracket to the radiator support. Install the threaded ends in a turnbuckle.

**i. Front of Hood Higher than Fenders**

If this condition is apparent, check the rear edge of the hood to see if it is low at the cowl or spaced properly. A hood which is too far forward will appear too tight. If the hood to cowl adjustment is correct, check the hood striker and latch assembly. If the striker is shortened the front of the hood will be drawn down. It will be necessary also to adjust the hood bumpers on both sides when adjusting the hood.

(1) Raise the hood and loosen the striker locknut above the striker plate.

(2) Turn the striker clockwise, using a screwdriver. The number of turns will be determined by the amount the hood will have to be brought down, also lower hood bumpers.

(3) Lower the hood and check fit. If the correct

adjustment has been obtained, hold screwdriver in slot in striker then tighten locknut.

**NOTE: Do not adjust the striker too short, as difficulty will be experienced when closing hood.**

**j. Hood Side Contour Does Not Follow Fender**

When the side contour of the hood does not follow the curve of the fender, the hood should be reshaped.

(1) Insert a small block of wood (about 1 inch square) between fender flange and hood, just opposite the low spot on the hood.

(2) Close the hood slowly. With the hands placed just ahead of the block, gently apply pressure to the hood.

(3) Repeat this operation about every six inches until the contour of the fender and hood conform evenly.

**k. Fender Below Level of Hood at Front End**

If the hood has been properly adjusted and one fender is still below the level of the hood at the front, the fender should be raised.

(1) Raise the hood, then loosen the bolts that hold the fender to the radiator support.

(2) Wrap a cloth around lifting lug of service jack and install under front lower corner of the fender.

(3) Raise the jack until the fender is in the correct position. Leave the jack in place and tighten the fender bolts securely.

(4) Lower the jack, close the hood and check the fit.

(5) Adjust hood bumpers as required.

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## WINDSHIELD AND WINDOWS

**39. WINDSHIELD GLASS—(ALL MODELS)**

The windshield and rear window weatherstrip are of the one-piece type with an integral outside locking lip, as shown in Figure 24. The windshield is a single piece of curved glass and is inserted in the glass channel of the weatherstrip. The windshield and weatherstrip are held in the body opening by the pressure of the closed locking lip.

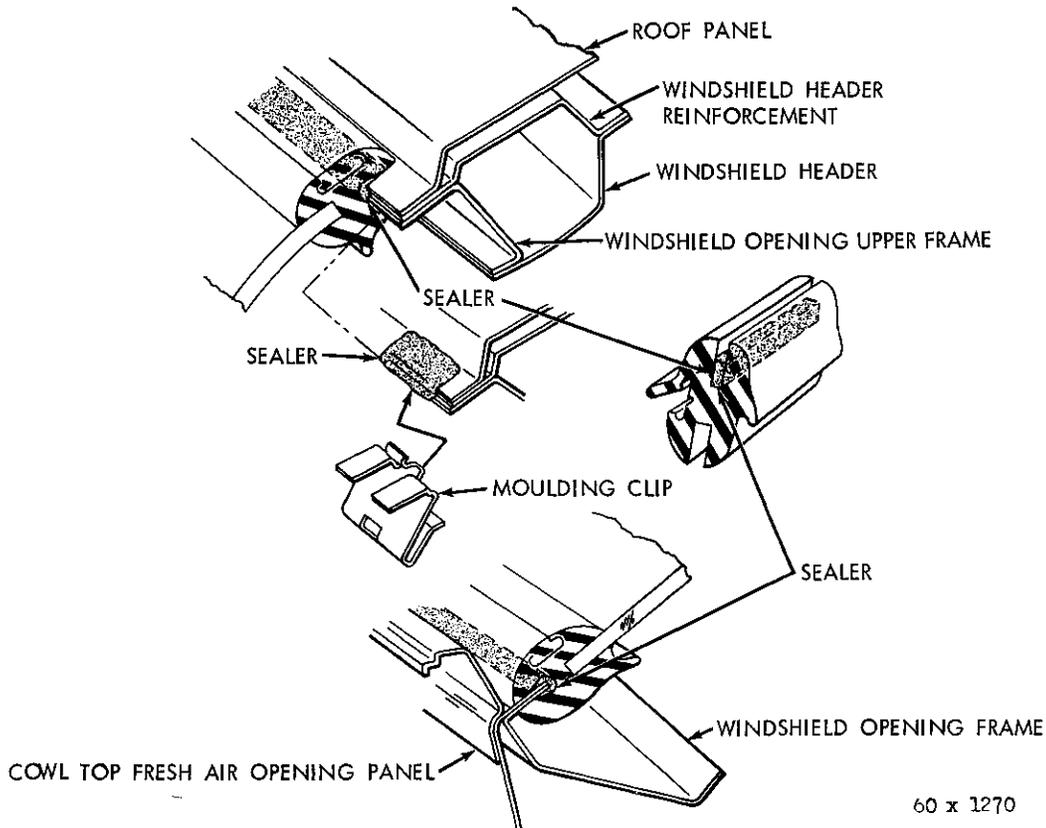
**α. Removal**

(1) Cover the adjacent cowl, hood and fender area with a protective covering.

(2) Remove the inside windshield glass opening garnish mouldings attaching screws and remove mouldings.

(3) Disengage moulding "A" post side moulding

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**Fig. 24—Windshield Weatherstrip Cowl and Roof Panel Sealing**

from upper and lower moulding and remove moulding (Fig. 25), on Imperial models remove attaching screws (Fig. 26).

(4) Remove the "A" post lower chrome moulding attaching screws and remove moulding (Fig. 27).

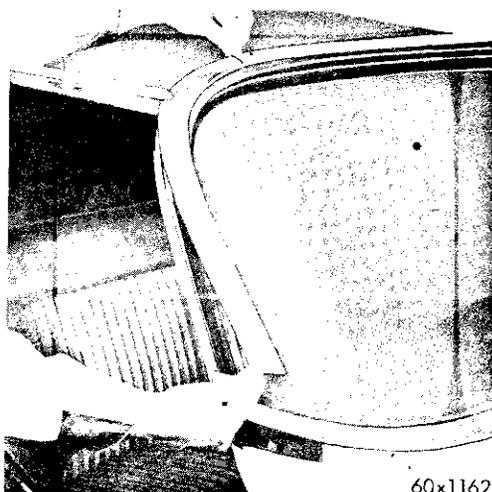
(5) With a suitable tool carefully raise the extreme end of the upper and lower moulding from clips and remove mouldings.

(6) On Imperials remove the upper and lower center clips.

(7) Carefully remove the sealing compound from around the weatherstrip and body opening.

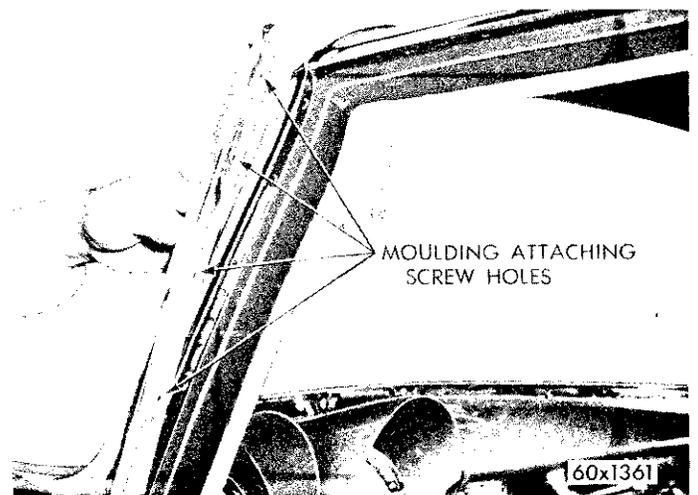
(8) Pry the lip of the weatherstrip apart, insert fibre tool, twist tool slightly to unlock, while moving the tool across the cowl, over the top and around the sides of the weatherstrip to completely unlock the locking strip (Fig. 28).

To unlock windshield locking strip, use a fibre tool, as shown in Figure 28.



60x1162

**Fig. 25—Removing or Installing Side Moulding**



160x1361

**Fig. 26—Removing or Installing "A" Post Side Moulding (Imperial)**

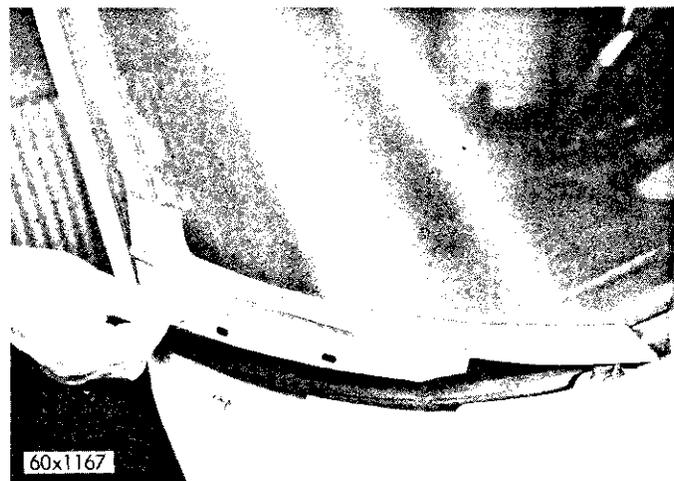


Fig. 27—Removing or Installing Lower Side Moulding

(9) With a helper supporting either end of the windshield, exert pressure to force the windshield out of the weatherstrip and carefully remove the windshield glass from the vehicle.

A windshield which has a crack originating from under the weatherstrip indicates the possibility of a pressure crack. Before installing a new windshield, it is advisable to inspect the windshield fence and opening clearances. The weatherstrip fence can be straightened and the opening clearances can be checked as follows:

(1) Remove the windshield weatherstrip.

(2) Install the glass in the opening with six four-inch long pieces of weatherstrip, as shown in Figure 29. (This is enough to support the windshield in place.)

(3) Check the clearance between glass and fence. A properly centered glass has  $\frac{21}{64}$  to  $\frac{33}{64}$  inch clearance on all sides, and  $\frac{1}{8}$  to  $\frac{1}{4}$  inch distance between

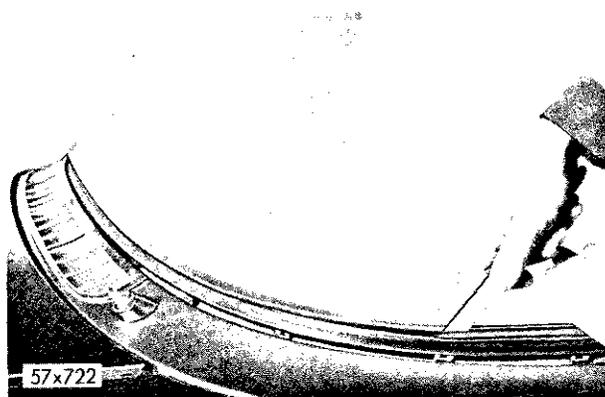
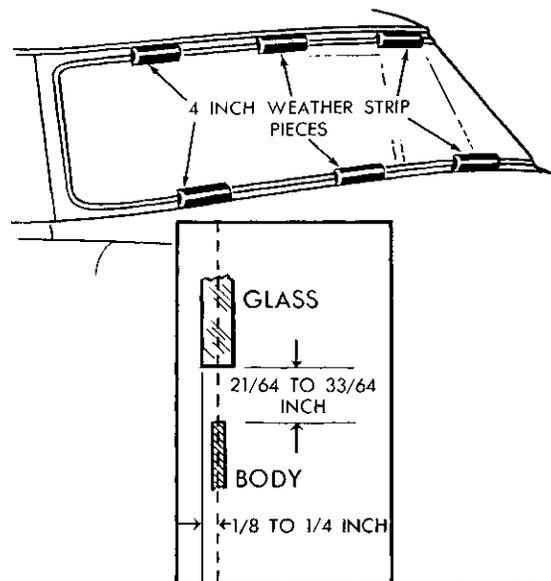


Fig. 28—Unlocking Windshield Weatherstrip (Typical)



56 x 515

Fig. 29—Checking Windshield Clearances

the outer edge of the glass and the centerline of the fence, as shown in Figure 29.

Any spot on the body that varies should be reworked by either grinding away fence or straightening the openings.

**b. Installation**

(1) Check the moulding retaining clips around windshield opening (Fig. 30).

(2) Apply a generous coating of sealing compound to the body fence and to the lip of the weatherstrip where it contacts the opening frame; completely around the weatherstrip.

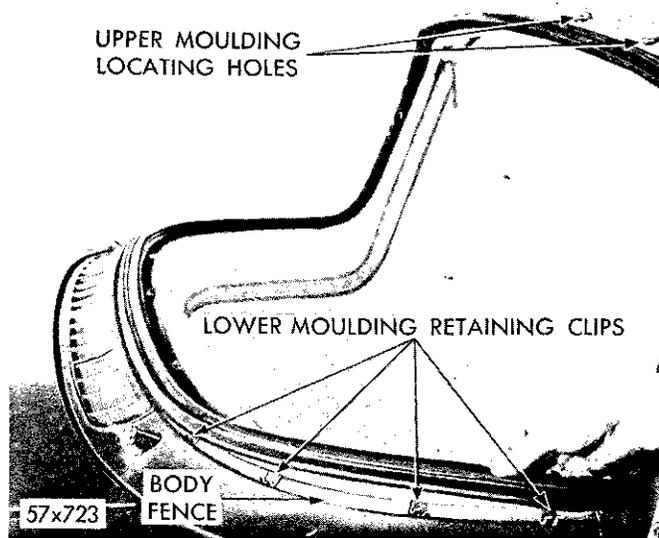


Fig. 30—Windshield Weatherstrip and Moulding—Sides (Imperial)

(3) It is advisable to inspect and seal the seam joint between the roof panel and windshield opening fence.

(4) Form a ball of sealing compound and place it in each moulding retaining clip bolt holes.

(5) When installing the mouldings, press the retaining clip bolts through the balls of the sealing compound.

(6) Use black weatherstrip cement to seal between the windshield glass and the weatherstrip (Fig. 31).

(7) Insert the nozzle of dispensing gun about  $\frac{1}{8}$  inch between the glass and weatherstrip.

(8) Apply a bead of cement between the glass and weatherstrip.

(9) Apply about three feet at a time, clean the excess off with a cloth moistened with solvent.

(10) Place glass in position across cowl.

(11) Slide upper edge of glass into channel of weatherstrip.

(12) Pound the glass with the palm of the hand, using an upward motion, until glass is fully seated in channel of weatherstrip at top, bottom and sides of glass.

After properly seating glass in weatherstrip, strip in glass with a wedge-shaped tool of hardwood or fibre (Fig. 32) inserted between the weatherstrip and glass at either corner to strip glass into weatherstrip. Slide the tool across the top, bottom, and around the sides of the weatherstrip to properly seat glass in place (Fig. 32).

**NOTE:** Always work the tool across the top down each side and over the bottom.

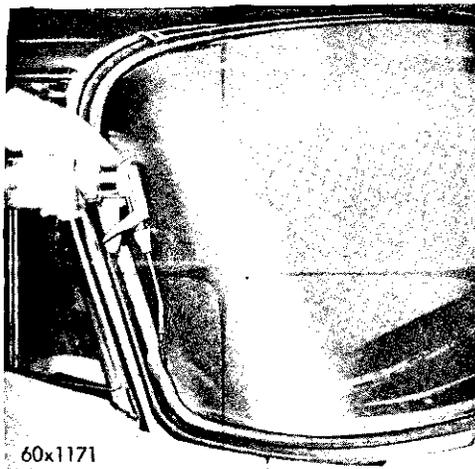


Fig. 31—Sealing Windshield Weatherstrip

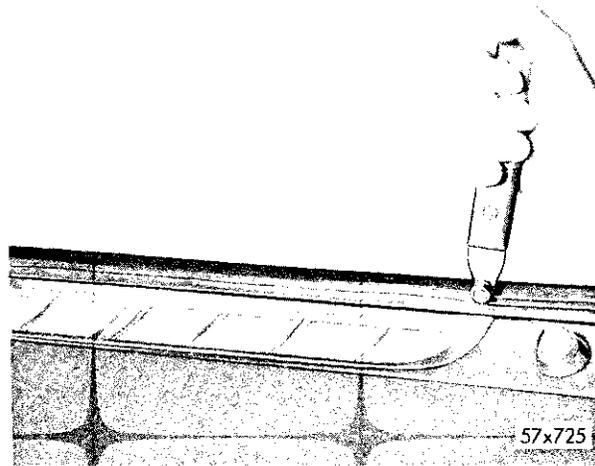


Fig. 32—Stripping Glass into Weatherstrip (Typical)

(13) Seal the rear edge of weatherstrip all around glass opening.

(14) Align and install the upper windshield chrome moulding over the top of windshield; on Imperial models only, make sure to exert sufficient pressure on center of moulding to force moulding all the way down on clips (Fig. 33).

(15) Align and install the lower center chrome moulding.

(16) Install the lower cowl side mouldings and attaching screws. Be sure the lower cowl side mouldings overlap lower moulding to insure proper installation.

(17) Slide the door hinge pillar ("A" post) lower side mouldings into position with the lower end overlapping the cowl moulding upper end of side mould-

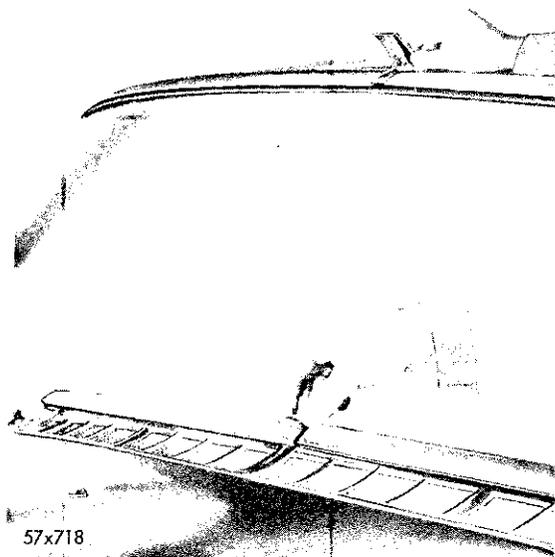
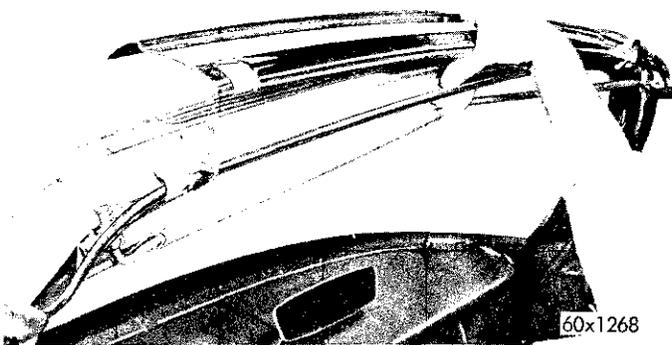


Fig. 33—Removing or Installing Upper and Lower Moulding Clips (Imperial Models)



**Fig. 34—Removing or Installing Windshield Header Moulding (Convertible Coupe)**

ing into position overlapping the upper moulding. Install the screws and tighten securely.

(18) On Imperial models, install upper and lower center clips (Fig. 33).

(19) Install the windshield wiper arms and blades, then tighten the windshield garnish moulding attaching screws securely.

(20) Clean the windshield, using a suitable solvent, then test for water leaks.

#### 40. CONVERTIBLE WINDSHIELD GLASS

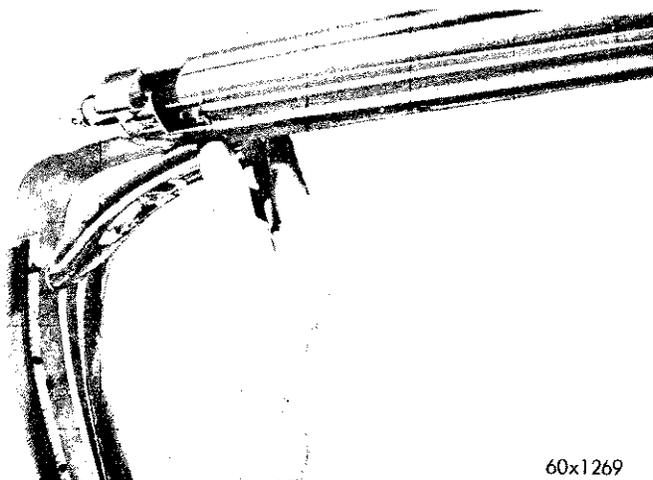
##### a. Removal

(1) Cover up the adjacent cowl, hood and fender area with protective covering.

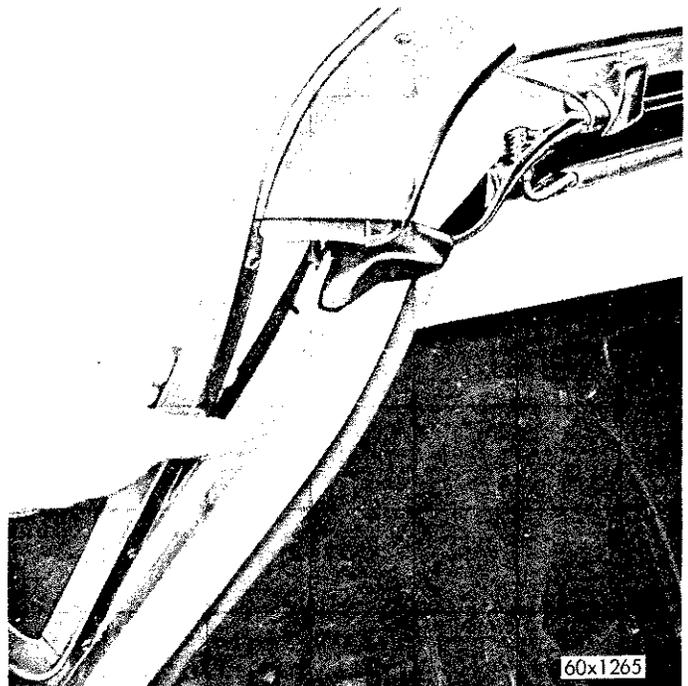
(2) Release the top locking mechanism and push the top header from the windshield frame to expose screws holding moulding.

(3) Remove the windshield wiper arms and blades.

(4) Remove the upper header moulding, attaching screws and remove moulding.



**Fig. 35—Removing or Installing "A" Post Inner Side Moulding (Convertible Coupe)**



**Fig. 36—Removing or Installing "A" Post Outer Side Moulding**

(5) Pry the header moulding up slightly to clear the moulding from the weatherstrip then disengage from the header and remove, as shown in Figure 34.

(6) Remove the screws attaching inner and outer side "A" post side mouldings (Figs. 35 and 36).

(7) Remove the sun visors.

(8) Remove the screws attaching the header trim cap to header.

(9) Remove the windshield glass as indicated in Paragraph 39 (a).

##### b. Installation

Install the windshield on the convertible in the same manner as described in Paragraph 39 (b), Windshield Glass Installation, then continue as follows:

(1) Slide the header cap moulding up against weatherstrip.

(2) Force the moulding against the weatherstrip, then press the rear edge down over the header.

(3) Install the screws to hold in position, then tap lightly with a rubber hammer to seat. (Be sure the cap is evenly spaced across header.)

(4) Install the screws and tighten securely.

(5) Install the inner and outer trim mouldings. (Refer to Figs. 35 and 36.)

(6) Press tightly against weatherstrip, engage



**Fig. 37—Removing or Installing Upper Side Rear Window Moulding (Typical)**

with the header, and lower moulding, then press down over door hinge pillar ("A" post) and install retaining screws.

(7) Seal the windshield as outlined in Paragraph 39, Steps 6 and 8.

(8) Install the sun visor wiper arms. Test for leaks and clean the windshield.

**41. REAR WINDOW GLASS**

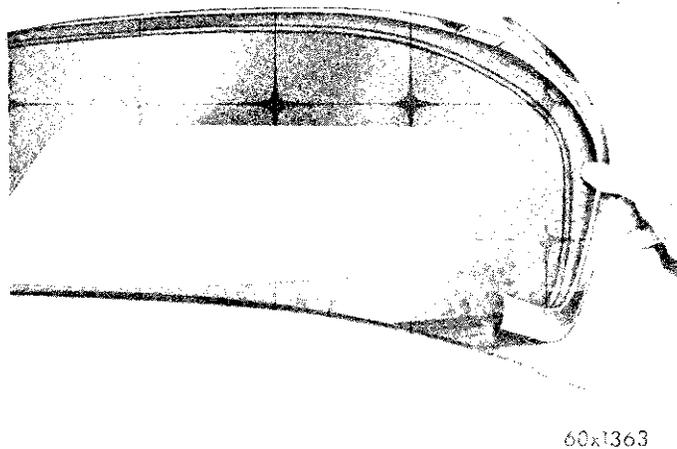
**a. Removal**

(1) Cover the rear deck, rear window and quarter panel areas with protective covering.

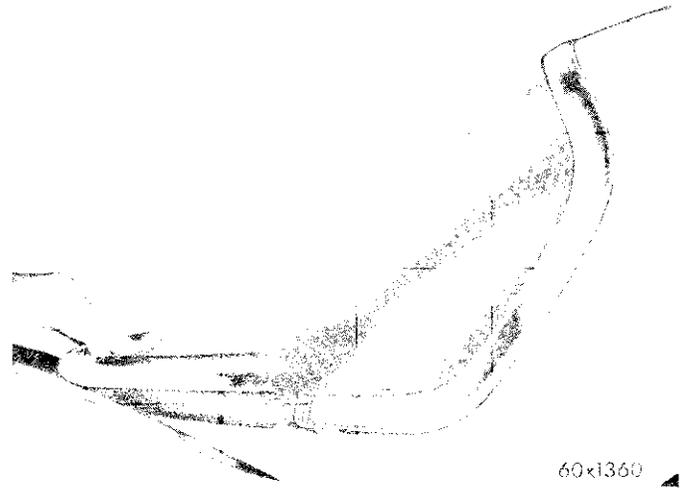
(2) Remove the upper, lower, and center mouldings retaining clips.

(3) Remove the side, upper, lower and center weatherstrip mouldings (Figs. 37, 38, 39, and 40).

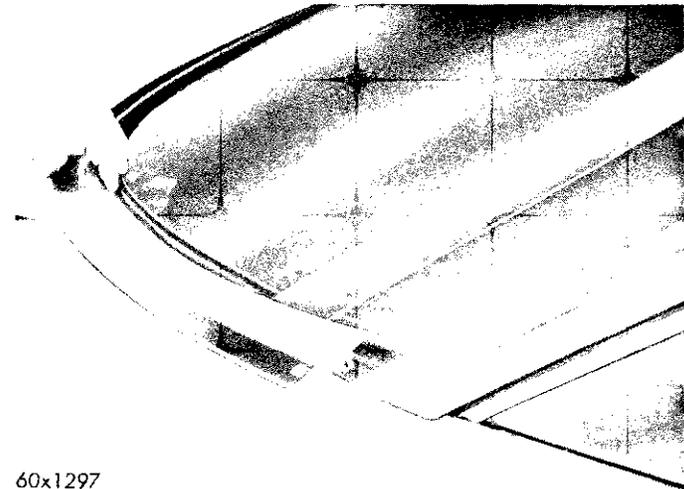
(4) Use a fibre wedge to unlock weatherstrip.



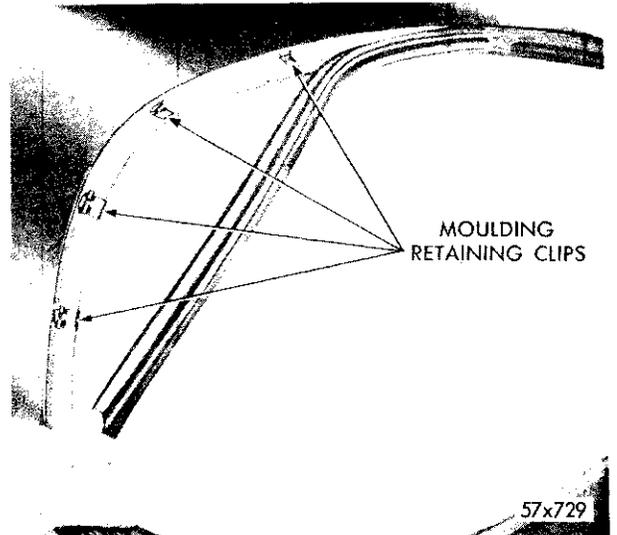
**Fig. 38—Removing or Installing Lower Rear Window Side Mouldings (Imperial)**



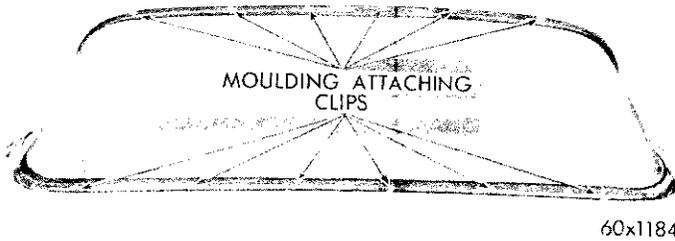
**Fig. 39—Removing or Installing Lower Rear Window Moulding (Imperial)**



**Fig. 40—Removing or Installing Lower Rear Window Lower Moulding (Chrysler, DeSoto)**



**Fig. 41—Positioning Moulding Retaining Clips (Imperial)**



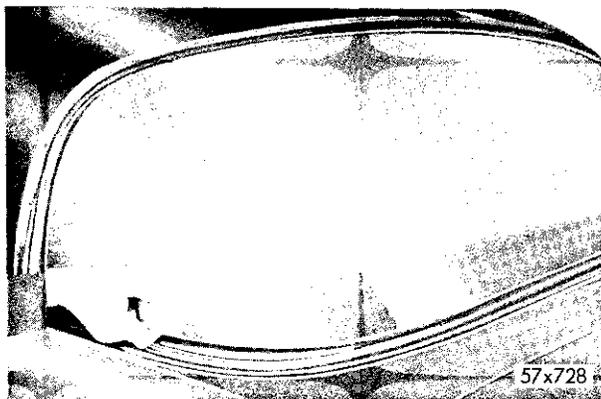
**Fig. 42—Moulding Attaching Clips (Typical)**

After unlocking the weatherstrip, slide the tool up and completely around the weatherstrip, to unlock the lip.

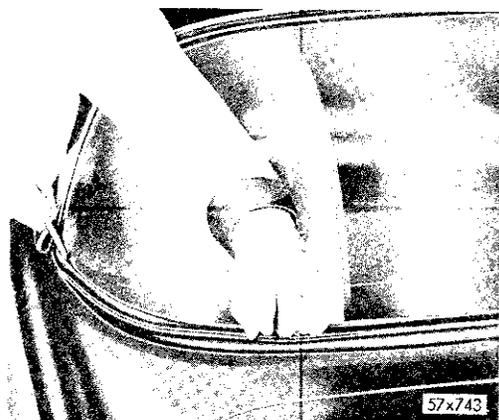
Releasing the locking lip will allow the rear window glass to be removed without disturbing the weatherstrip.

(5) Remove the glass by pushing on the glass from the inside.

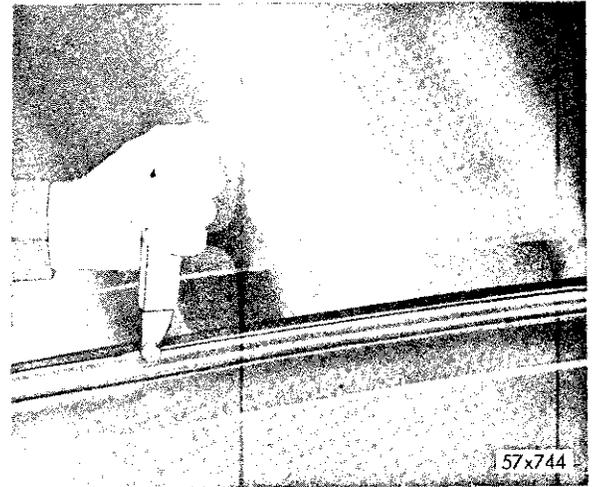
(6) Use of gloves will protect the hands against possible sharp edges.



**Fig. 43—Removing or Installing Rear Glass**



**Fig. 44—Stripping Rear Glass in Body (Imperial)**



**Fig. 45—Locking in Rear Glass**

**b. Installation**

(1) Inspect and reposition moulding retaining clips (Figs. 41 and 42).

(2) Apply weatherstrip adhesive in the glass groove.

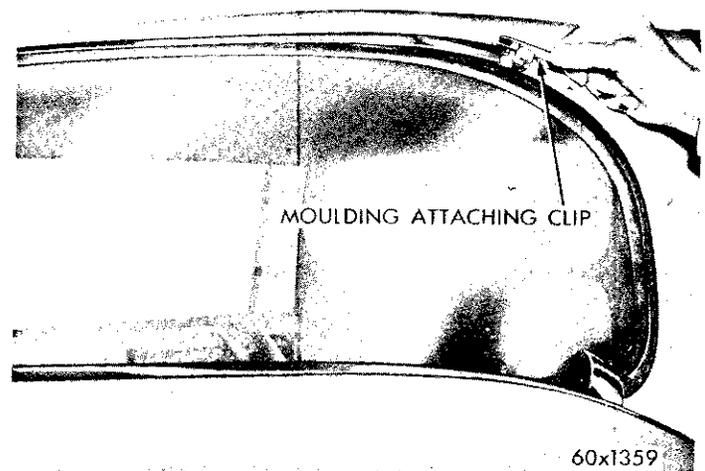
(3) Position the glass at the lower outside corners, as shown in Figure 43.

(4) Work the lip of the weatherstrip over the glass along the lower edge.

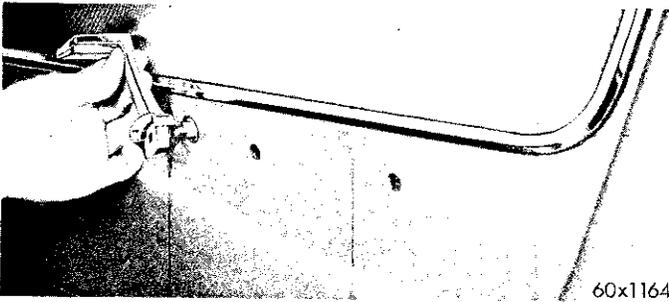
(5) After the glass is entered along the top and the lower corners, work the lip of the weatherstrip over the lower edge of the glass, as shown in Figure 44.

Make sure the glass is properly seated by tapping the glass with palm of hand. Do not use a rubber mallet when installing rear window glass.

(6) Lay a bead of sealer in the glass groove all around the rear window.



**Fig. 46—Removing or Installing Upper Rear Window Moulding Clip (Imperial)**



60x1164

**Fig. 47—Removing or Installing Remote Control Handle**

(7) Moisten the edge of the locking strip with water.

(8) Starting at the center of the upper edge, lock the top edge and the sides. Lock the lower edge last. See Figure 45.

(9) Install the upper, lower, and side mouldings.

(10) Install the upper and lower center moulding clips (Fig. 46) the side moulding caps and check rear window glass for water leaks.

#### 42. GLASS RUN CHANNEL

##### a. Removal

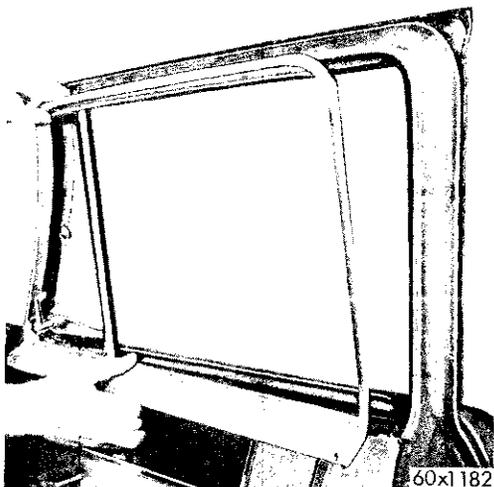
(1) Remove the garnish moulding, arm rest, and remote control handle (Figs. 47 and 48).

(2) Remove trim panel (Fig. 49) and water curtain.

(3) Lower the glass and pull the glass run channel free at the top (Fig. 50).

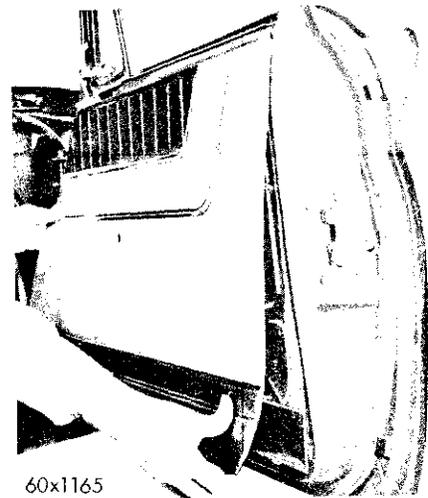
(4) Pull the glass run channel up until the upper and lower clips are disengaged.

(5) Remove the glass run channel from the door.



60x1182

**Fig. 48—Removing Garnish Moulding (Typical)**



60x1165

**Fig. 49—Removing or Installing Trim Panel**

##### b. Installation

(1) To install the glass run channel, first lower the glass.

(2) Slide the channel down and engage the upper and lower clips (Fig. 50).

(3) Push the channel down. Install the upper portion of the channel.

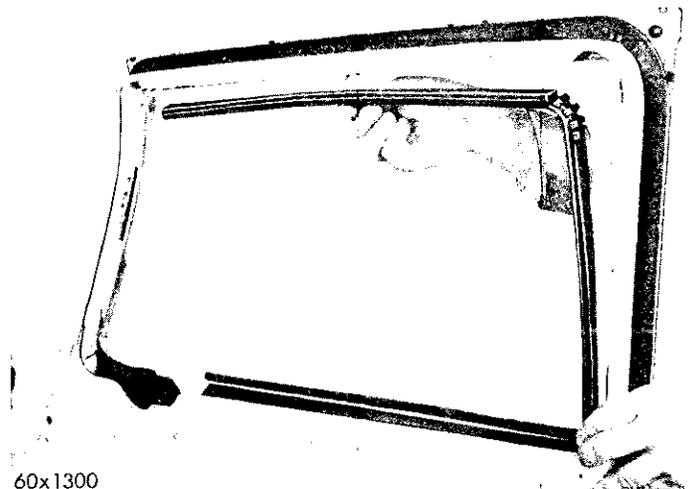
(4) Install trim panel, hardware, and garnish moulding.

(5) Check glass for non-binding when raised or lowered.

#### 43. FRONT DOOR GLASS

##### a. Removal

(1) Remove the garnish moulding arm rest and remote control handles (Figs. 47 and 48).



60x1300

**Fig. 50—Removing and Installing Glass Run Channel (Typical)**

(2) Remove trim panel (Fig. 49) and water curtain.

(3) Lower the glass and remove the upper travel stop.

(4) Raise the door glass and remove glass from regulator arm retainers and door opening, as shown in Figure 51.

If the glass is to be replaced:

Remove the door glass lower channel and seal from the glass by driving them off with a block of hardwood and a mallet.

On models with the two arm regulators it will be necessary to remove the lower stop and crank the window down to release it from the lower channel. Pull the glass up and out of the door.

**b. Installation**

When installing the channel on a new glass, make certain it is correctly positioned on the glass before driving the channel in place.

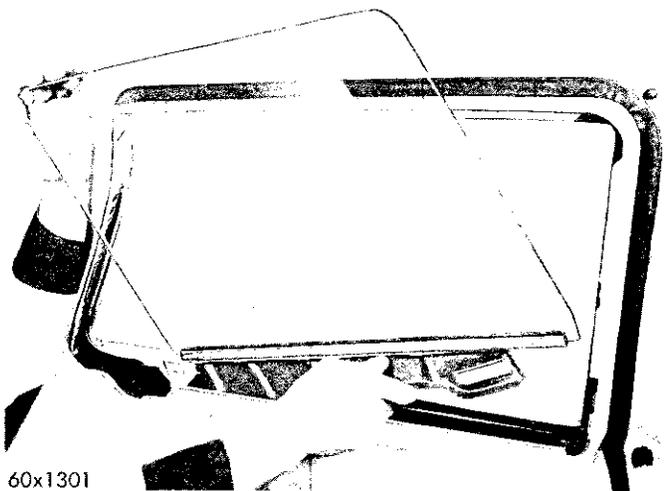
(1) Lower glass in door and install regulator arms, retainers and clips.

(2) Make sure glass is positioned in glass rear channel.

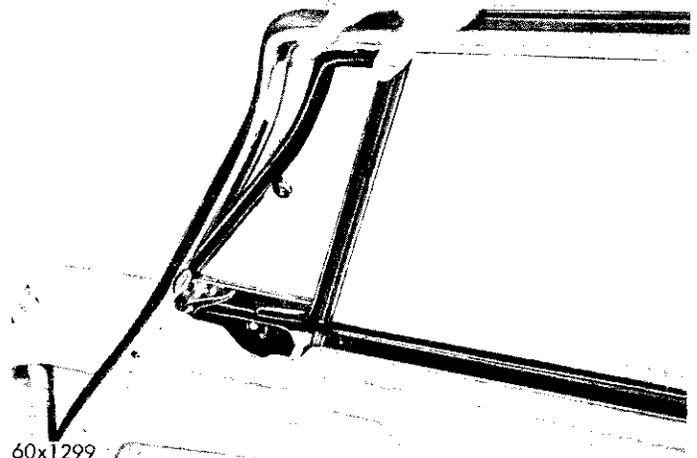
(3) Lower and raise glass and check for proper operation.

(4) Install trim panel, door to hardware and garnish moulding.

(5) After installation of the glass is completed, adjust the glass channel and the divisional bar so that window does not bind when raised or lowered.



**Fig. 51—Removal and Installation of Front Door Glass (Typical)**



**Fig. 52—Removing or Installing Window Ventilator**

**44. REAR DOOR GLASS (FOUR DOOR SEDAN)**

**a. Removal**

(1) Remove the garnish moulding and remote control handles.

(2) Remove trim panels and water curtain.

(3) Roll the glass down and pull the glass run channel out at the top.

(4) Roll the glass up and disconnect the regulator arm from channel and remove the glass.

(5) Remove the glass run channel. If the glass is to be replaced, drive the lower channel and seal off of the glass with a hardwood block and mallet.

**b. Installation**

(1) Position seal and channel on the glass and drive channel into place.

(2) Connect the regulator arm to glass channel.

(3) Roll the window part way down.

(4) Install the glass run channel.

(5) Test the sliding action of the glass.

(6) If the glass binds, adjust the glass run channel and the division bar so that the window does not bind when the window is raised or lowered.

(7) Install the trim panel, door hardware and garnish moulding.

**45. FRONT DOOR VENTILATOR (FOUR DOOR SEDAN)**

**a. Removal**

(1) Remove the garnish moulding, arm rest and remote control handles, Figures 47 and 48.

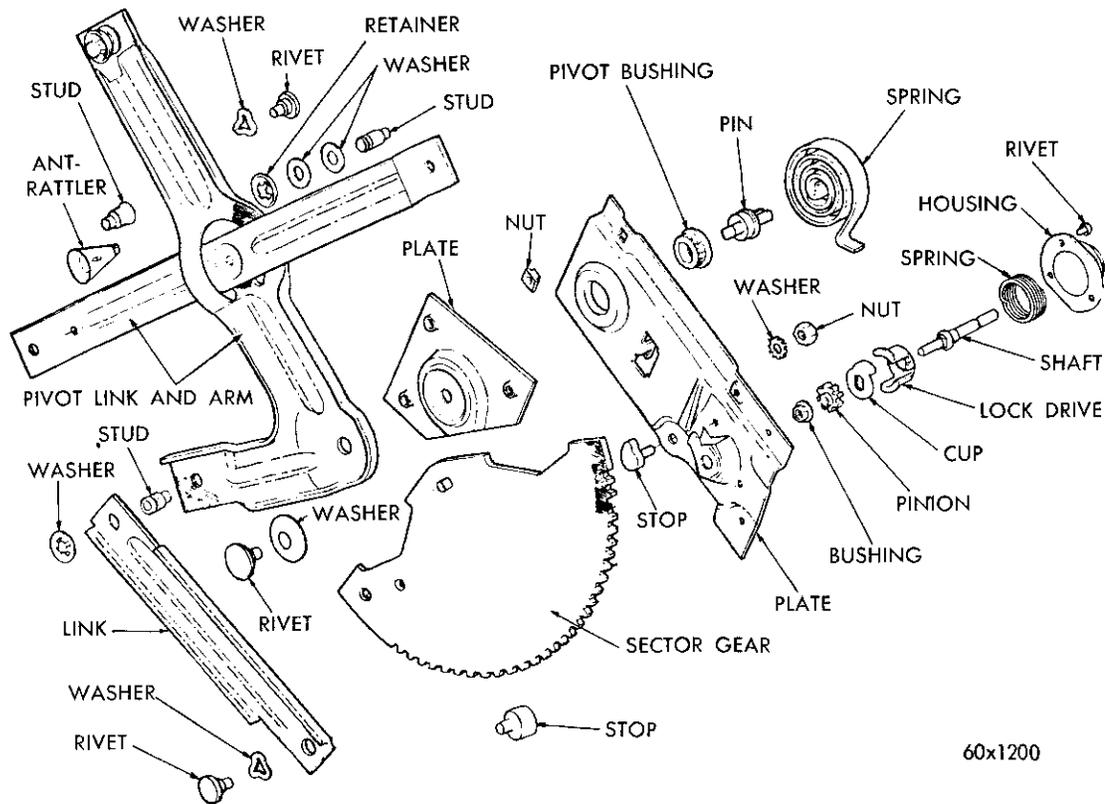


Fig. 53—Window Glass Regulator Front (Exploded View)

60x1200

- (2) Remove trim panel (Fig. 49) and water curtain.
- (3) Remove the center bar and adjusting screw. Remove the ventilator attaching screws.
- (4) Lower door glass and remove ventilator assembly (Fig. 52).

**b. Installation**

- (1) Install ventilator assembly and tighten attaching screws.
- (2) Adjust anchor screw for proper operation of ventilator and seal.
- (3) Install trim panel, door hardware and garnish moulding.

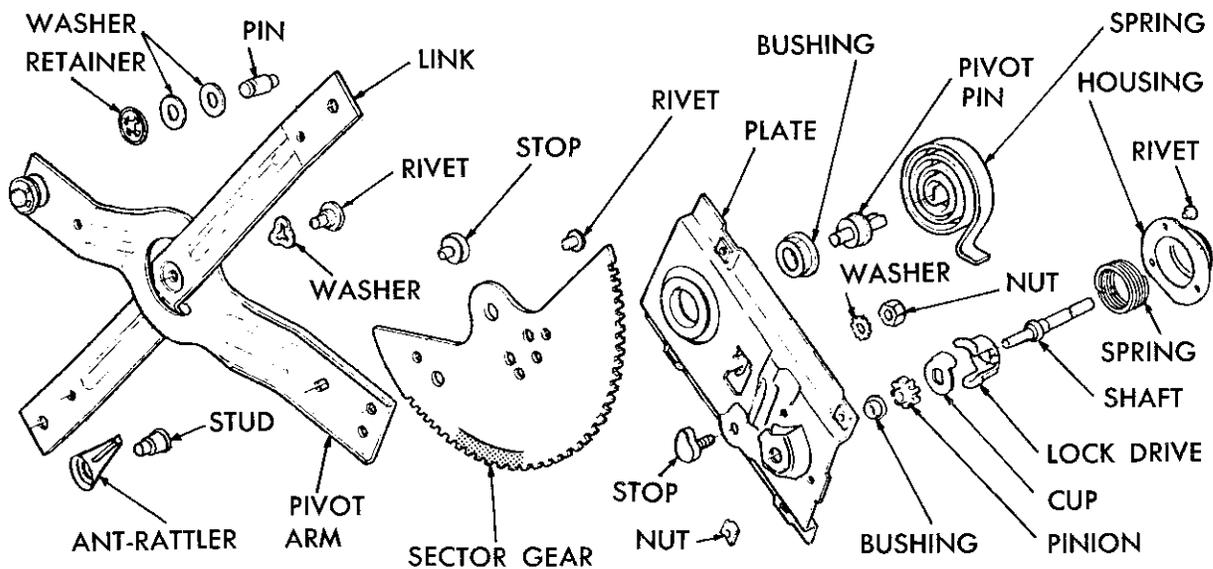


Fig. 54—Rear Door Window Regulator (Exploded View) (DeSoto, Chrysler)

60x1201

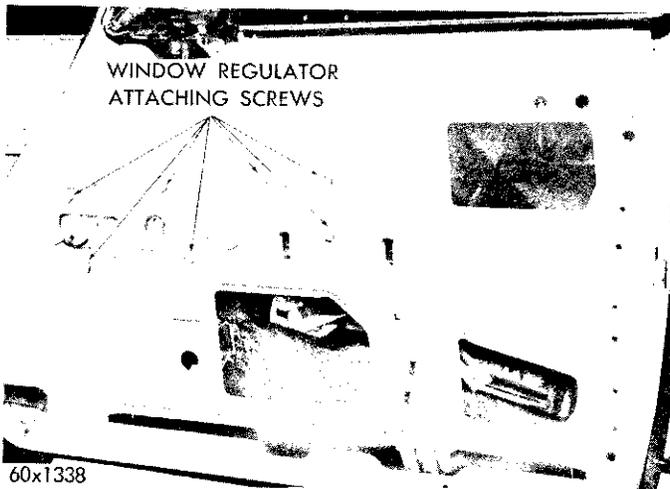


Fig. 55—Window Regulator Attaching Screws

**46. FRONT AND REAR DOOR WINDOW REGULATOR (Fig. 53 and 54)**

**a. Removal**

- (1) Remove the garnish moulding, arm rest and remote control handles.
- (2) Remove trim panel and water curtain.
- (3) Raise the door glass and remove glass from regulator.
- (4) Remove the regulator attaching screws (Fig. 55) and remove the regulator (Figs. 56 or 57) and pivot links (Fig. 58) through the door opening.

**b. Installation**

- (1) Install pivot link and regulator assembly (Figs. 56 or 58).
- (2) After installing the regulator, turn handle so that arm is in the raised position.



Fig. 56—Removing or Installing Front Window Glass Regulator Assembly (Manual) (DeSoto, Chrysler)

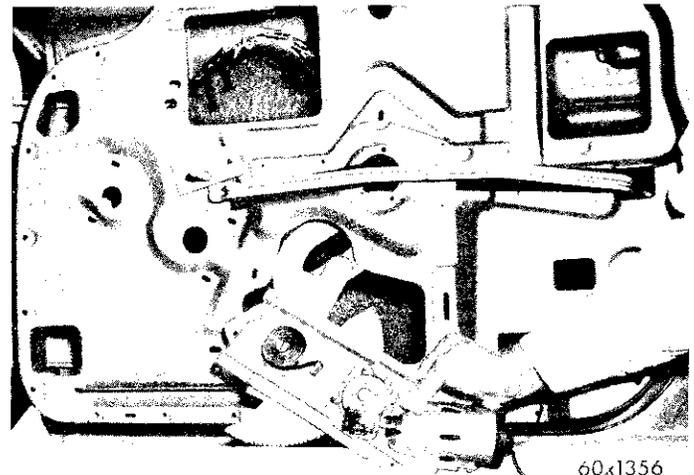


Fig. 57—Removing or Installing Window Glass Regulator (Imperial)

- (3) Engage the regulator arm in the door glass lower channel. Lower the glass and install regulator arm retainer and clips.
- (4) Install the trim panel and inside door hardware.
- (5) Install garnish moulding.

**47. FRONT DOOR REMOTE CONTROL ASSEMBLY (Fig. 59)**

**a. Removal**

- (1) Remove the garnish moulding (Fig. 48) arm rest and remove control handles.
- (2) Remove trim panel (Fig. 49) and water curtain.
- (3) Raise the door glass.
- (4) Remove the attaching screws holding the remote control base to the door panel.

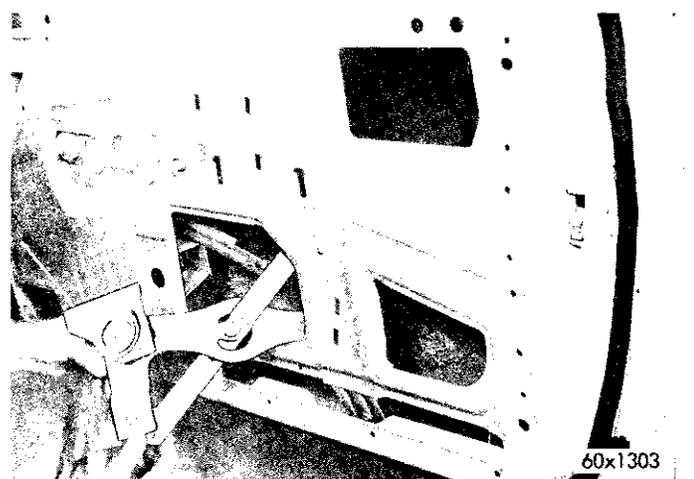
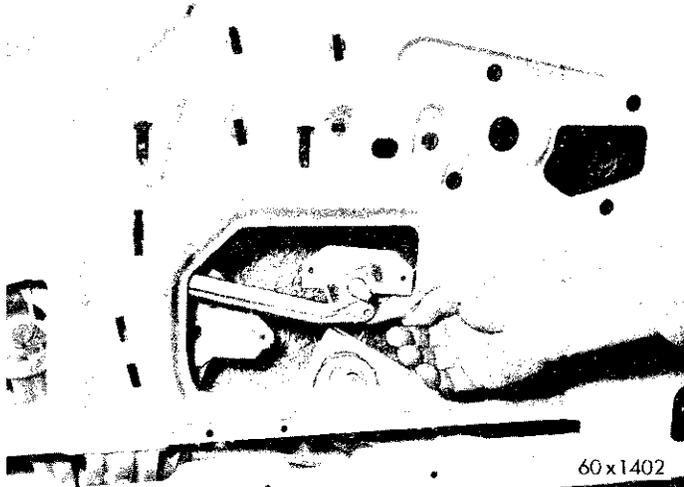


Fig. 58—Removal and Installation of Glass Regulator Pivot Link

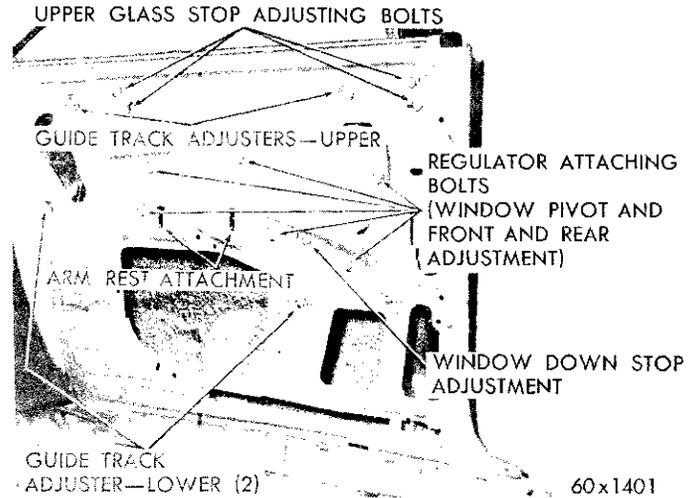


**Fig. 59—Removing or Installing Remote Control Assembly (Chrysler, DeSoto)**

- (5) Disconnect control to lock lever.
- (6) Remove the control through the large opening in the door.

**b. Installation**

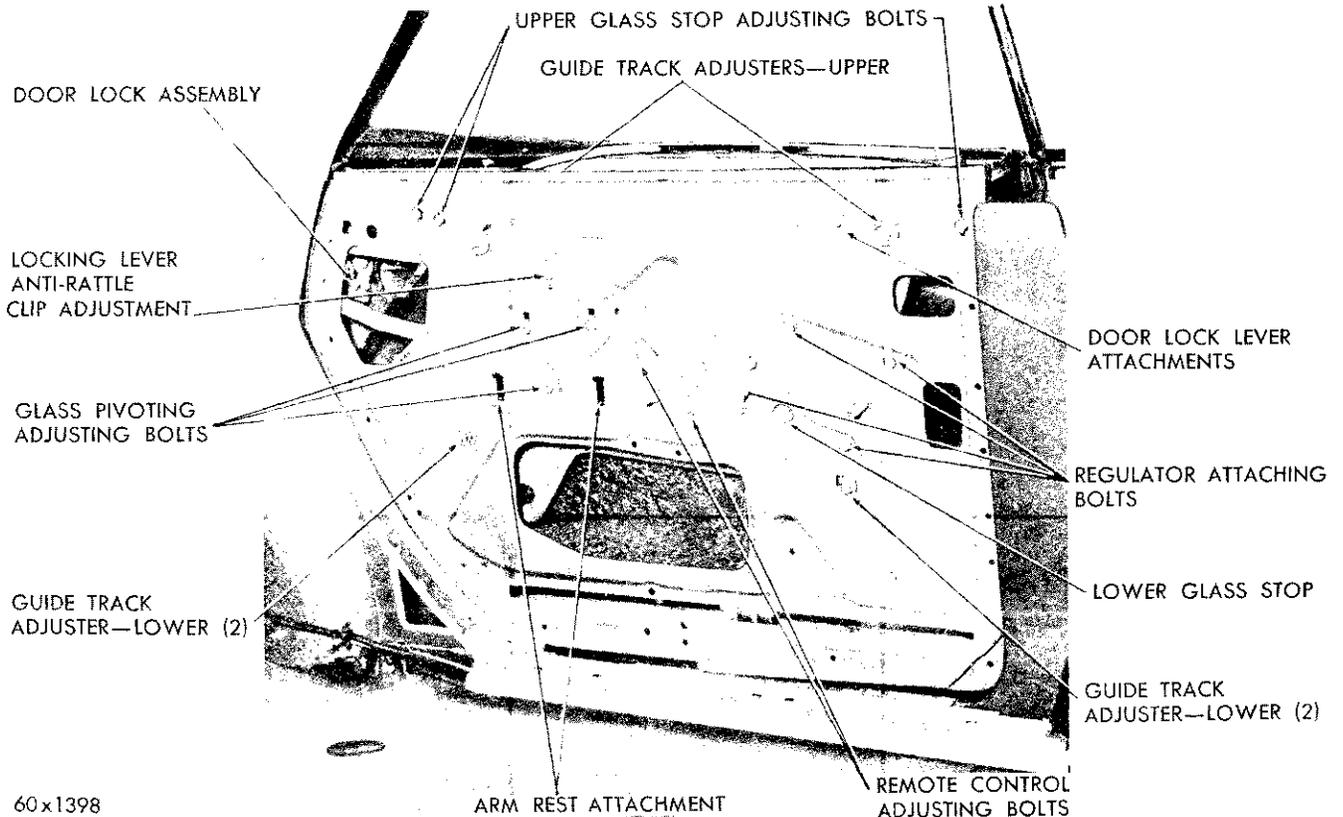
- (1) When installing the remote control assembly, coat all parts liberally with lubriplate.
- (2) Install the assembly through door opening.
- (3) Rotate the assembly in order that the end of



**Fig. 60—Rear Quarter Glass Controls (Chrysler, DeSoto)**

the remote control arm can be connected to the lock lever.

- (4) Install the attaching screws.
- (5) Check the assembly for proper operation and adjust if necessary.
- (6) Install trim, and water curtain.
- (7) Install garnish moulding.
- (8) Install arm rest if so equipped.



**Fig. 61—Rear Door Control Adjustment (Chrysler, DeSoto)**

**48. REAR QUARTER WINDOW GLASS (TWO DOOR HARD TOP AND CONVERTIBLE MODELS (Fig. 60)**

**a. Removal**

- (1) Remove the arm rest, seat cushion and seat back.
- (2) Remove regulator handle.
- (3) Remove trim panel.
- (4) Remove trim panel and shower curtain.
- (5) Use regulator handle to raise the glass high enough to reach the regulator attaching clips through the access hole.
- (6) Remove the up stops located on the inner panel.
- (7) Carefully slide glass and loosen the track at the upper attaching points.
- (8) Disconnect the regulator arms from the lower glass frame and remove glass.
- (9) Remove glass from opening.

**b. Installation**

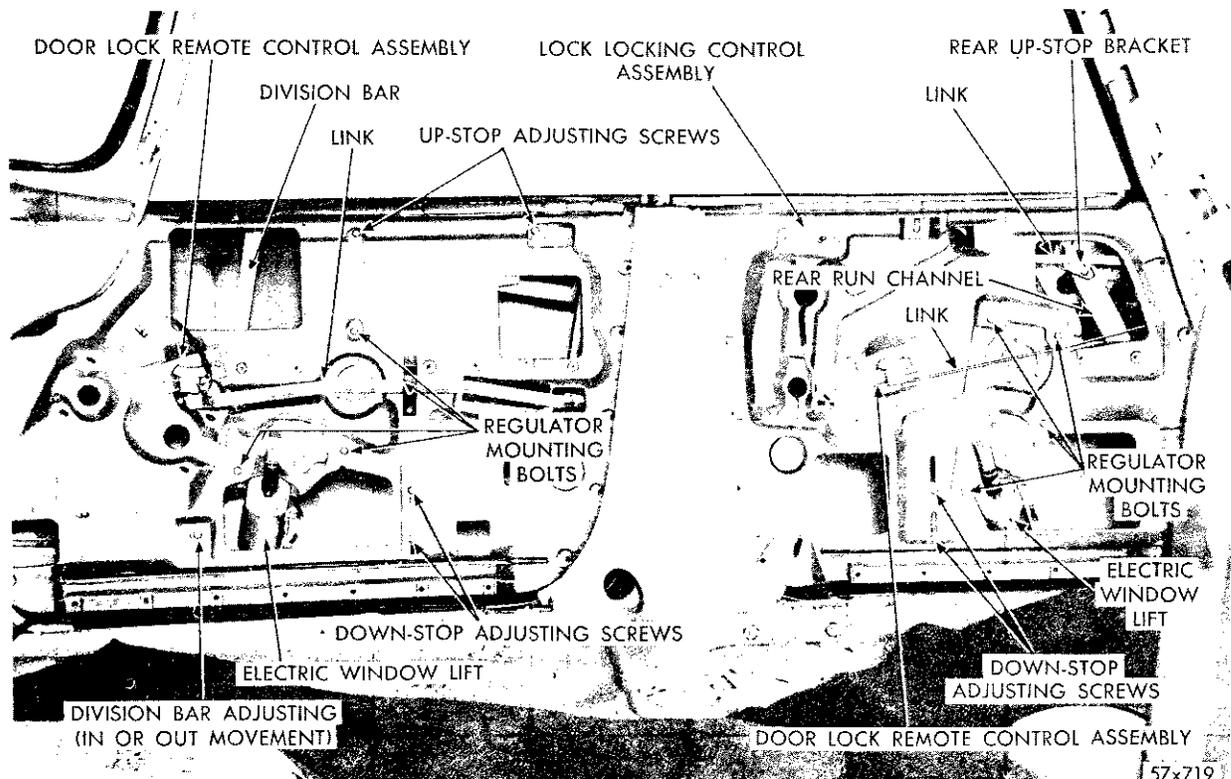
- (1) When installing quarter, slide seal and lower channel on glass.
- (2) Install the nylon roller guides into the roller track.

- (3) Rotate the regulator arm until arms are accessible at window opening.
- (4) Install regulator arms into lower glass frame.
- (5) Install the regulator arm attaching clips.
- (6) Install the up stops.
- (7) Check up and down and radial movement of regulator for proper adjustment.
- (8) Replace shower curtain, trim panel and install hardware.
- (9) Adjust the track in and out and fore and aft to attain correct adjustment.

**49. REAR DOOR WINDOW GLASS (FOUR DOOR HARD TOP) (Fig. 61 or 62)**

**a. Removal**

- (1) Remove the door inside hardware and trim panel and shower curtain.
- (2) Remove regulator handle.
- (3) Use the regulator handle to raise the glass high enough to reach through the access hole to remove the regulator attaching clips.
- (4) Remove the up stops located at the front and rear of the door inner panel.



**Fig. 62—Front and Rear Door Control Assembly (Imperial)**

(5) Disconnect the regulator arms from the lower glass frame to remove the glass.

**b. Installation**

(1) Install the nylon roller guides into front and rear tracks.

(2) Lower glass and install regulator arms into lower glass frame.

(3) Install the regulator arm retaining clips.

(4) Install the up stops and check for proper operation. The front track (Figs. 60 or 61) can be adjusted forward to the rear or inward and outward. The rear track (Figs. 60 or 61) can be adjusted inward or outward. The regulator attaching points are slotted to provide up and down adjustments.

(5) Replace shower curtain, trim panel and inside hardware.

**50. REAR QUARTER WINDOW GLASS (HARDTOP MODELS) (Fig. 60)**

**a. Removal**

(1) Remove rear seat cushion, regulator handle, and trim panels.

(2) Lower glass and remove Allen screw locking pivot arm pin.

(3) Pull forward vertical section of felt run channel up and out of body opening.

(4) Carefully raise glass and disconnect regulator arm from quarter glass lower channel.

(5) Remove glass from opening. If glass is to be replaced, drive the seal and channel off glass with hardwood block and mallet.

**b. Installation**

(1) When installing quarter window, slide seal and lower channel on glass.

(2) Wind regulator arm up until the end protrudes above window opening.

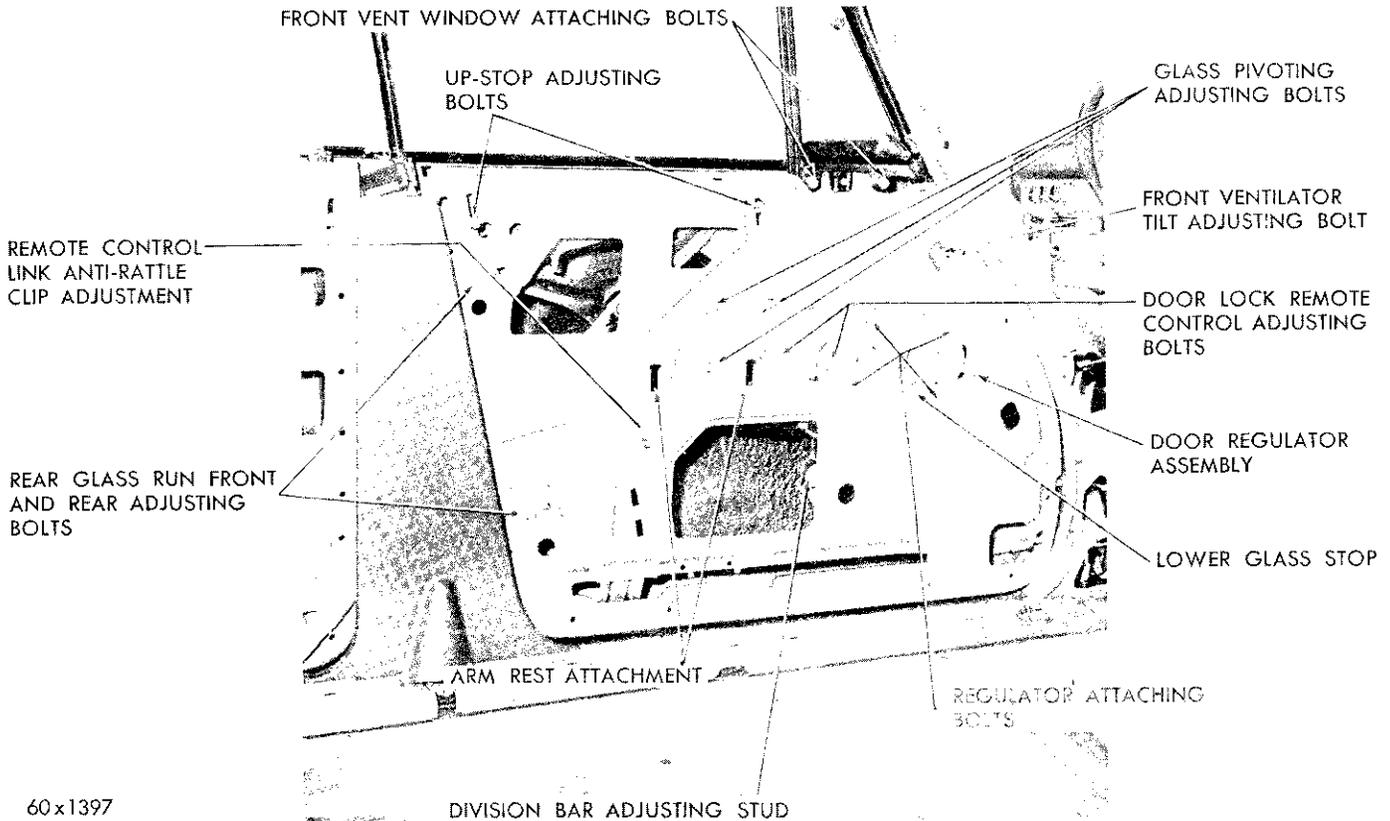
(3) Connect arm to lower channel.

(4) Guide glass in rear portion of glass run channel and carefully lower glass.

(5) Install top and forward portion of felt run channel.

(6) Make certain that upper and lower side clips are engaged when front portion of felt run channel is installed.

(7) Refer to "Adjustment of Rear Quarter Window Glass", Paragraph 51 (c), for adjustment of rear quarter window.



**Fig. 63—Front Door Control Adjustments (Chrysler, DeSoto)**

(8) Install trim panel and the other components that were removed.

### 51. CONVERTIBLE COUPE (QUARTER WINDOW)

#### a. Removal

(1) Lower top, position quarter window, and remove retainer and washer that holds regulator arm to lower glass channel.

(2) Remove pivot bracket hinge screws (Fig. 60).

(3) Work window assembly up and out of quarter panel.

#### b. Installation

(1) When installing quarter window, make sure regulator arm-to-lower glass channel is installed correctly and is secure.

(2) Complete remainder of installation operations.

#### c. Adjustment of Rear Quarter Window Glass

The rear quarter window can be adjusted in or out by use of four adjusting screws threaded into pivot bracket (Fig. 60).

The rear of window can be adjusted in or out by adjustments located at top and bottom of guide track.

Upward travel of window is controlled by an adjustable stop located at the rear of the window. Downward travel is controlled by a non-adjustable strip in reinforcement of pillar post.

### 52. FRONT DOOR VENT WINDOW AND DOOR GLASS ADJUSTMENT (HARDTOP MODELS) CHRYSLER AND DESOTO

(1) Remove remote control handle, trim panel, and garnish moulding.

(2) Loosen the ventilator wing attaching bolts and divisional bar adjusting nut.

(3) Reposition ventilator wing assembly in door opening to line up with front door post and roof rail.

(4) Retighten attaching screws and divisional bar nut.

(5) Check ventilator for proper alignment.

(6) Raise window and check alignment with roof rail and weatherstrip.

(7) Adjust rear guide upper adjustment to align window with outer edge of weatherstrip so that only light contact is maintained with lip of weatherstrip.

(8) Adjust the rear track (Fig. 63) in and outer adjustment to line the glass up while positioning the window glass up against the roof rail weatherstrip.

(9) Adjust the rear track forward and rearward position to hold glass partially snug.

(10) Reposition the regulator pivot to correct window misalignment as required to fit roof rail contour.

(11) Reset upper and lower stops.

**NOTE:** It may be necessary to realign the rear door window glass opening to conform with front glass alignment for perfect fit.

(12) Raise and lower glass a couple of turns and check for proper fit.

## HEADLINING

### 52. REMOVAL (ALL MODELS EXCEPT HARDTOPS AND CONVERTIBLES)

In order to remove the headlining it will be necessary to remove the rear window on sedan models only.

(1) Remove the dome light assembly and rear seat cushion assembly as well as the sun visor and the upper windshield garnish moulding.

(2) After the rear glass has been removed, pull rear window weatherstrip out at the top and down the sides of the rear window opening as shown in Figure 64.

(3) Pull the headlining out from under the rear



Fig. 64—Removing Headlining With Stiff Wire (Chrysler, DeSoto)

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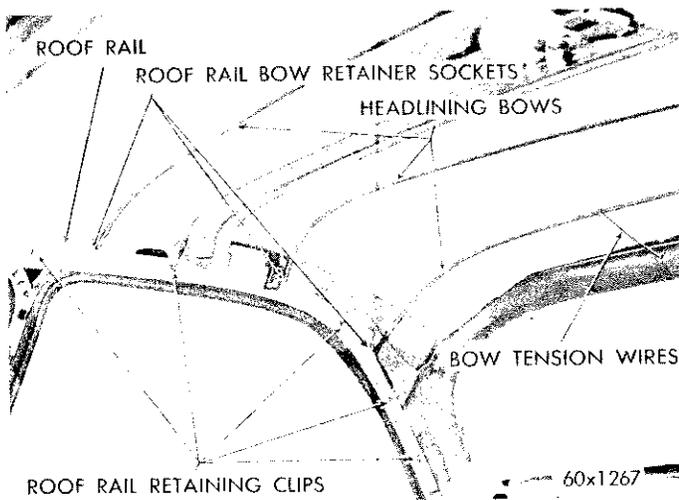


Fig. 65—Roof Rail Bow Retainer Sockets (Chrysler, DeSoto)

package shelf and away from the rear quarter panel and wheel housing.

(4) Pry the headlining retainer strip, with a screwdriver, away from the roof rail above the doors. (The headlining is cemented in place over the windshield header and at the rear window body opening.) To remove the lining it will be necessary to remove the cemented front and rear sections of the headlining from the windshield and rear window openings before removing the headlining and bows from the roof rails.

**NOTE:** The roof rails on all models using cloth headlining are strung through retaining loops sewed into the lining. Each bow is held in place by an attaching loop pressed into each roof rail and sprung in place when installed to keep the headliner taut (Fig. 65).

(5) After pulling the headlining from the windshield and rear window opening, remove the headlining bows from the roof rail retainers. Use care not to damage lining.

(6) Remove bow retaining springs and remove

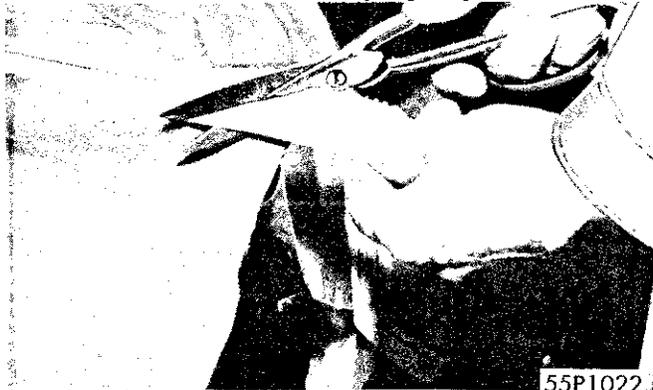


Fig. 66—Trimming Excess Listing Even with Edges of Headlining (Chrysler, DeSoto)

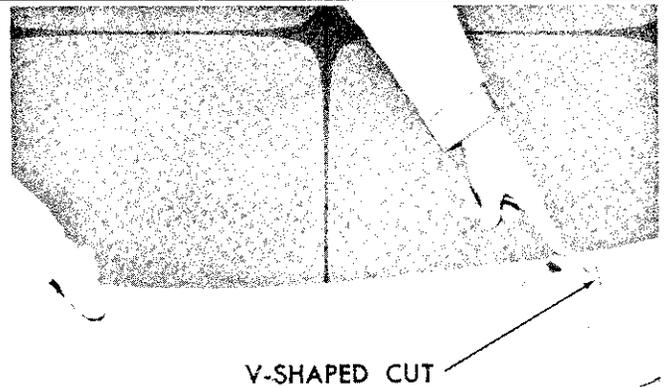


Fig. 67—Marking Center of Each End of Headlining with V-Shaped Cuts (Chrysler, DeSoto)

the headlining from the roof, the rear quarter and lower section under the package shelf.

**Installation**

(1) Remove each bow from the old listing.

**NOTE:** Before installing the bows in the new headlining, trim the excess listing even with the edges of the headlining, as shown in Figure 66.

(2) Notch the headlining at the front and rear ends to indicate the center of the material by making small V-shaped cuts, as shown in Figure 67. Use these marks as guides to properly center the headlining.

(3) Begin at the rear of the car. Apply cement to window opening (Fig. 68). Install the rear bow tension spring.

(4) Install bows in the correct location, since bows are of different length and must be correctly

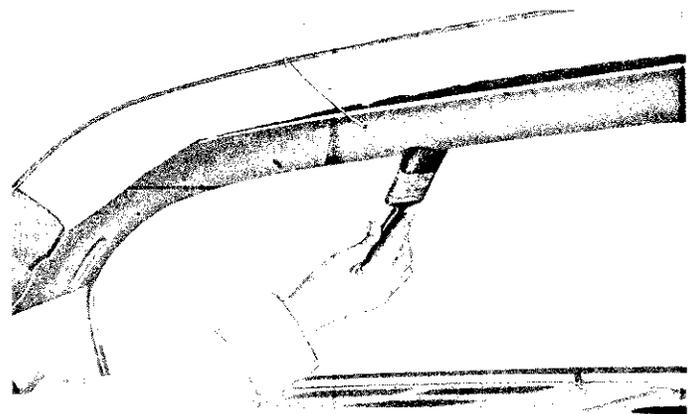
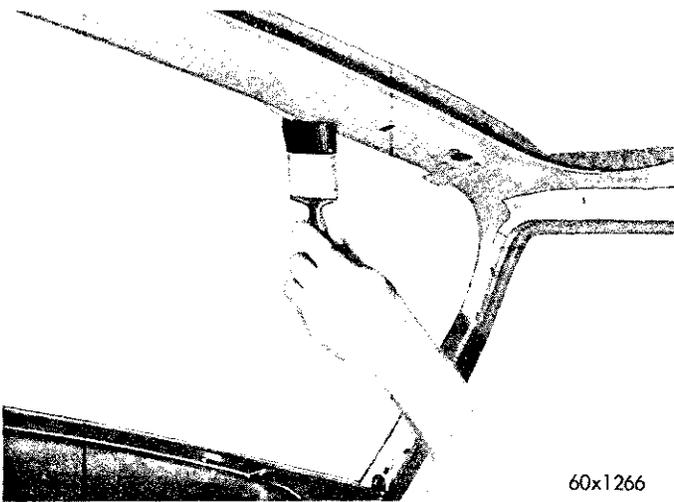


Fig. 68—Apply Cement to Rear Window Opening (Chrysler, DeSoto)



**Fig. 69—Applying Cement at Windshield Header Bar (Chrysler, DeSoto)**

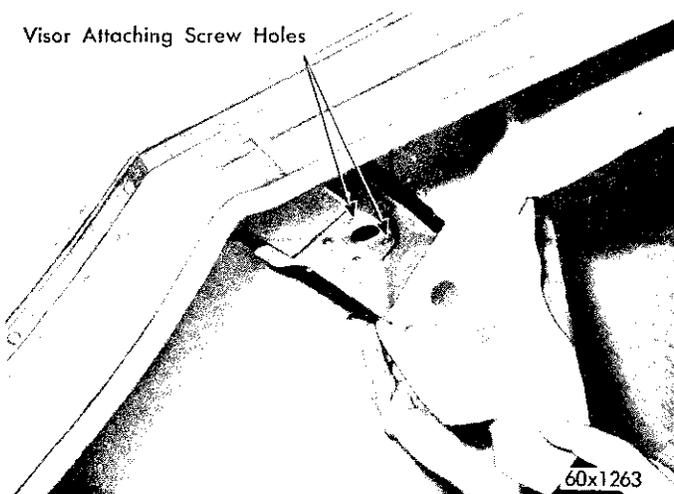
positioned to prevent headlining from wrinkling. This procedure assures correct installation of the bows.

(5) Install the remaining bows, making sure to stretch the headlining evenly so that approximately the same amount of material hangs down on each side.

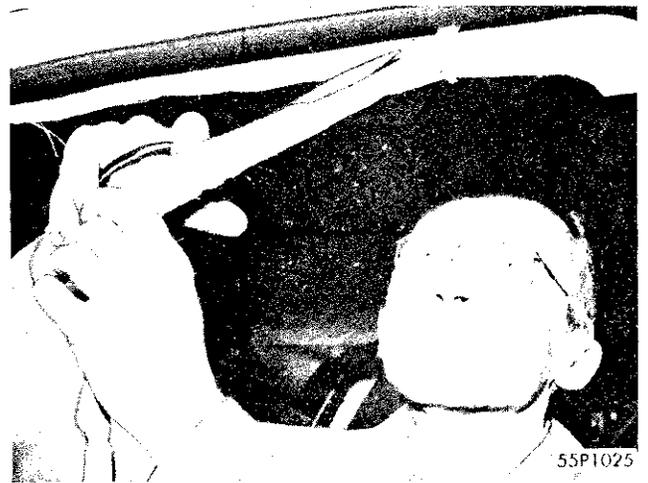
(6) Apply cement to the windshield header bar (Fig. 69). Wait until it becomes tacky. Stretch the headlining forward and over the cemented area, and onto the barbs on the windshield header. Make sure the first seam of the headlining is straight.

(7) Cut holes in the headlining for the visor (Fig. 70) retaining screws and pivot.

(8) Install visors before tucking in the corners of the headlining at the top of the windshield posts to prevent tearing the headlining when tightening the screws.



**Fig. 70—Visor Attaching Holes (Chrysler, DeSoto)**



**Fig. 71—Trimming Excess Material From Windcord (Chrysler, DeSoto)**

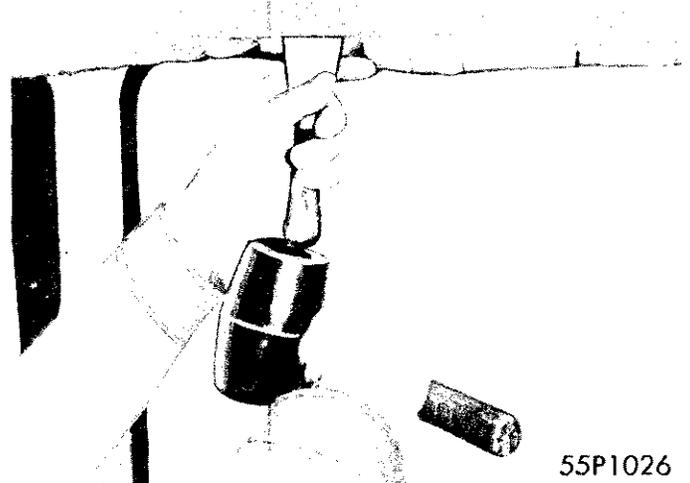
(9) Install garnish mouldings.

**NOTE:** In most cases the listing is longer than necessary. Cut the material at the ends to prevent wrinkling at the seams when it is tucked or cemented in place (Fig. 71). Cut the listing from the end up to the clip. Use care to prevent cutting the listing too far up the bow and ruining the fit of the headlining.

(10) After listings are cut, start at the front and trim the headlining so that only 1/2 to 1 inch of material hangs down below the door windcord.

(11) Use a dull putty knife to tuck the first and second seam between the roof side rail and retainer, as shown in Figure 72. Tuck the remaining material in place around the rear window opening and lower package shelf.

(12) When one man is performing the installation, alternate from one side to the other, completing



**Fig. 72—Tucking Headlining Between Roof Rail and Retainer (Chrysler, DeSoto)**

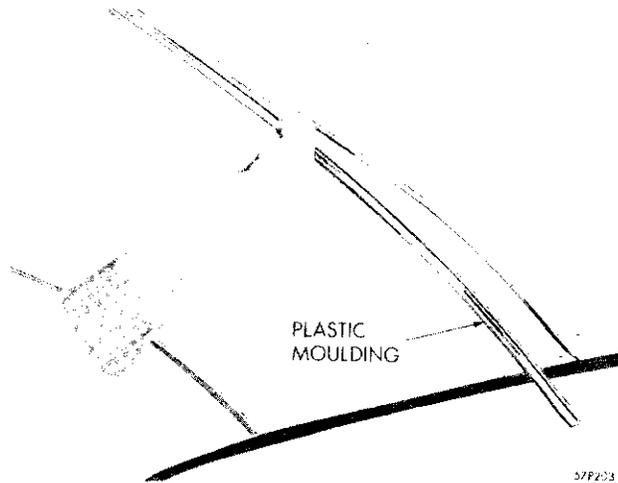


Fig. 73—Removing Plastic Moulding From Retainer

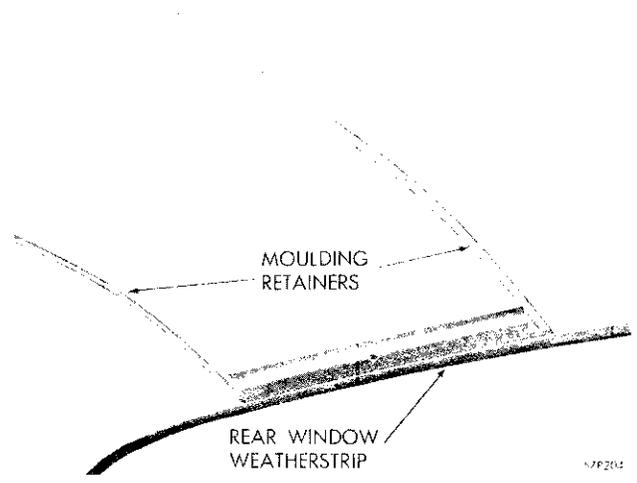


Fig. 74—Plastic Mouldings Removed From Retainers

one section at a time; make certain that the seams are straight. As the work progresses, the material should be kept free of wrinkles until all of the headlining is tucked in place between roof rail and the retainer.

- (13) Install the rear window glass moulding dome light, side and upper windshield mouldings.
- (14) Install rear package shelf and rear cushion.
- (15) Seal and check rear window glass for leaks.

**53. HARDTOP MODELS (PLASTIC MOULDINGS)**

If either of the outer sections are to be replaced it is only necessary to remove one plastic moulding, see Figure 73. If the center section is to be replaced it will be necessary to remove both plastic mouldings from the retainers, as shown in Figure 74.

**a. Removal**

- (1) Remove the front and rear window garnish mouldings.
- (2) Starting at either end, pry the plastic moulding off of the retainer.
- (3) Pull down on the moulding to release it from the retainer.

- (4) Remove the damaged section by pulling it downward to release it from the retainer.

- (5) To remove the plastic headlining at the side pull towards the center of the car and this will release the plastic headlining from the small spring-type clips at the outer edges.

**b. Installation**

- (1) Push the plastic headlining onto the small retainer clips on each side of the car.
- (2) Push the headlining up at the center and properly center the moulding and snap it into place.
- (3) If the center section is to be installed push it into place on the retainers and snap ring.
- (4) Snap the mouldings onto the retainers and install the garnish mouldings.

**Town and Country Models:**

The plastic headlining removal is the same except the headlining runs from side-to-side and it is only necessary to remove the garnish mouldings when the front or rear section of the headlining is being replaced.

**SEATS**

**54. CUSTOM POSITIONED SIX-WAY MANUAL FRONT SEAT ADJUSTMENT (Fig. 75)**

- (1) Loosen the four adjusting bolts (two in each seat base).

- (2) Horizontal slots allow a fore or aft movement of 1<sup>5</sup>/<sub>8</sub> inches.
- (3) Vertical slots allow up, down or tilt movement of 1<sup>1</sup>/<sub>8</sub> inches.

(4) Position the seat as desired and tighten the bolts to lock it in place.

## 55. FRONT SEAT

### a. Removal

(1) The front seat cushion is an integral part of the seat frame, from under the car, remove the 4 nuts attaching the seat base to the floor pan.

(2) Remove the seat and base assembly.

### b. Installation

(1) Place the seat and base assembly on the floor pan so that the studs in the seat base line up with the holes in the floor pan.

(2) Install the 4 attaching nuts and tighten securely.

## 56. AUTOMATIC SWIVEL SEAT OPERATION

As the door is opened, the cable pulls the plate outward, stretching both springs. A rod attached to the actuating cable releases the seat latch when the door is about halfway open. The light spring then pulls the seat outward until the pivot plate stop contacts the seat frame bracket.

If it is desired to keep the seat from swivelling when the door is opened, a light push returns the

seat to the straight-ahead position, where it automatically latches into position. If this is done, the seat can be unlatched and swivelled out by lifting the latch release handle located at the side of the seat.

When the door is closed the heavy spring pulls the swivel seat back until it latches in the straight-ahead position.

## 57. SEAT ASSEMBLY

### a. Removal

(1) Open the door to its widest position.

(2) Remove the plastic royalite covers on the front and rear frame rails.

(3) Remove the nut #3, Figure 76, securing the swivel seat pivot assembly to seat base.

(4) Raise the seat cushion and back assembly at the rear out of pivot assembly, remove opening assist spring, #4, Figure 77, from tab on bottom of seat cushion, and pull the seat straight back to remove the C-channel from the nylon rollers.

### b. Installation

(1) Position seat assembly with C-channel on the nylon rollers, hook opening assist spring, #4 Figure 77 to tab on bottom of seat cushion, then insert the swivel seat pivot bolt into the pivot bushing in the seat base.

(2) Install the washer and seat to pivot assembly nut, #3, Figure 76 and tighten to  $180 \pm 30$  inch-pounds torque.

(3) Reinstall the plastic royalite covers on the front and rear frame rails.

## 58. CABLE ASSEMBLY — DOOR HALF

### a. Removal

(1) Remove the seat cushion and back assembly. Shut the door to relax the cables.

(2) Unhook the seat-return spring from the pivot actuating arm.

(3) Rotate the cable ferrule, see #5, Figure 76, clockwise (L.H. Thread) to remove seat half cable from the door half. Loosen one of the jam nuts, #6, Figure 76, around the cable housing and remove the cable assembly from the bracket on the seat frame.

(4) Depending upon which side of the vehicle is being worked on, remove the front floor covering of that side and fold upon opposite side. This requires loosening the seat track to floor pan attachment bolts to slip the floor covering from under the seat track pedestals.

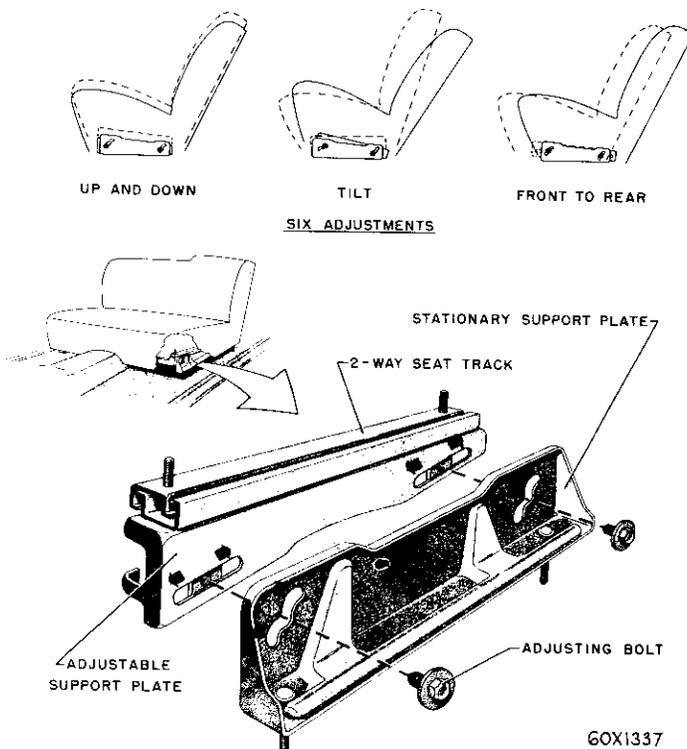
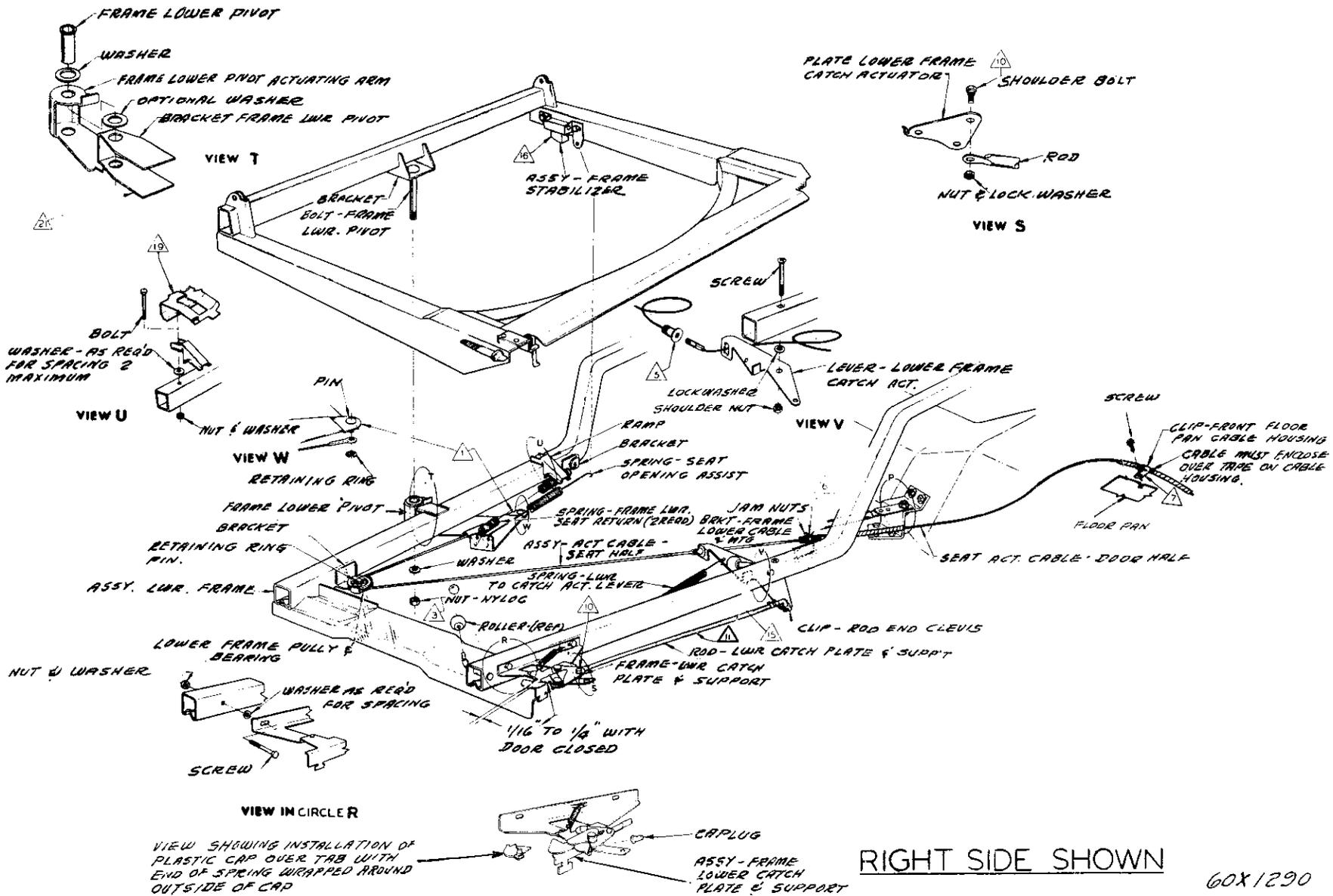


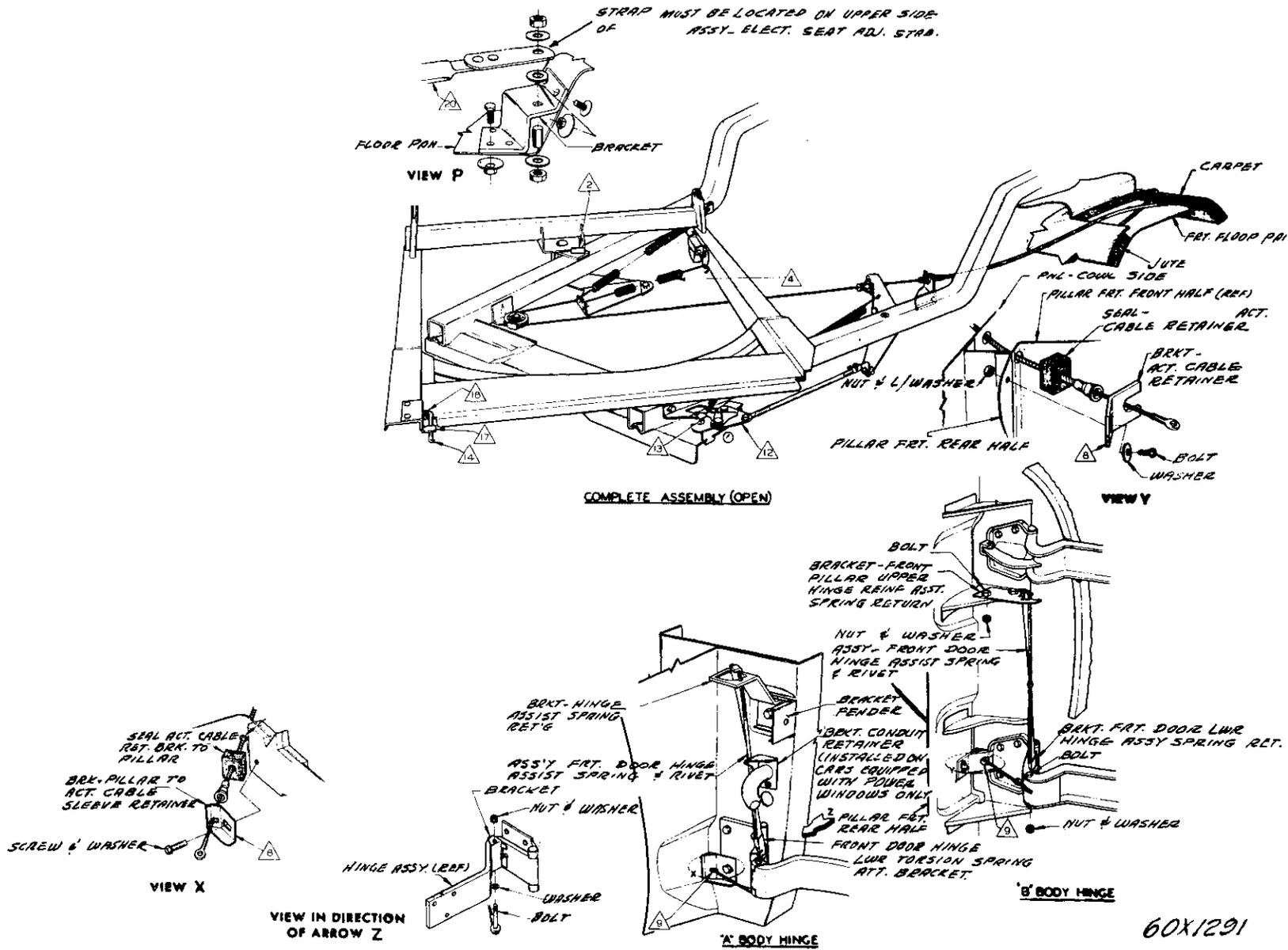
Fig. 75—Six-Way Slotted Track Seat Assembly



RIGHT SIDE SHOWN

60X1290

Fig. 76—Swivel Seat Assembly (Left)



60X1291

Fig. 77—Swivel Seat Assembly (Right)

(5) Remove the clip, holding cable to floor pan.

(6) Remove the cable retainer bracket, #7, Figure 76, from front door pillar and also the cable end from the hinge bolt.

(7) Pull the cable housing through the holes in the pillar after removing the jam nuts from the opposite end of the housing.

#### b. Installation

(1) Push a new polyurethane foam seal over the housing and insert the cable housing through the holes in the door pillar.

(2) Place the cable retainer over the cable housing, attach retainer to the pillar and attach the cable end to the door hinge.

**NOTE: Center the cable so it does not rub, against retainer bracket by adjusting the bracket in direction required.**

(3) Put the arm nuts back on the cable housing.

(4) Screw the ferrule of seal half cable tightly to new cable.

(5) Install the new cable housing in the slotted lower frame bracket, screw the jam nuts up loosely on each side of the bracket in approximate location as an old cable housing, and with the door closed, reinstall the seat return spring.

(6) Re-open door, put the cable housing in the clip, center clip over the tape on the housing, and screw clip down to the tunnel.

(7) Replace the floor covering and tighten the seat track attachment bolts.

(8) Replace the seat cushion assembly.

(9) A visual check should be made to see that the door half cable leaves pillar in a horizontal plane.

(10) Close the door and check the tension of the cable from under the rear of the seat.

(11) Adjust the jam nuts so that there is a slight slack in the cable going round the pulley.

#### CAUTION

**Do not get the seat half cable too tight, rather it is better that the seat cable is loose.**

(12) Check seat for proper automatic operation.

### 59. CABLE ASSEMBLY (SEAT HALF)

#### a. Removal

(1) Remove the seat cushion and back assembly.

(2) With the door closed, remove the return spring.

(3) Unscrew the ferrule on this cable from the door half cable.

**NOTE: L.H. Thread.**

(4) Remove the retaining rings from the other end of the seat half cable and the pulley.

(5) Lift the pulley off of the pivot pin and remove the cable.

#### b. Installation

(1) Place the cable in the pulley, install the pulley on the pivot pin and install the retainer ring.

(2) Install the end of the cable over the pin on the pivot assembly actuating arm and secure with the retainer.

(3) Screw the ferrule of the seat half, see #5, (Fig. 76), to the cable (door half).

(4) Install the return spring.

(5) Check the pulley for freedom of operation and whether the cable is binding around the pulley.

(6) Readjust the cable (door half) if necessary to get the proper cable tension—slightly loose.

### 60. CATCH RELEASE ASSEMBLY

#### a. Removal

(1) Remove the seat cushion assembly, remove the shouldered bolt, #10, Figure 76, holding catch actuator rod to catch the plate and the support assembly.

(2) Remove 2 attaching screws and nuts of catch assembly from the seat frame rail.

#### b. Installation

(1) Position the catch release assembly to seat the frame rail and install with 2 attaching screws using washers between the catch release assembly and the seat frame side rail as required for spacing and tighten with lock nuts and washers.

(2) Attach the catch actuator rod to catch the plate and support assembly with the shouldered bolt, #10, (Fig. 76).

#### c. Adjustment

(1) The adjustment of this assembly is the most critical one of the whole automatic swivel seat mechanism and yet is very simple.

(2) An elongated slot has been provided in the end of the actuator rod, #11 (Fig. 76).

(3) The correct action of the catch release mechanism is such that the seat cushion swivels out when the car door is just entering the first of two detent positions of the integral hinge and door check.

(4) If this action is not correct, loosen bolt, #10 (Fig. 76) and pivot the actuator plate, view 5, away from or towards door. Away from the door delays the release of latch, towards door causes the release to occur earlier.

(5) After adjustment be sure to tighten the bolt back to 15 to 25 inch-pound torque.

### 61. SEAT PIVOT ASSEMBLY

#### a. Removal

(1) Remove the seat cushion and back assembly.

(2) Unhook the seat return spring, unhook cable (seat half).

(3) Take the bushing out of and disassemble pivot assembly by removing the pivot actuating arm and washers. (View T, Fig. 76).

(4) Note the location and sizes of nylon washers.

#### b. Installation

(1) Be sure to adequately lubricate nylon washers on both of their sides with Lubriplate before installation.

(2) Install the pivot actuating arm over the seat frame pivot bracket, placing one nylon bushing between the bracket and arm and the other on top of the arm.

(3) Insert pivot bushing through washers, arm and bracket. Check movement of the arm before installing seat cushion and back assembly.

(4) It should swing freely.

(5) Install cable (seat half) and the seat return spring. Replace the seat cushion assembly, Paragraph 57.

### 62. SEAT BACK ASSEMBLY

#### a. Removal

(1) Remove the seat assembly, Paragraph 57, and invert the seat.

(2) Remove the screws holding the retarder springs in place.

(3) The screws are located on the bottom of the seat frame and under the seat back hinges.

(4) Remove the retarder springs.

(5) Turn seat assembly right side up, remove the two hinge bolts and lift the seat back assembly straight up to remove.

#### b. Installation

(1) Insert the seat back support arms in the seat base assembly and install the two hinge bolts.

(2) Invert the seat and install the retarder springs replacing the screws under the seat back hinges and on the bottom of the seat frame.

(3) Install the seat back and cushion assembly, (Paragraph 57).

### 63. NYLON ROLLERS

#### a. Removal

(1) Remove the seat assembly, Paragraph 57.

(2) Slide the rollers off their mountings and check for excessive wear or flat spots.

#### b. Installation

(1) Lubricate the surfaces of the nylon roller mountings with Lubriplate.

(2) Insert the nylon rollers on their mountings.

(3) Install the seat assembly, Paragraph 57, and check operation of the seat.

### 64. ARM REST HINGE ASSEMBLY

#### a. Removal (Fig. 78)

(1) Remove the Allen head pivot screws.

(2) Lift the hinge assembly straight up to remove.

(3) Remove the nylon bearings from the hinge rod.

#### b. Installation

(1) Position the nylon bearings on the hinge rod.

(2) Place the hinge in position and install the Allen screws.

(3) Check the hinge operation.

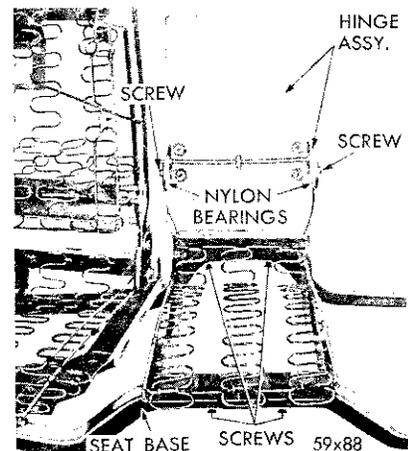


Fig. 78—Arm Rest Assembly

### 65. ARM REST HINGE NYLON BEARINGS REPLACEMENT

Refer to Paragraph 64, Arm Rest Hinge Assembly, and follow instructions listed therein.

### 66. ARM REST ASSEMBLY

#### a. Removal (Fig. 78)

(1) Move the seat forward and up on 6-way electric seats.

(2) Swing the swivel seats to the outward position.

(3) From the back portions of the seat frame assembly, remove the four Phillips head screws attaching the arm rest to the seat frame assembly.

#### b. Installation

(1) Position the arm rest assembly on the seat base assembly and install the four Phillips head screws.

(2) Turn the swivel seats to the straight ahead position.

### 67. FRONT DOOR HINGE ASSIST ASSEMBLY

#### a. Removal

(1) Remove door pillar torsion spring assembly (composed of flat torsion bars riveted together in the center), insert from inboard side of the car the notched end of the special Tool, C-3800, on the springs directly under the spring-retainer bracket with the door fully open.

(2) Twist springs counterclockwise (right side), clockwise (left side) to rotate them out of slot and carefully allow springs to unwind.

(3) (On Imperial only, use the complete windup Tool C-3799, whose notch makes an angle of 70 degrees with respect to the handle to pry springs out of retainer and then hook on the second Tool C-3800, underneath the other, after partial rotation, to complete the unwinding operation.)

(4) Pull springs out of the slot in lower door hinge brackets.

#### b. Installation

(1) With door fully open, install torsion springs in slot in lower door hinge bracket.

(2) From the inboard side of the car insert the notched end of the special Tool C-3800, on the springs slightly below the upper spring retainer bracket.

(3) Twist the springs clockwise (right side) counterclockwise (left side) to rotate and install them in the upper slot.

(4) (On Imperial only, make only a partial rotation with special Tool C-3800 and then slip on the second Tool C-3799, above the other to complete the rotation and install them in the upper slot.)

(5) Check operation to see if springs remain in proper slot in upper bracket.

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## DOORS

### 68. DOOR INSIDE HARDWARE AND TRIM (MANUAL DOOR LOCKS)

#### a. Removal

(1) On Windsor, Saratoga, and all DeSoto models with the handle behind the arm rest, remove arm rest or remove cover plate to reach the remote control handle attaching nut.

(2) On Imperials or Chrysler New Yorker models use a long screwdriver to reach through the handle slot and loosen the handle clamping screw which is directly in front of the handle.

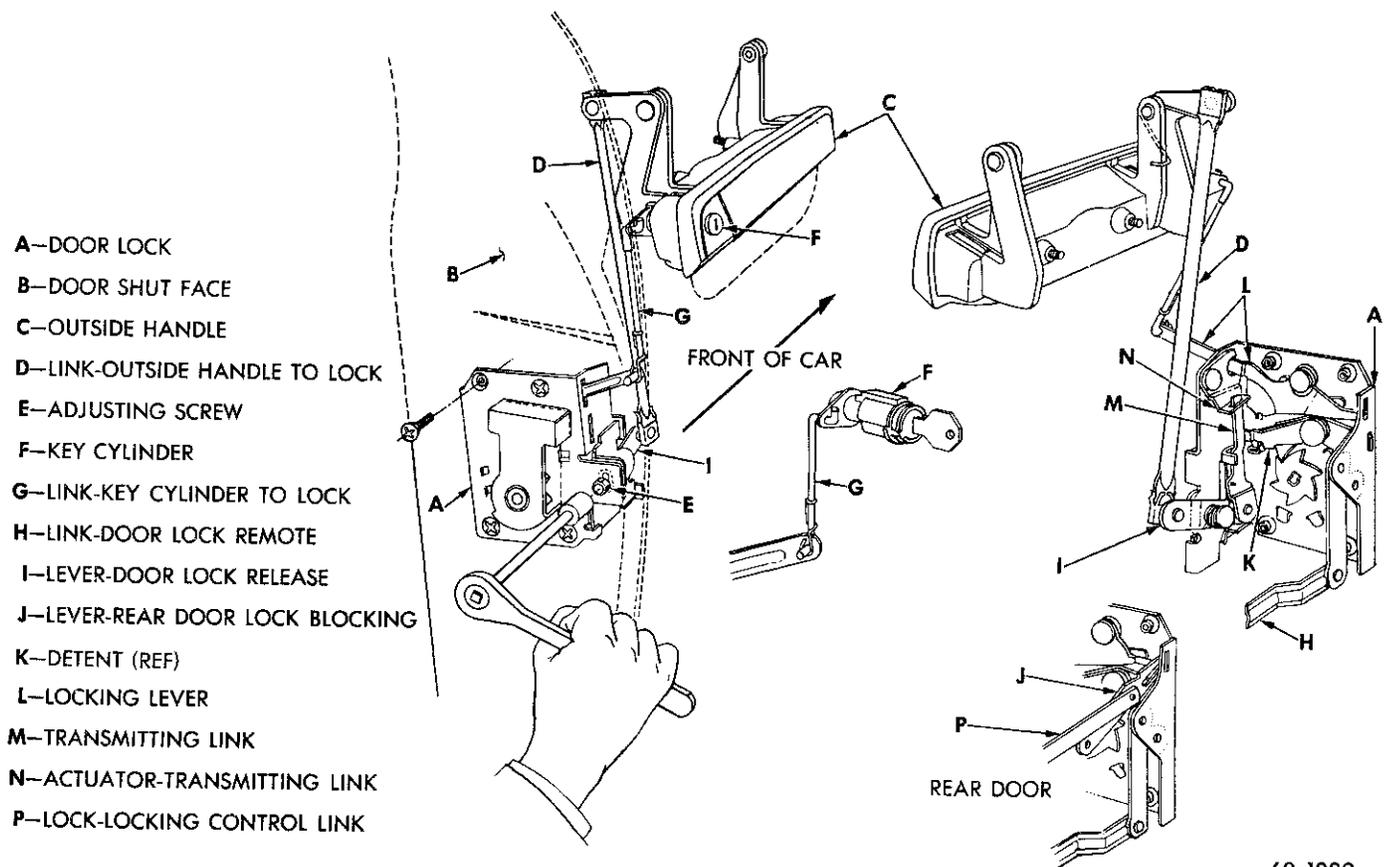
(3) After loosening, the handle may be pulled off the shaft as the trim panel is removed.

(4) The rear door locking control knob is attached to its shaft on all models by means of a small screw through the center of the hub into the center of the end of the shaft. The knob is positioned on the shaft by spline teeth on the O.D. of the shaft and the I.D. of the hole in the knob.

#### b. Installation

(1) On all models, position the locking control knob on splined shaft.

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60x1289

Fig. 79—Manual Door Lock (Exploded View)

(2) Insert small screw through center of hub into the center end of shaft.

(3) On Windsor, Saratoga and all DeSoto models, install cover plate, or install arm rest if removed.

(4) On Imperials and New Yorker models replace the trim, the handle can be replaced with the trim.

(5) Using a long screwdriver tighten the handle clamping screw which is directly in front of the handle.

**69. OUTSIDE DOOR HANDLE AND KEY CYLINDER (Fig. 79)**

**a. Removal**

(1) First remove inside hardware and trim as in Paragraph 68.

(2) Run window glass up to top position.

(3) Disconnect link (D) from handle to lock by pulling away from lock release lever (I). The link clip will snap off over the ball on which the link pivots. On front door only disconnect the link from the key cylinder (F) to the lock (G) by removing formed wire clip from the rod and removing rod from lock lever (L).

(4) Back off the two nuts on the studs at the back of the handle. Pull handle out of door.

(5) To remove lock cylinder (with or without removing outside handle) take out cylinder retaining screw at back of cylinder and pull cylinder out of handle.

**b. Installation**

(1) Install lock cylinder (F) in position, install link rod (G) and wire clip.

(2) Install and tighten cylinder retaining screw.

(3) Insert handle in door, install the two stud nuts on the back of the handle.

(4) Install wire clip on the rod (D) snap rod over ball on which link pivots.

(5) Install trim and hardware as outlined in Paragraph 68.

**70. DOOR LOCK AND REMOTE CONTROL ASSEMBLIES**

**a. Front Doors, All Except Hardtop—Removal**

(1) After removing the door inside hardware and trim as in Paragraph 68 and disconnecting outside handle control links as in Paragraph 69.

(2) Remove glass run felt channel.

(3) Starting at top end at division bar and working rearward pull the channel down and out of its retaining channel all the way to the glass at the lock face of the door then pull straight up so the channel will slide out from between the glass and the lower channel.

(4) If the glass fits tight, loosen the glass guide channel extension (lower extension of division bar) at its bottom attachment to allow the glass to move forward.

(5) Having removed the felt channel, next pull up the metal that retained the felt channel below window opening.

(6) Next carefully raise the glass, by means of the regulator crank, being sure the glass follows in the channel from which the felt channel was removed.

(7) With the glass in this position, disconnect the outside handle link at the lock, and the key cylinder link at the lock.

(8) Remove the two screws attaching the remote control assembly to the door inner panel and the four screws holding the lock to the door shut face.

(9) Slide the lock out of hole in shut face into the door and rotate the lock to disconnect the remote control link at the lock. Remove both lock and remote control from the door (Fig. 80).

#### b. Installation

**NOTE:** Grease all pivots on the linkage as they are assembled.

(1) Insert lock and remote control into the door.

(2) Connect the remote control link to the lock.

(3) Slide the lock into the hole in the shut face of the door.

(4) Install the four screws that hold the lock to the door shut face.

(5) Install the two screws that attach the remote control assembly to the door inner panel.

(6) Connect the key cylinder link to the lock.

(7) Connect the outside handle link to the lock.

(8) When reinstalling the metal glass run channel (with glass lowered) be sure it is retained in the clip at the bottom bracket and that the top clip hooks into the slot provided.

(9) After this channel is secure, push the felt channel down the edge of the glass into the metal channel, being sure it goes back of the lower clip. Soap solution added to the glass run will ease installation. (**Never use oil.**)

(10) Then press the upper part of felt channel into the proper location, up the side and along the top of the door window opening.

(11) Be sure to adjust the glass fit between the channels by moving the adjustment of the bottom end of the division bar so the glass cannot get out of the channels yet is not bound between them.

(12) Install trim as described in Paragraph 68.

#### c. All Rear Doors and Front Hardtop Doors

Raise the glass to the top position and remove the lock and remote control screws (rear door—also take the nut off the locking lever assembly) and remove the assemblies from the panel. Rotate the bottom of the lock forward to disconnect the remote and lock control (P) links. Take the lock out of the door. On Imperial front doors, it is easier to get the remote control disconnected from the lock if the glass rear lower guide channel bottom attaching screw nut is removed and the channel pushed away from the inside panel so that the lock remote control link can be freed from back of the channel.

#### d. Front and Rear Doors On Imperial Sedans

The extruded aluminum upper window frame must be removed before the lock can be taken out of both front and rear doors.

This is accomplished by removing bolts attaching upper aluminum frame to door.

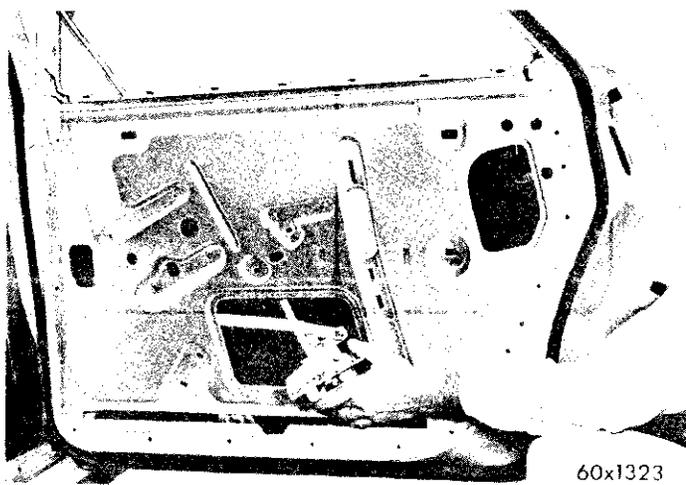


Fig. 80—Removing or Installing Door Lock Assembly

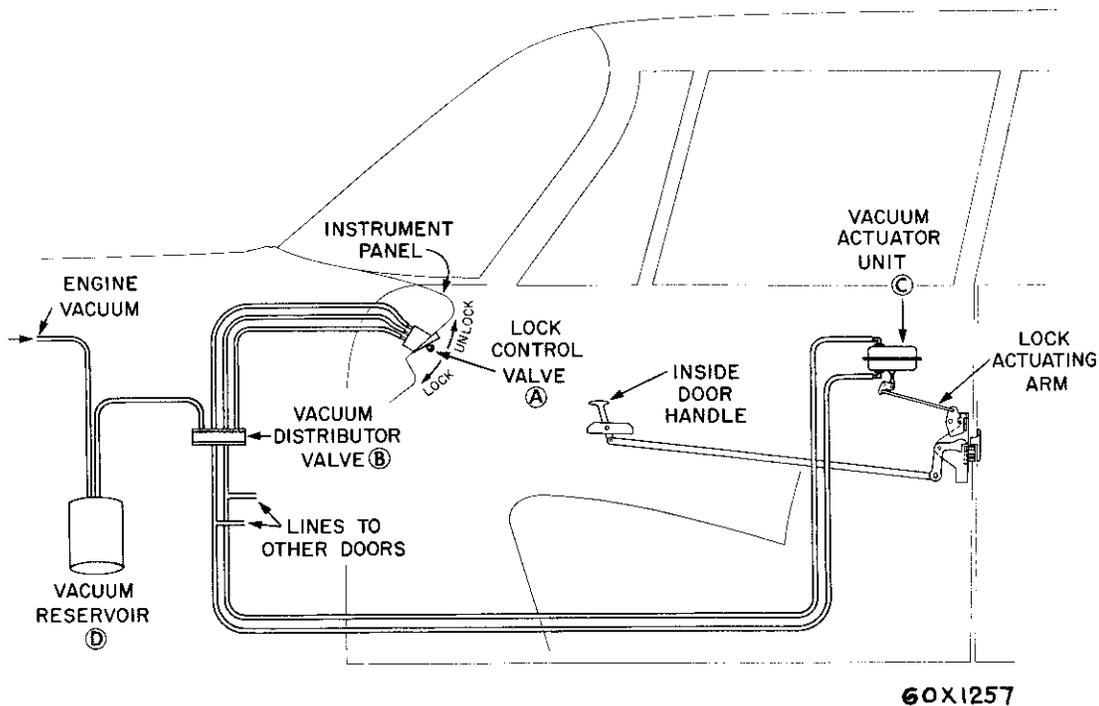


Fig. 81—Power Door Locking System

**71. POWER DOOR LOCK OPERATION—  
(ALL MODELS EXCEPT IMPERIAL) (Fig. 81)**

**WARNING**

**Do not apply air pressure anywhere in the system.**

The manual switch on the dash has three positions: (1) down—lock, (2) up—unlock, and (3) center or neutral. The doors may all be locked or unlocked simultaneously with the instrument panel manual switch. Each front door may be unlocked individually from inside with the door handles. The rear doors may also be unlocked with the ignition key from outside the car.

The manual switch in the instrument panel selects the distributor valve function. The vacuum distributor valve directs the proper pressure signal to the vacuum actuator units in each door. The vacuum actuator units do the work of locking or unlocking the particular door. The vacuum reservoir will provide a locking or unlocking function when the engine is not running.

**72. MANUAL LOCKING SWITCH**

**a. Removal**

(1) Unscrew lock nut to loosen switch from switch plate.

(2) Disconnect three hoses (one large and two small) from distributor.

(3) Remove manual switch and hose from back of instrument panel.

**b. Installation**

(1) Install the three hoses leading from the distributor to the switch, slipping them on the switch connections and making sure the small hose with the red stripe is reinstalled on the connection marked with red.

(2) Install the switch assembly from the back of the instrument panel through the hole in the switch plate and secure in place on the face of the instrument panel by installing the lock nut securely on the threaded shaft of the switch.

**73. VACUUM ACTUATOR UNIT**

**a. Removal**

(1) Remove garnish moulding, arm rest, inside door handle, window regulator handle, inside door lock (if on rear door), door trim panel and shower curtain.

(2) Disconnect the two rubber hoses from the actuator.

(3) The vacuum actuator is then accessible for removal after first removing its attaching screws and link clip.

**b. Installation**

(1) Install the vacuum actuator in the door with attaching screws and link clip.

(2) Attach the two rubber hoses, slipping them over the two connections on the actuator, making sure the hose with the red stripe is reinstalled on the connection marked with red.

(3) Replace the shower curtain and reinstall the door trim panel.

(4) Reinstall the door hardware beginning with the inside door lock (if on rear door), window regulator handle, inside door handle and arm rest.

(5) Reinstall the garnish moulding.

#### 74. VACUUM DISTRIBUTOR VALVE

##### a. Removal

(1) Disconnect the large hose leading from the vacuum reservoir.

(2) Disconnect the three hoses (one large and two small) leading to the manual switch.

(3) Disconnect the two large hoses leading to the doors.

(4) The vacuum distributor valve can then be removed from the firewall after first removing its attaching screws.

##### b. Installation

(1) Install the vacuum distributor valve on the firewall under the instrument panel with its attaching screws.

(2) Install the two large hoses leading to the doors by slipping them over the connections on the vacuum distributor valve. Make sure that the large hose with the red stripe is installed on the connection marked with red.

(3) Install the three hoses (one large and two small) leading to the manual switch by slipping them over the connections on the vacuum distributor valve. Make sure that the small hose with the red stripe is installed on the connection marked with red.

(4) Install the large hose leading from the vacuum reservoir by slipping it over the connection on the vacuum distributor valve.

#### 75. VACUUM RESERVOIR

##### a. Removal

(1) Disconnect the large vacuum hose leading from the engine manifold.

(2) Disconnect the large hose at the tank leading to the vacuum distributor valve.

(3) Remove the two metal screws attaching the support clamp to the radiator yoke and remove the reservoir.

##### b. Installation

(1) Install the vacuum reservoir on the radiator yoke attaching both ends of the support clamp to the yoke with two metal screws.

(2) Install the large hose, leading to the vacuum distributor valve, by slipping it over the tank connection.

(3) Install the large hose leading from the engine manifold by slipping it over the tank connection.

#### 76. HOSES

##### a. Removal

(1) The large hose from the manifold to the vacuum reservoir is accessible for removal under the hood.

(2) Disconnect the one end from the engine manifold and the other end from the vacuum reservoir.

(3) The large hose from the vacuum reservoir to the vacuum distributor valve must first be disconnected from the reservoir under the hood and then from the vacuum distributor valve under the instrument panel and pulled through the grommet in the fire wall.

(4) The three hoses from the vacuum distributor valve to the manual switch are accessible for removal under the instrument panel after first disconnecting each end from the respective units.

(5) To remove the two large hoses to the front doors, first remove the kick pad and then remove the door hardware and trim as indicated for removal of vacuum actuator unit. The hoses to the front doors run from the tees inside the cowl, through the "A" post grommet into the door hinge face. Hoses must be disconnected from two (2) clips on inside door panel, and one (1) clip on the door shut face just under the lock before hoses can be removed.

(6) To remove the two large hoses to the rear doors, first remove the kick pad and then remove the door hardware and trim as indicated for removal of vacuum actuator unit. The hoses to the rear doors run from the tees inside the cowl, out of the cowl and along the side sill into the "B" post, out of the "B" post grommet into the hinge face of the door. The hoses must be removed from the clip on the inside of the hinge face of the door, and the two (2) clips on the inside door panel before they can be removed.

(7) The main feed lines to the doors run from the distributor valve to tees just above the distributor valve. The main feed lines branch out from these tees to both sides of the body.

**b. Installation**

(1) Install one end of the large hose from the manifold to the vacuum reservoir on the engine manifold fitting at the rear of the engine and the other end by slipping it over the connection of the vacuum reservoir.

(2) The large hose from the vacuum reservoir to the vacuum distributor valve must first be installed under the instrument panel by slipping it over the fitting on the vacuum distributor valve. Then slip the hose through the grommet in the fire wall and install the other end on the vacuum reservoir by slipping it over the connection on the reservoir.

(3) Install the three hoses (one large and two small) from the vacuum distributor valve to the manual switch by first slipping one end of each over the connections on the back of the switch assembly under the instrument panel.

(4) Then install the other end of each hose on the distributor valve on the fire wall by slipping them over the connections on the valve. Make sure the small hose with the red stripe is installed on the connections marked with red.

(5) Install the two large hoses to either front door by first slipping one end of each over the connections on the vacuum actuator unit in the door. Secure the hoses in place with one (1) clip on the inside of the shut face of the door and with two (2) clips on the inside door panel.

(6) Slip the other end of the hoses through the hole in the hinge face of the door and through the grommet in the "A" post connecting the two ends to the tees inside the cowl by slipping them over the tee connections.

(7) Make sure both ends of the hose with the red stripe are installed on the connections marked with red. Replace the shower curtain and reinstall the door trim panel.

(8) Reinstall the window regulator handle, inside door handle, arm rest and garnish moulding. Reinstall the cowl kick pad.

(9) Install the two large hoses to either rear door by first slipping one end of each over the connections on the vacuum actuator unit in the door.

(10) Secure the hoses in place with two (2) clips on the inside door panel and one (1) clip on the inside of the hinge face of the door.

(11) Slip the other end of the hoses through the hole in the hinge face of the door and through the grommet in the "B" post. Then down the "B" post, along the side sill and into the cowl.

(12) Connect the two ends to the tees inside the cowl by slipping them over the tee connections. Make sure both ends of the hose with the red stripe are installed on the connections marked with red.

(13) Replace the shower curtain and reinstall the door trim panel.

(14) Reinstall the inside door lock, window regulator handle, inside door handle, arm rest and garnish moulding.

(15) Reinstall the "B" post moulding, the inside sill moulding and the cowl kick pad.

**77. DOOR HINGE (ALL MODELS)**

In order to adjust the rear door hinges the trim and door opening whipcord must be removed to gain access to hinge pillar attaching bolts.

**a. Removal**

Loosen the hinge pillar attaching bolts at "B" pillar (Fig. 81) and remove hinge and door assembly.

**b. Installation**

(1) Place door and hinge assembly in door opening.

(2) Align hinge assembly to hinge attaching holes in "B" pillar and install attaching bolts.

(3) To move the **upper part** of the door forward or rearward, loosen only the **upper hinge bolts** at the pillar. Open the door a few inches. Lift the rear door edge, or pull down on the rear edge—depending on adjustment needed. Retighten the bolts.

To move the **lower part** of the door forward or rearward, loosen only the **lower hinge bolts** at the pillar. Open the door a few inches and pull down at the rear edge, or lift up as needed. Retighten the bolts. Loosen the upper hinge bolt to let the hinge realign itself, and retighten the bolts.

## BODY SEALING

### 78. WEATHERSTRIP ADHESIVE

This cement may be used where a strong bonding of rubber parts to painted or unpainted steel surfaces is desired. It can be used for such purposes as the attachment of weatherstripping on doors and luggage compartment lid or for the attachment of felt pads.

**NOTE:** Before sealing, always clean all surfaces to be cemented with unleaded gasoline. Do not use kerosene as this liquid leaves a thin film of oil which will prevent adequate adhesion of the sealer.

### 79. WINDSHIELD RUBBER CEMENT

A heavy viscosity, black, rubber cement. This cement is used where glass is confined in the rubber weatherstrip, such as on the windshield and rear window to eliminate glass chatter and water leakage. This cement will not harm paint or chrome finish and can easily be removed with a cloth before it sets or masking tape after it dries.

### 80. GENERAL SEAM SEALING MATERIAL

Body caulking gray putty sealer (Permagum), used for body seam and joints—requires areas for sealing to be free of dirt, moisture and foreign matter, Sealer must be pressed firmly into seam to effect a proper seal.

### 81. GASOLINE RESISTANT PERMAGUM SEALER

Used in areas subject to gasoline spillage such as filler housing door.

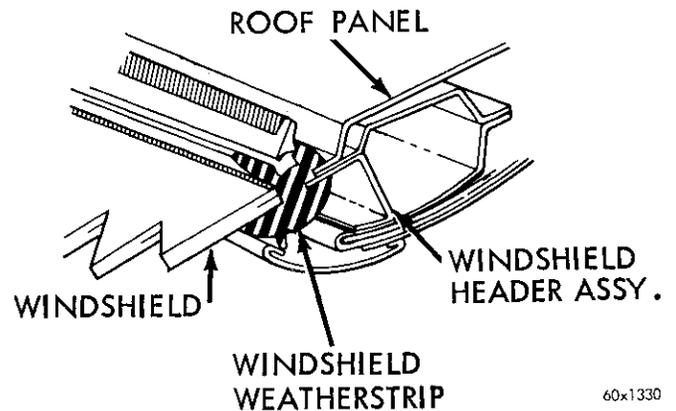


Fig. 82—Windshield Weatherstrip Sealing

### 82. WATER AND DUST LEAKAGE AREAS

#### a. Windshield and Rear Window Weatherstrip — Glass to Rubber (Figs. 82 and 83)

To eliminate glass chatter and water leakage between glass and rubber weatherstrip, it is recommended to lift the lip of the rubber weatherstrip where it contacts the glass, using a nozzle type applicator and force a continuous  $\frac{1}{8}$ " diameter bead of windshield rubber cement deeply around the entire edge of glass, as shown in Figure 31.

#### b. Windshield and Rear Window Weatherstrip (Figs. 83 and 84)—Rubber to Body and Moulding Attaching Clips to Body Water Leakage (Show cement completely around on backlite)

Remove the outside finish mouldings; and apply a continuous  $\frac{1}{8}$ " diameter bead of windshield rubber

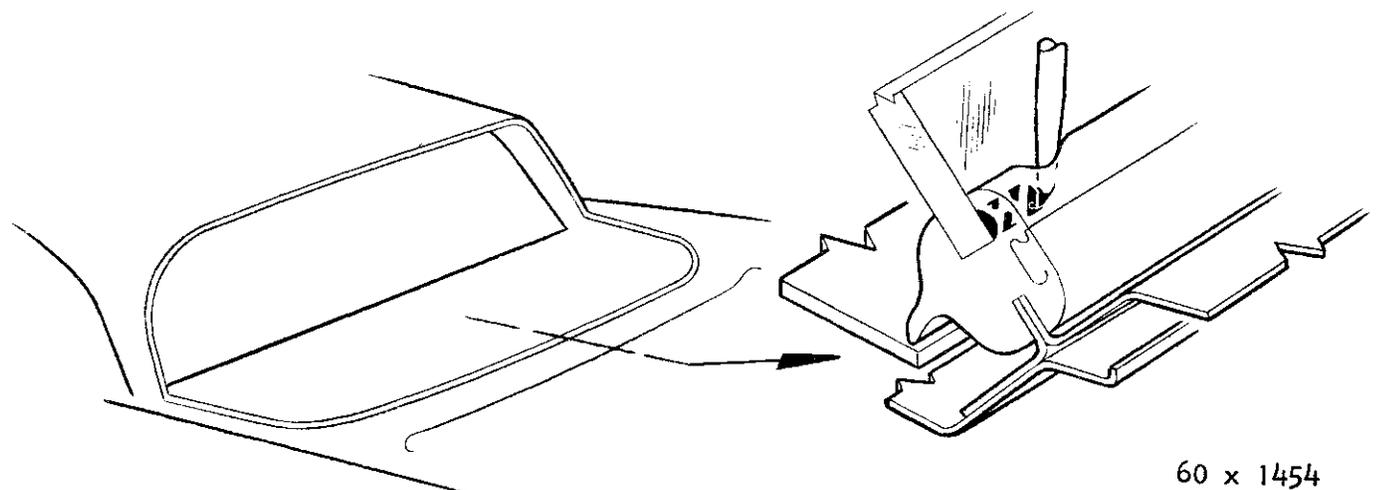


Fig. 83—Rear Window Weatherstrip Sealing (Lower)

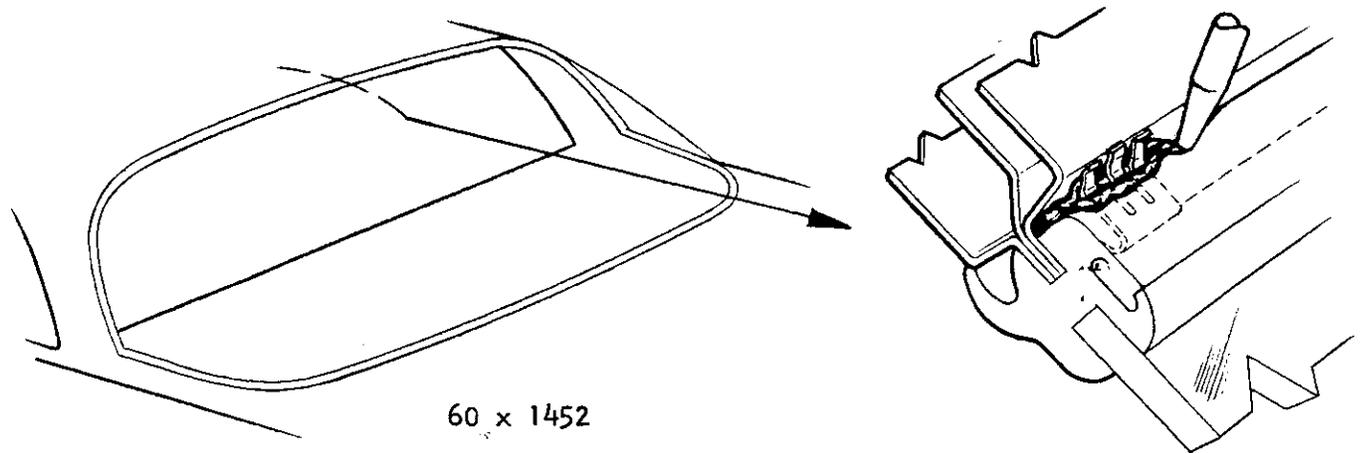


Fig. 84—Rear Window Weatherstrip Sealing (Upper)

cement around entire edge of rubber to body opening fence. It is recommended to take particular caution to apply an excessive amount of cement around each moulding attaching clip.

**c. Windshield Weatherstrip Sealing (Fig. 31)**

Seal the weatherstrip against the body opening by carefully working a thin coating of Body Seam Sealer between the body edge and the rubber moulding. Or, lift the lip of the rubber weatherstrip where it contacts the body metal, and use a nozzle-type applicator (sealer gun) to force the sealer deeply around the entire edge. It is rarely necessary to re-seal between the glass and the weatherstrip, unless the glass has been replaced. If faulty sealing of the glass to the weatherstrip has caused a leak, remove the windshield finish moulding and apply sealer as

far down as possible between the inner weatherstrip and the glass for a considerable distance on each side of the leakage point (Fig. 31). Clean off excess sealer with a rag. Reinstall the finish mouldings and check for proper seal.

**d. Door Hinges at Center Pillar Fig. 85)**

Check the sealer where rear door hinge enters through center pillar. This should be done after door fitting as sealer may become cracked or loose. Seal around hinge should be an air tight seal. Reseal if necessary with body caulking putty sealer.

On the Imperial models having a simulated spare tire cover on the luggage compartment deck lid, seal around each moulding attaching bolt nut with body caulking putty. Seal around the periphery of the spare tire cover with body caulking sealer (C-300 Models).

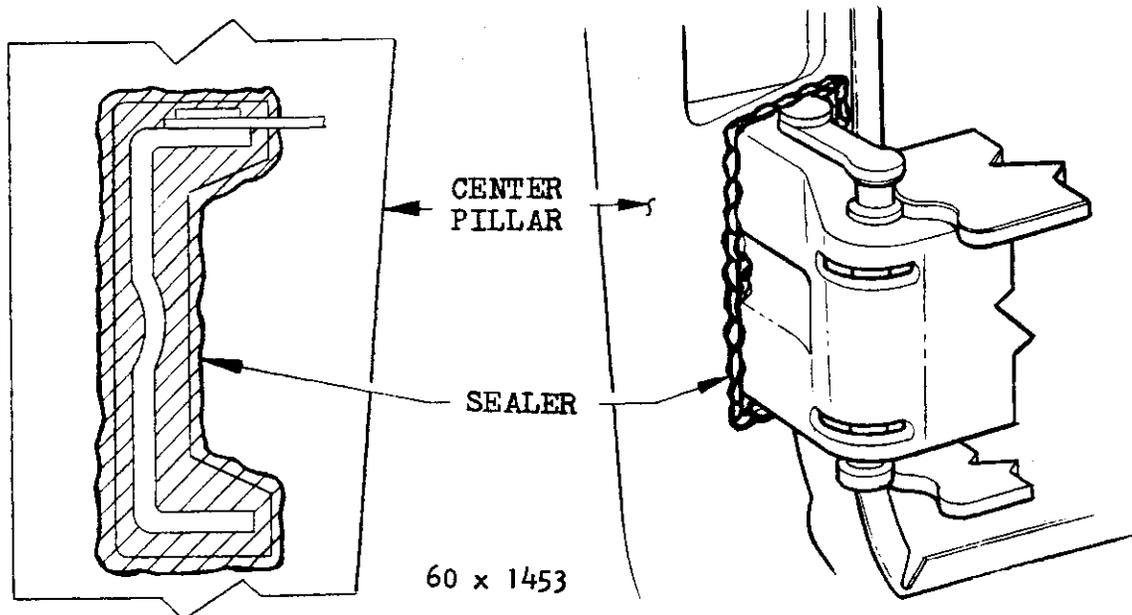


Fig. 85—Rear Door Hinge Sealing

Seal all openings and joint seams on the inside of the luggage compartment lower panel, especially the back-up lamp wire grommets. Seal all luggage compartment floor panel seams with liquid body sealer. Seal between the luggage compartment lower panel and floor panel with body caulking sealer. Make sure all plugs and grommets are properly installed.

**e. Front Door Vent Window (Fig. 86)**

Leaks through the vent windows can be located by water test. After locating the leak area, inspect the condition of the vent weatherstrip, the fit of the vent glass in the vent opening, and the compression of the vent glass weatherstrip.

In most cases simple adjustments will correct leaks between the vent glass and the weatherstrip. To increase the pressure of the glass against the upper portion of the weatherstrip, install shims made from rubber shim stock and place between

the upper vent pivot bracket and the outside of the vent glass.

Application of black mastic or body sealer to the corners of the vent weatherstrip generally corrects the leak in this area if the weatherstrip overlaps. If the weatherstrip is severely damaged, install a new vent window weatherstrip.

Leaks around the pivots can be corrected by the use of black mastic sealer. Fill the openings in the weatherstrip where the vent pivot goes through the weatherstrip. Seal around the upper pivot bracket at the door frame and at the junction of the division bar and door frame.

The first and most important requirement to obtain a good water-tight seal between the door window frames and the roof rail weatherstrip is precise adjustments of the doors, the window frames and channels. Adequate adjustments are provided for up

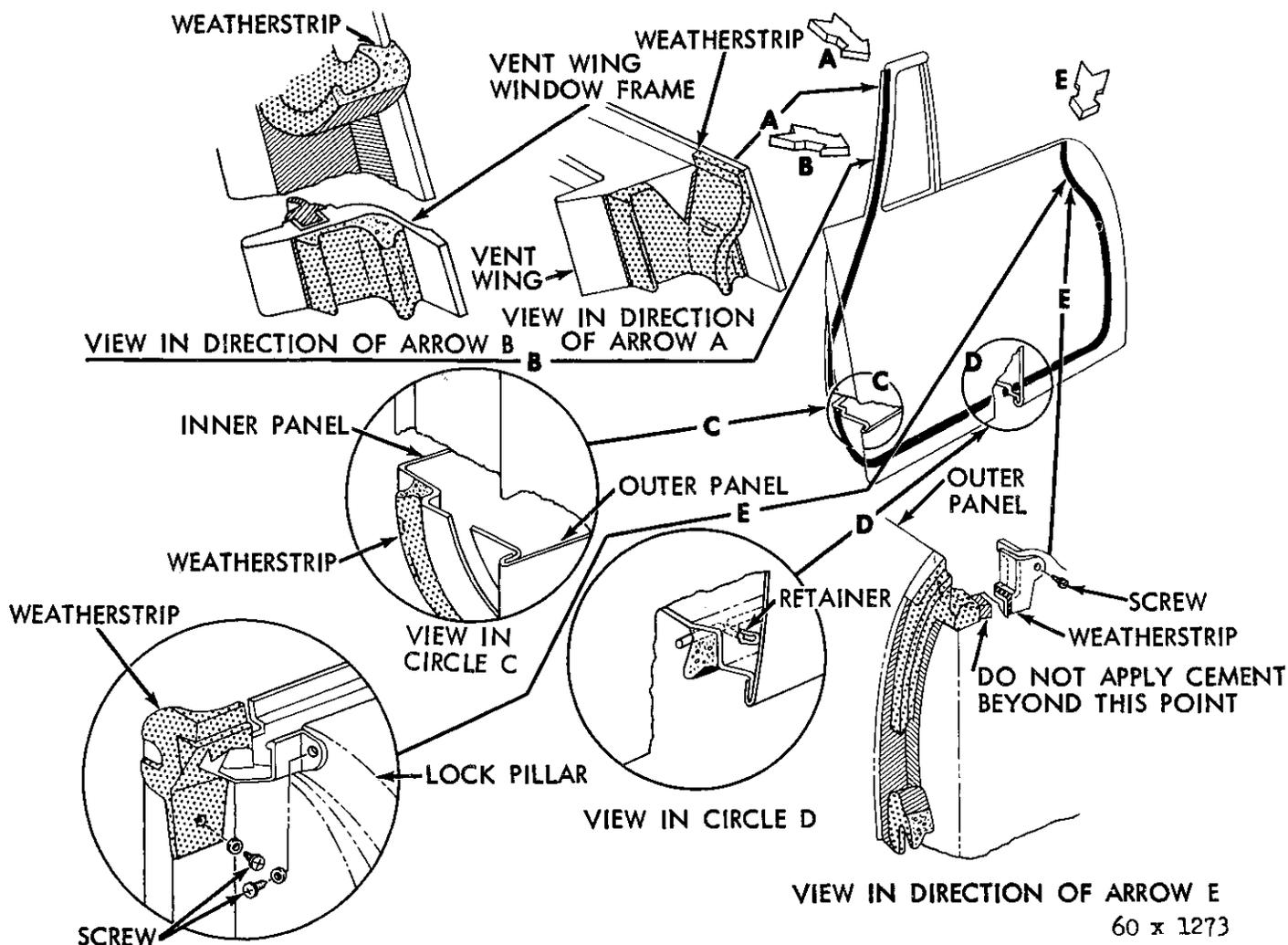


Fig. 86—Door Ventilator Wing Sealing (Hardtop Models)

and down, in and out, and forward and rearward adjustment of the window frames. It is important that the weatherstrip has sufficient pressure against the frame, but too great pressure will push the window frame out of alignment and will prevent proper contact with the mating window weatherstrip.

**83. LUGGAGE COMPARTMENT SEALING**

Leaks may occur from medallions or clip-holes, tail lamps or the rear quarter panel which will generally appear in the luggage compartment, floor extensions near the quarter panel.

Before attempting to correct luggage compartment leaks, carefully determine the real source of the leak.

**CAUTION**

Do not confuse condensation on metal parts with water leaks.

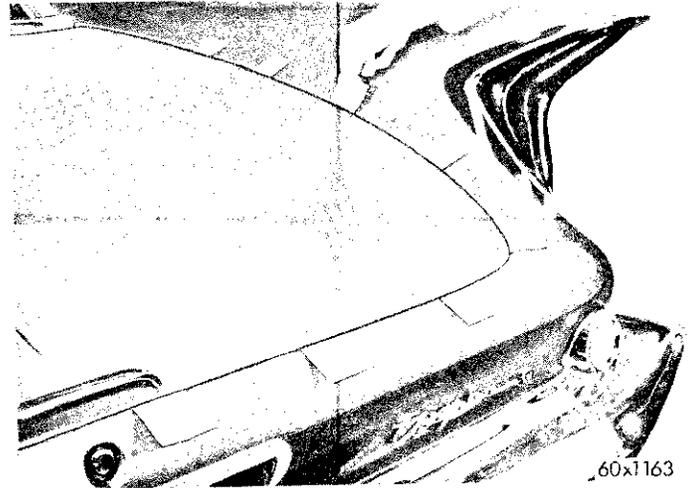
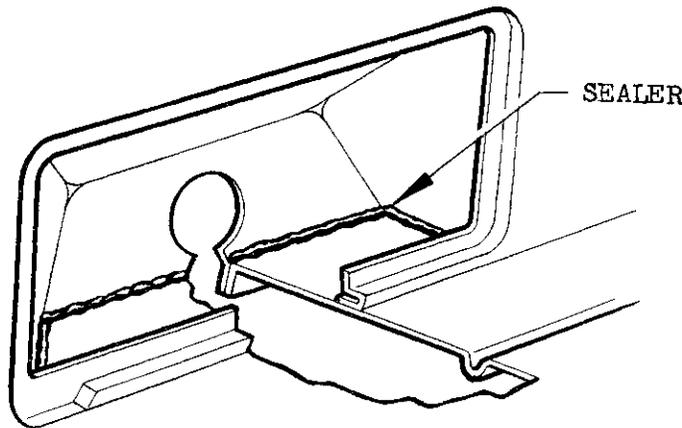
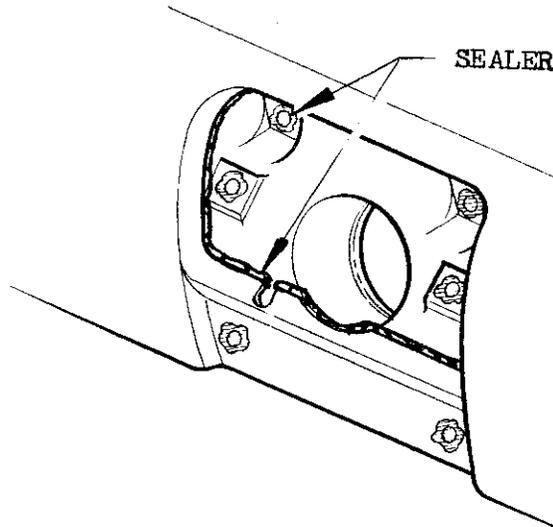


Fig. 87—Checking Deck Lid Seal

60x1163



CHRYSLER & DESOTO



IMPERIAL MODELS

60 x 1450

Fig. 88—Sealing Fuel Filler Housing

When the actual source of the leaks has been traced to the luggage compartment itself, correct as follows:

Be sure to obtain proper fit and alignment of the luggage compartment deck lid before trying to correct the leak at the lid weatherstrip. Inspect the luggage compartment lid drain trough and weatherstrip retainer joints for rough and porous welds. Seal with body caulking putty or body sealer as required. Brush a continuous coating of weatherstrip cement around entire weatherstrip trough. Install the deck lid weatherstrip into the retainer. Be sure to obtain a good fit and compression of the lid weatherstrip. Adjust deck lid if necessary to obtain proper compression. Test with the use of slips of paper, trace powder and/or a testing bulb, as shown in Figure 87.

Leaks at the deck lid weatherstrip retainer trough body joints can best be sealed by loosening the weatherstrip at the joint and applying sealer to the entire seam at the inside of the trough and then recement the weatherstrip.

Seal all openings and joint seams on the inside of the luggage compartment lower panel, especially the back-up lamp wire grommets. Seal all luggage compartment floor panel seams with liquid body sealer. Seal between the luggage compartment lower panel and floor panel with black mastic sealer.

#### 84. LEAKAGE AT DECK LID

Before water testing the deck lid make certain that the deck lid is properly fitted. Start the water test at the bottom and work slowly toward the top of each side. Then work across the top of the lid. Inspect the two upper and lower welded joints for proper sealing.

Leakage around the lid is usually caused by insufficient contact between the deck lid and the weatherstrip which may indicate the need for refitting the lid, replacing or shimming the weatherstrip. Clean surface prior to installation of new deck lid weatherstrip and brush an even coat of rubber cement to weatherstrip cementing surface. Care should be taken not to stretch the weatherstrip during replacement especially at the corners. Note — Reseal the metal weatherstrip retainer joints or burnt spot-welds if required with body caulking sealer.

#### a. Housing — Fuel Filler (Fig. 88)

Inspect for pin holes in seam of gas filler housing to deck lower panel (source of gasoline, water, and dust leak into trunk area). Repair seam with gasoline-resistant permagum sealer. To seal, remove attaching screws of fuel filler housing door; apply  $\frac{1}{8}$ " diameter ball of sealer to holes prior to reinstalling of screws.

#### b. Rear Window

If water enters the luggage compartment under the package shelf, remove the rear window lower trim moulding and clean out the old sealer from the trough below the weatherstrip. Apply semi-fluid sealer body caulking putty-type sealer along the entire length of the trough. Seal the trough at both lower corners of the window, as shown in Figure 83.

To aid in the installation of the moulding, mark the clip holes by placing balls of sealer to the rear of each moulding hole. This helps align the trim moulding retaining studs with the holes and avoids the possibility of moving the sealer or damaging the paint. Remove balls of sealer when moulding is installed.

#### c. Rear Quarter Panel

The increased use of bright metal and medallions on the rear quarter panel results in more clips and bolt holes, which may leak. Leaks from this area will generally appear in the luggage compartment, floor extensions near the quarter panel.

Seal around all attaching clip and bolt holes, tail lamp reinforcement seams, and rear quarter panel and floor pan extension with body caulking sealer or windshield cement depending upon the size of the opening at this joint.

#### d. Dash Panel (Fig. 89)

If leakage occurs at the key hole grommet, it is rec-

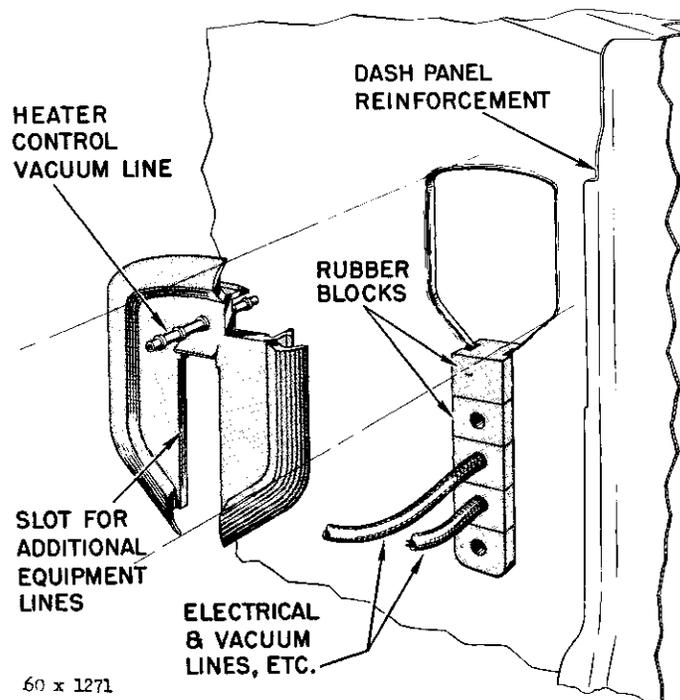
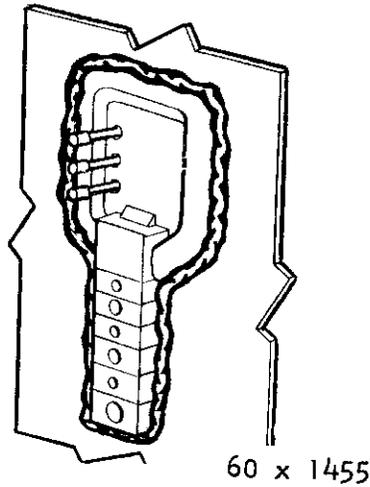


Fig. 89—Sealing Dash Panel Grommets



**Fig. 90—Sealing Dash Panel Rubber Grommets**

ommended to place a bead of windshield rubber cement or body caulking sealer around the edges of the grommets to seal them to the dash panel. The type of sealer used will depend on the individual requirement. Apply cement around grommet for Imperial, Chrysler and De Soto models, as shown Figure 90. Fill any unused holes with body caulking sealer.

**e. Hood (All Models) (Fig. 91)**

Locate the hood to cowl seal weatherstripping on the

hood properly, and lock in place. This seal greatly effects dash panel grommet leakage. Imperial models —reacement if necessary.

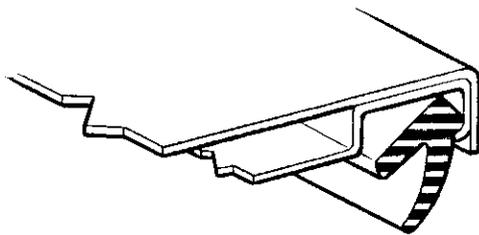
**f. Roof (Fig. 92)**

Inspect the roof drip rails carefully from one end to the other for burned spotwelds, skips or breaks in the seal between the roof flange and the drip rail. Clean the roof drip rail thoroughly before applying the putty caulking sealer. Wipe sealer into areas where skips occur. Clean off the excess putty. Seal may be painted. It is advisable to inspect the seam joint sealing under the drip rail. Occasionally this seal is incomplete or broken. Use procedure as outlined above for repair.

When correcting a water leak at the front end of the roof, be sure to fill the joint of the roof to "A" pillar and the slotted notches and skips in the seam in the "A" pillar flange with body caulking sealer. These notches and seams can be seen by removing the windshield pillar mouldings.

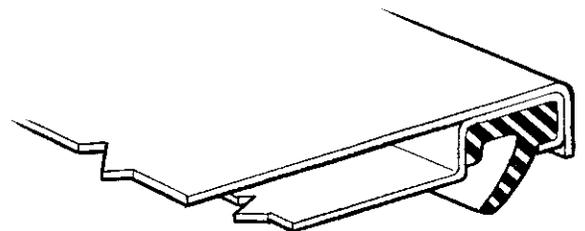
On Imperial models, if damage occurs to headlining due to water and requires replacement, correct water leakage at the roof trim mouldings.

**NOTE:** Be sure to remove the trim mouldings and seal around each retaining stud and clip with body caulking putty.

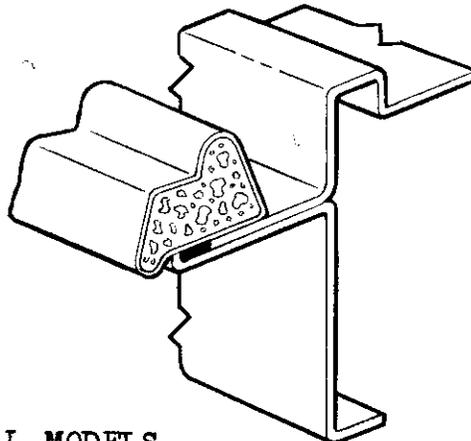


OPEN POSITION

CHRYSLER & DESOTO



CLOSED POSITION



IMPERIAL MODELS

60 x 1456

**Fig. 91—Sealing Cowl Panel**

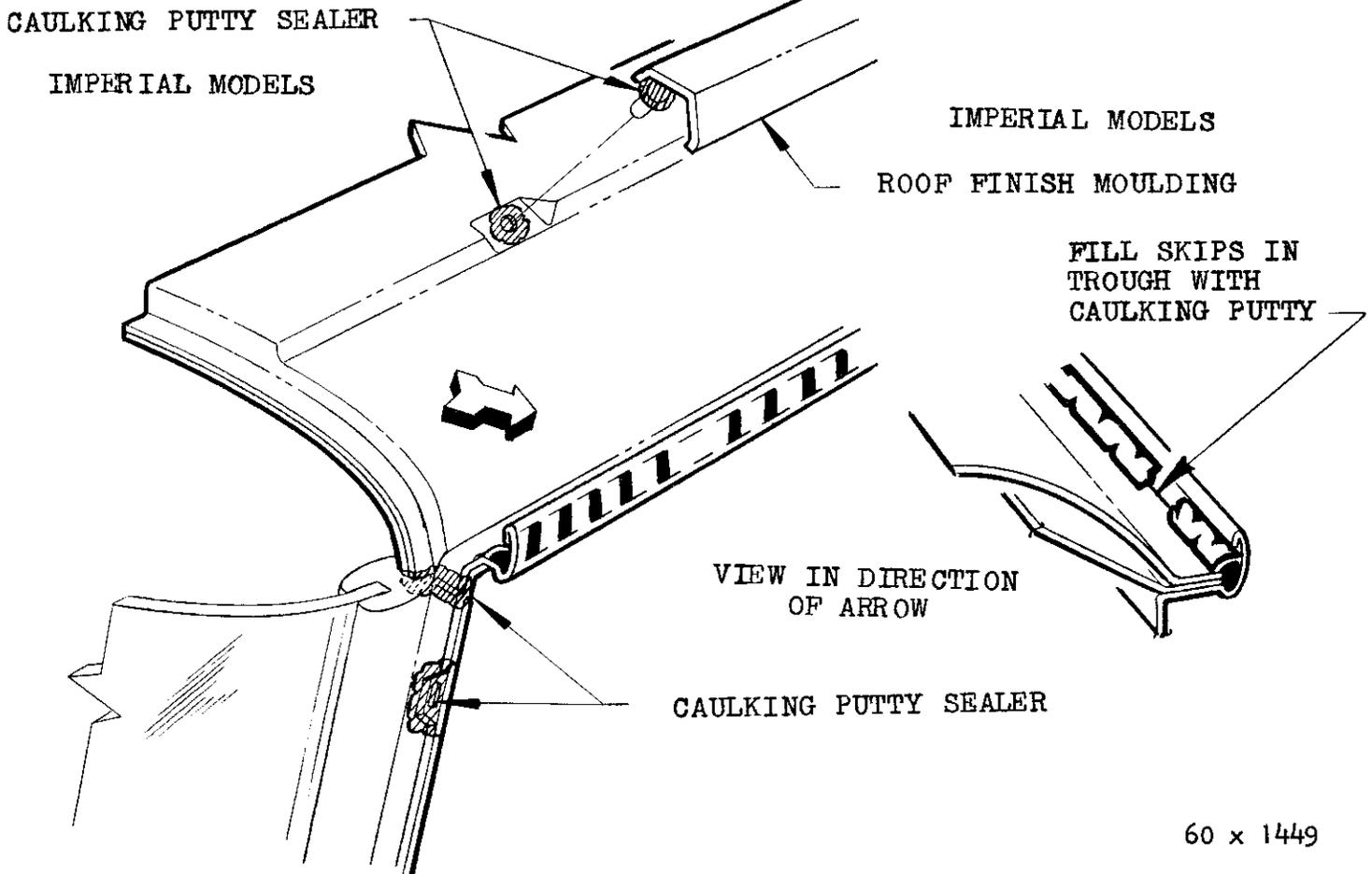


Fig. 92—Sealing Rear Window Glass and Roof Moulding

60 x 1449

When correcting leaks in the roof panel areas while the headlining is down, inspect the sealing at the junction of the roof rails, windshield opening header, and windshield pillar (upper "A" pillar). Seal all open body joints with body caulking putty.

**g. Doors (Fig. 93)**

Before attempting to correct door weatherstrip water leaks, it is most important that the doors be properly adjusted to the body door opening, and that the window frames be properly adjusted to fit the contour of the door opening.

Sufficient adjustments are provided to obtain forward and rearward, up and down, and in and out adjustment of the window frames.

**NOTE:** Be sure the door and window frame fits the door opening and body contour.

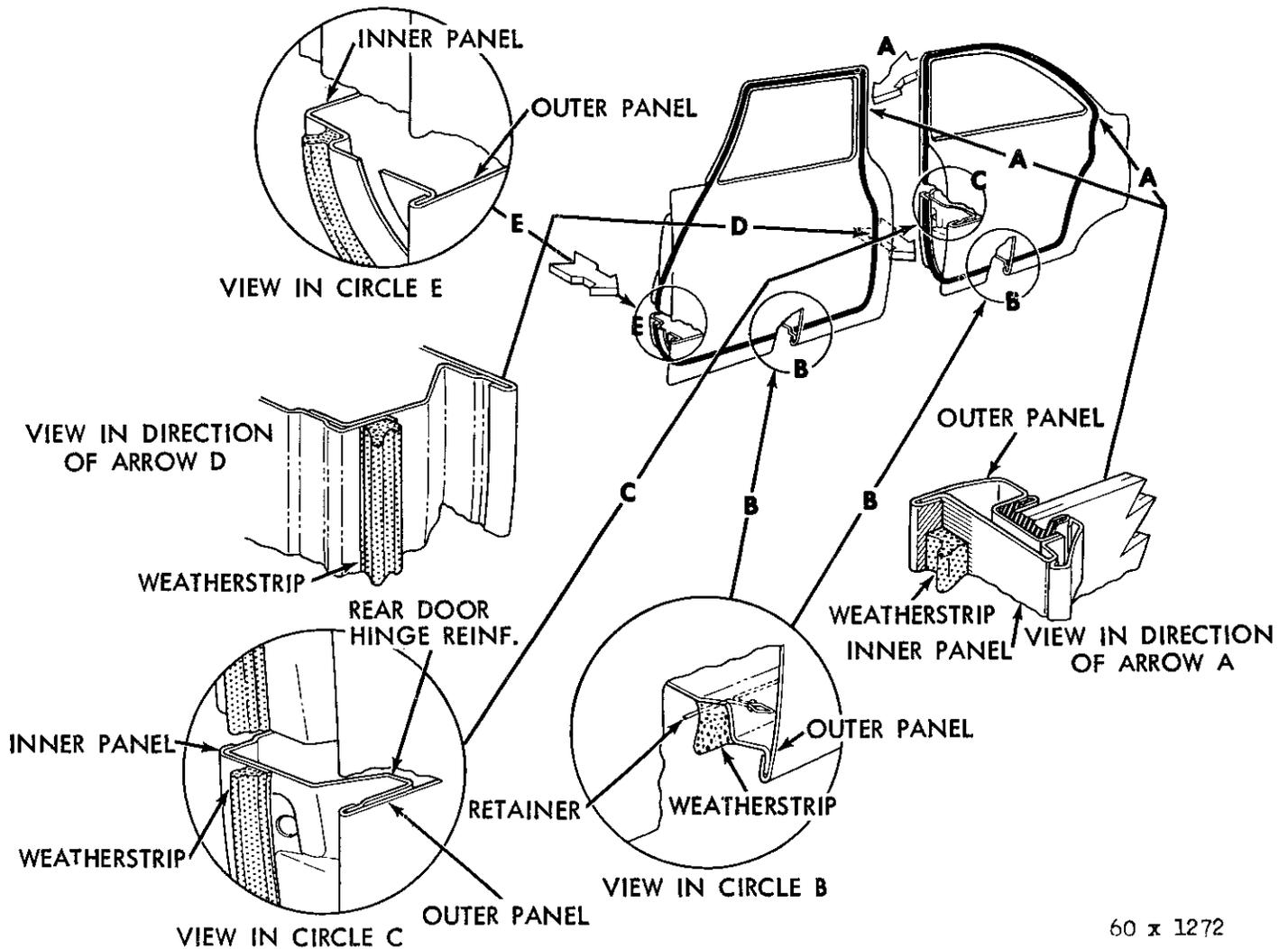
Leaks around the door weatherstrip may be detected by water test, or with the use of slips of paper, trace blue carpenter's chalk, or the use of trace-powder and testing bulb (Fig. 94). When using chalk

or tracepowder, a good seal will be indicated by an unbroken chalk line. A weakness in the seal will be indicated by passing or blowing through of the powder.

Rolled, kinked, or creased weatherstrip, as well as breaks and openings or gaps between the ends of the weatherstrip, and loose weatherstrip or shallow areas all can contribute to dust and water leaks.

Faulty weatherstrip should be removed and the old weatherstrip cement should be carefully cleaned off. Remember, the weatherstrip is moulded so that certain areas of the weatherstrip must fit into the window frame clearance radius in the roof rail, and other contour areas of both when the door is closed. Weatherstrip that has worked loose should be stripped from the door, the old cement removed with solvent, and the weatherstrip recemented with rubber cement.

When installing new weatherstrip, apply a thin coat of weatherstrip cement to the two surfaces of the weatherstrip that are to be bonded to the door flange and window frame and let it set up until tacky, while a thin coat of cement is applied to the

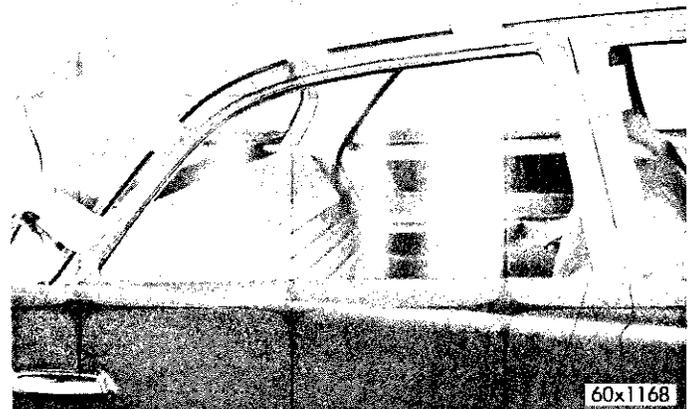


60 x 1272

**Fig. 93—Front and Rear Doors Weatherstrip Application**

door inner panel and flange and the window frame areas which are to be bonded to the weatherstrip. Allow the cement to set until tacky, and then carefully and firmly press the weatherstrip into place.

Build up the low areas of the weatherstrip to obtain a greater overlap of the weatherstrip on the door opening, by installing closed cell rubber shim stock under the weatherstrip. To obtain greater compression of the weatherstrip against the door opening, install the closed cell rubber shim between the weatherstrip and the flange of the door or the extruded aluminum frame. Be sure to taper off the ends of the shim stock, since blunt ends will cause water leaks. Loosen the weatherstrip where the shim is to be installed. Clean off the old cement with solvent. Apply weatherstrip cement to both sides of the shim, and to the weatherstrip and door bonding areas. Allow to set up until tacky. Install the shim and press the weatherstrip firmly in place.



60x1168

**Fig. 94—Check Door Seal**

To obtain a smooth radius of the weatherstrip around the corners of the door window frame, slot the weatherstrip on the inside of the radius to allow the weatherstrip to bend smoothly around the corner. Fill the slots with windshield cement or body caulking sealer.

If the weatherstrip is pulled too tightly around the corners, it may be corrected by loosening the weatherstrip along the window frame and carefully cutting the cord on the back corner of the weatherstrip in several places to allow the weatherstrip to stretch up so that enough weatherstrip stock is available to provide a gentle curve around the door window frame corner. Clean off the old weatherstrip cement, and recement the weatherstrip in place as previously described.

#### h. Door and Quarter Watershield Installation (Fig. 86) — Hardtop and Convertible Models

Water entering the car from the outside of the window generally drains out through the drain holes in the bottom edge of the door and quarter inner panel. However, water often seeps into the doors to dampen the door trim panels. This is due to the water entering through the door inner panel and seeping through the door openings in the door inner panel.

To correct this type of leak, remove the trim panel and plastic watershield. Be careful in removing the plastic watershield so that it can be reused, otherwise, a new plastic watershield will have to be installed. Seal off all holes in the door or quarter inner

panel using a waterproof masking tape. Pull windcord from forward edge of quarter panel and run wide tape over access holes and windcord clip holes. Cement the plastic watershield in place using rubber cement and reinstall windcord. The cement pattern must funnel any water leakage into the slot at the bottom of the door.

Be sure to tuck in the bottom edge of the shield through the long slot at the lower edge of the door or quarter inner panel. Seal at corners with waterproof tape. Seal around all the bolts, screws and washers. Water test before reinstalling trim panels.

#### i. Door Openings

Door openings contribute to water leaks in two ways: First, there may be leaks at the metal joint seams, and, secondly, the roughness of the door opening metal or coach joints may not provide a good sealing contact surface for the door weatherstrip.

Inspect for rough, exposed or unsealed metal joint seams outboard of door weatherstrip surface. If the seams are shallow apply body caulking putty to seam. If the seams are rough, large or deep, metal finish smooth with adjoining surfaces. Then apply cold solder with a spatula or putty knife smoothing it down as much as possible, and let it completely set up. Finish off with a sander and paint.

(Minor Leakage.) Note particularly the metal seam joints and the coach joints at the junction of the floor side sill to floor pan and the "A", "B" and "C" pillars. Water and dust can get through this joint and under the sill scuff plate. It is recommended

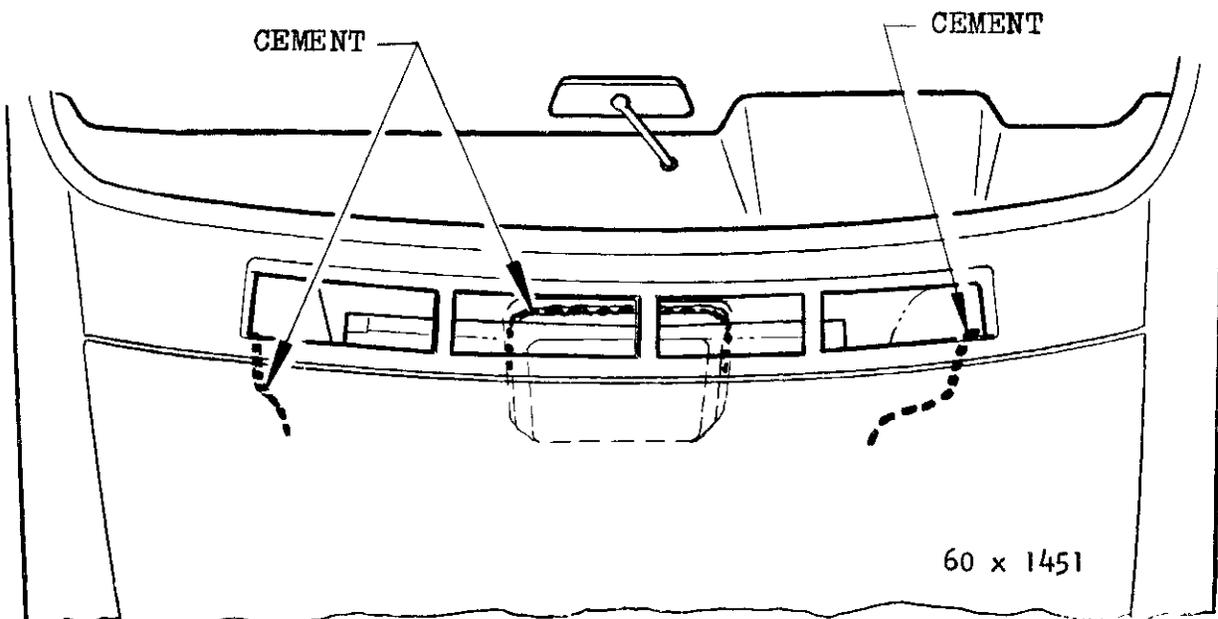


Fig. 95—Cowl Panel Plenum Chamber Sealing

to seal the full length of the seam and around the coach joints using liquid body sealer, applying it with a dispensing gun.

**j. Floor Pan Leakage**

Road splash can enter the body through any opening in the floor pan seams. Proper sealing can be determined by visual inspection of mud and dust traces inside the body. Properly clean area to be sealed and apply a ball of body caulking sealer to area, pressing sealer into the seam. Remove floor carpeting and rear seat cushion, if necessary.

**k. Cowl Top and Fresh Air Plenum Chamber Area Leakage (Fig. 95)**

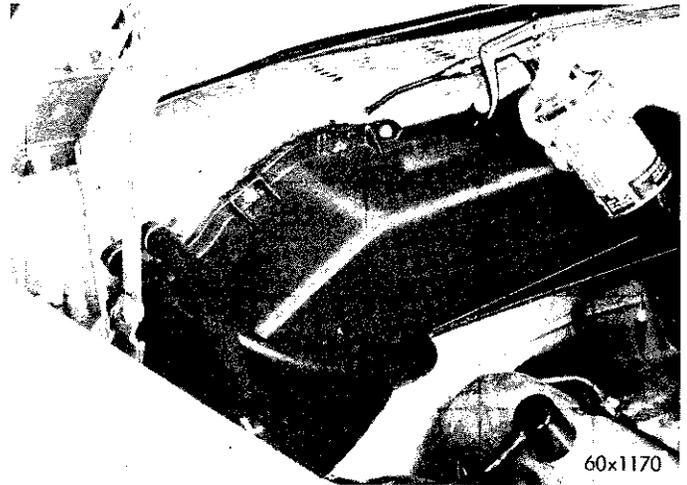
In most cases, water leakage at the heater system rubber fresh air door is caused by ineffective sealing of the fresh air water deflector trough to dash panel. To seal this area, remove the fresh air intake screen and reach into plenum chamber with a sealing gun, flowing a  $\frac{3}{16}$ " diameter bead of windshield rubber cement to sides and top of the deflector trough to dash panel seam.

If water enters around the dash panel with fresh air intake screen removed, flow a  $\frac{3}{16}$ " diameter bead of windshield rubber cement between the top of plenum chamber cover and dash panel seam (left-hand side). To prevent water entering blower system, flow a  $\frac{3}{16}$ " diameter bead of windshield rubber cement to top and sides of plenum cover to dash panel.

If water enters around the booster brake to dash panel assembly or the heater plenum cover, flow a  $\frac{3}{16}$ " diameter bead of windshield rubber cement along the top, sides and bottom of each assembly, as shown in Figures 96 and 97.

**l. Deck Lid Lock Cylinder and Bezel**

Apply body caulking sealer into seam of bezel and



**Fig. 97—Sealing Plenum Chamber Housing to Dash Panel**

deck lid lock, make sure sealer is all around the outer periphery of bezel.

**m. Tail Lamps**

Water test the tail lamp area for possible leakage into the luggage compartment. Water may enter between the tail lamp housing and quarter panel openings. To obtain a good seal, use a body caulking compound and the tail lamp should be removed, resealed and reassembled.

**85. TOWN AND COUNTRY WAGON TAIL GATE SEALING (WINDSOR AND NEW YORKER)**

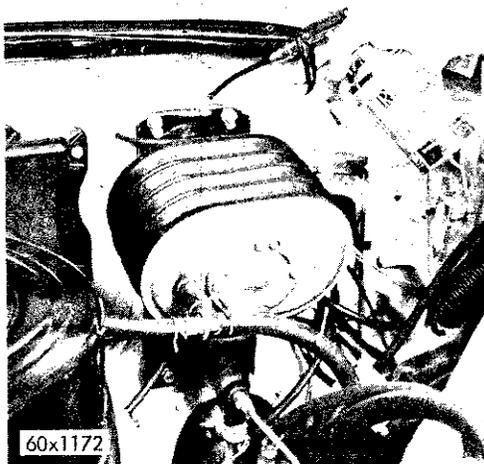
Sealing procedures pertaining to the roof, cowl, firewall, fresh air vent, doors and openings are essentially the same as contained in the section devoted to the sedans and coupe models. Body features that are pertinent to bodies are contained in this section.

**86. TAIL GATE GLASS RUN CHANNEL**

Water leaking past the glass run around the channel may be sealed off (Fig. 98) by applying sealer at indicated points. Water leaking around glass run may be sealed by removing glass run and applying additional beads of sealer to the glass run channel. Press a bead of rope-type seal into moulding seams and clean off surplus. While rear pillar garnish moulding is removed, inspect the outer "D" shaped opening; if necessary, seal. This opening should be filled with caulking putty.

**87. TAIL GATE WEATHERSTRIP**

The tail gate weatherstrip is designed to fit under a lip and into a channel at the sides of the tail gate opening. At its upper end a piece extends out and fits up into the bottom of the pillar (Fig. 98). Re-



**Fig. 96—Sealing Booster Brake Assembly to Dash Panel**

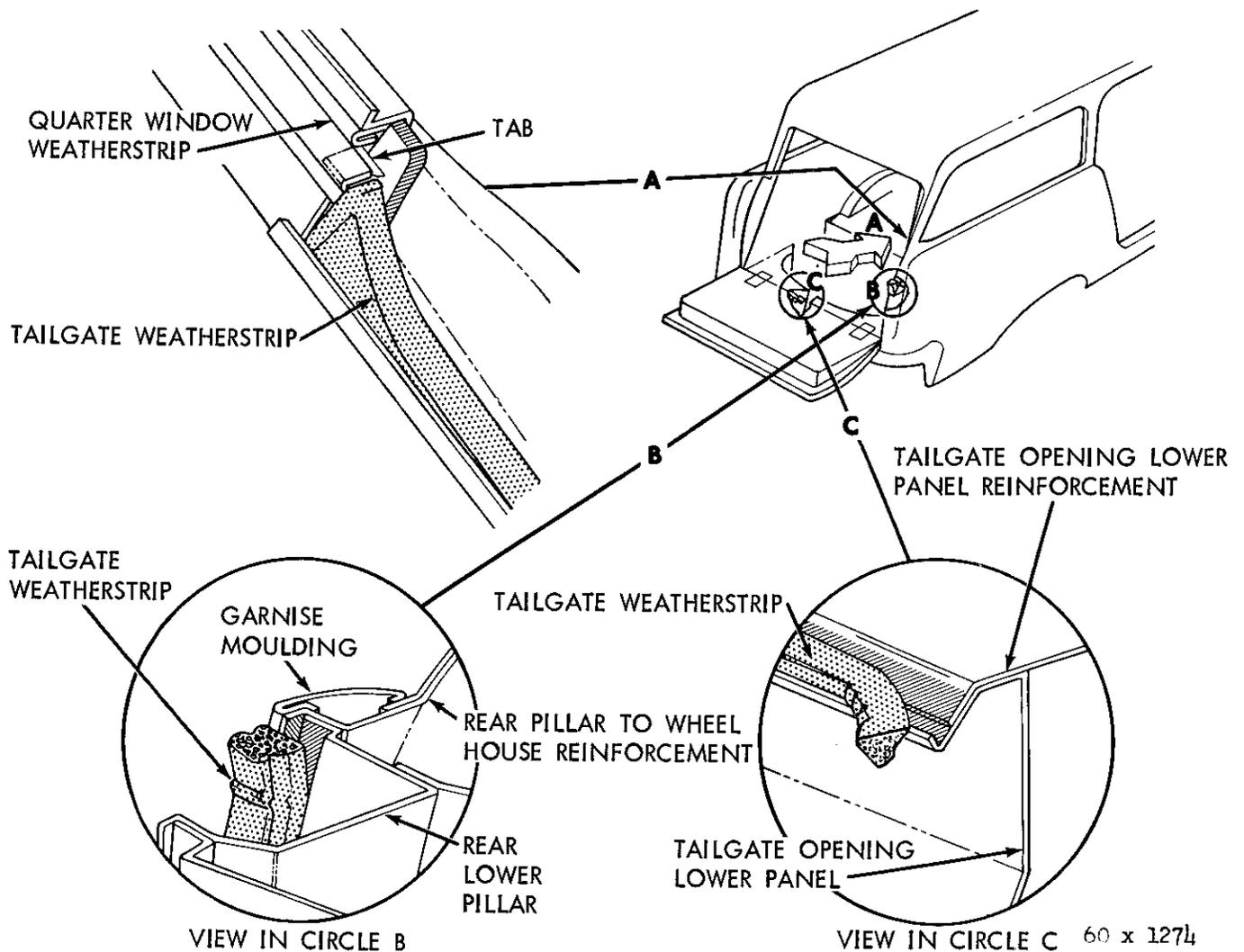


Fig. 98—Town and Country Wagon Tail Gate Sealing Applicator

move all weatherstrip that is not installed properly. Clean the channel and the weatherstrip with cement removing solvent. Apply a coat of cement to each part and reinstall weatherstrip. At the bottom of opening, it is sometimes necessary to remove the weatherstrip and after cleaning shim the weatherstrip surfaces and reinstall.

**88. TAIL GATE GLASS**

Check glass for proper fit. Be sure to adjust lift so that when glass is raised it fits squarely into top channel and compresses against the glass run. If glass does not seat in run when in closed position, it is possible for dust, water and carbon monoxide gas to be pulled in around top of glass.

## MINOR BODY SERVICING GRILLE AND BUMPERS

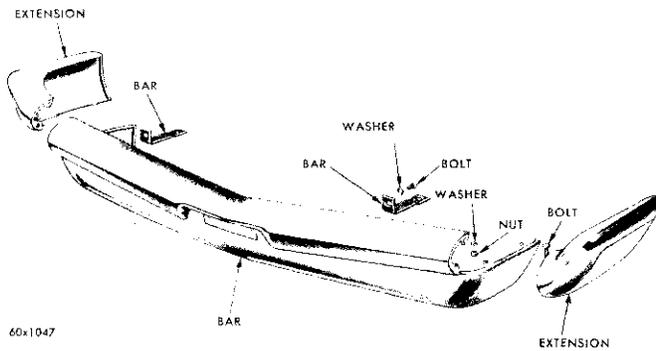
**89. BUMPER — FRONT (Figs. 99 and 100)  
(CHRYSLER AND DESOTO MODELS)**

**a. Removal**

(1) Remove the bumper to frame bolts.

(2) Remove the bumper support bracket to the frame bracket bolts and remove the bumper assembly.

(3) With the bumper removed, remove the bumper extensions.



**Fig. 99—Front Bumper Assembly (Exploded View)  
(Chrysler, DeSoto)**

**b. Installation**

- (1) Position the bumper extensions on the bumper and install the mounting bolts securely.
- (2) Position the bumper against the frame reinforcements and install the mounting bolts loosely.
- (3) Install the frame bracket to the bumper support bracket bolts loosely.
- (4) Align the bumper from side to side, and for correct spacing with the front fenders and tighten all mounting bolts securely.

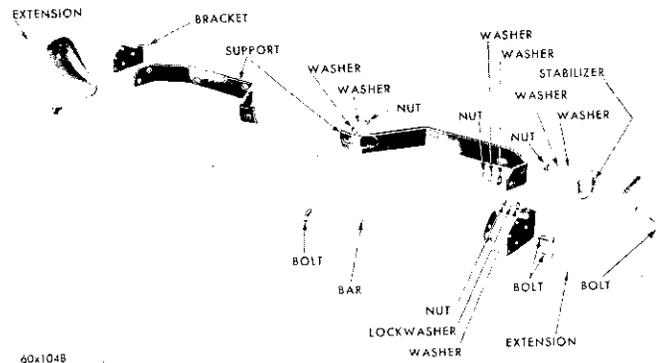
**90. BUMPER — REAR (Fig. 101)  
(CHRYSLER AND DESOTO MODELS)**

**a. Removal**

- (1) Remove the bumper stabilizer to the quarter panel mounting bolts.
- (2) Remove the bolts attaching the bumper to the support arms and remove the bumper assembly.
- (3) Remove the stabilizers from the bumper extensions.
- (4) Remove the bumper extensions.

**b. Installation**

- (1) Install the stabilizers on the bumper exten-



**Fig. 101—Rear Bumper Assembly (Exploded View)  
(Chrysler, DeSoto)**

sions and the extensions on the bumper face bar.

- (2) Using extreme care not to damage the paint on the quarter panel, position the bumper assembly on the support arms and install the mounting bolts loosely.

(3) After obtaining the bumper to the quarter panel alignment, tighten the bumper to support the arm bolts.

- (4) Install the stabilizer to the quarter panel bolts.

**91. DEFLECTOR (CHRYSLER MODELS)**

**a. Removal**

- (1) Remove the bumper assembly.
- (2) Remove the grille moulding.
- (3) Remove the stone deflector.

**b. Installation**

- (1) Position the stone deflector and install the stone deflector to the grille bracket bolts.
- (2) Install the grille moulding.
- (3) Install the bumper assembly.

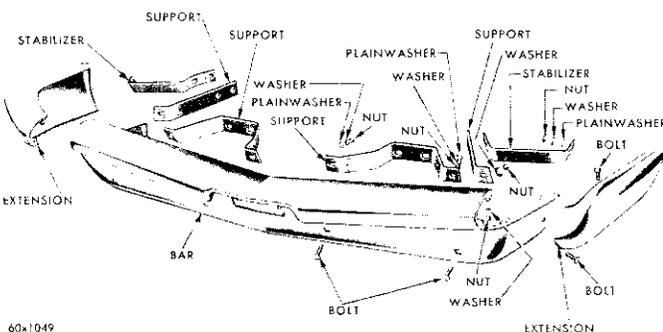
**92. GRILLE (CHRYSLER AND DESOTO MODELS)  
(Figs. 102 and 103)**

**a. Removal**

- (1) Remove the grille moulding.
- (2) Remove the grille to splash shield bolts.
- (3) Remove the grille to fender tie-bar support bolts.
- (4) Remove the grille assembly.

**b. Installation**

- (1) Position the grille in its opening and install the grille to the fender tie-bar support bolts loosely.
- (2) Install the grille to the fender splash shield



**Fig. 100—Front Bumper Assembly  
(New Yorker, Saratoga)**

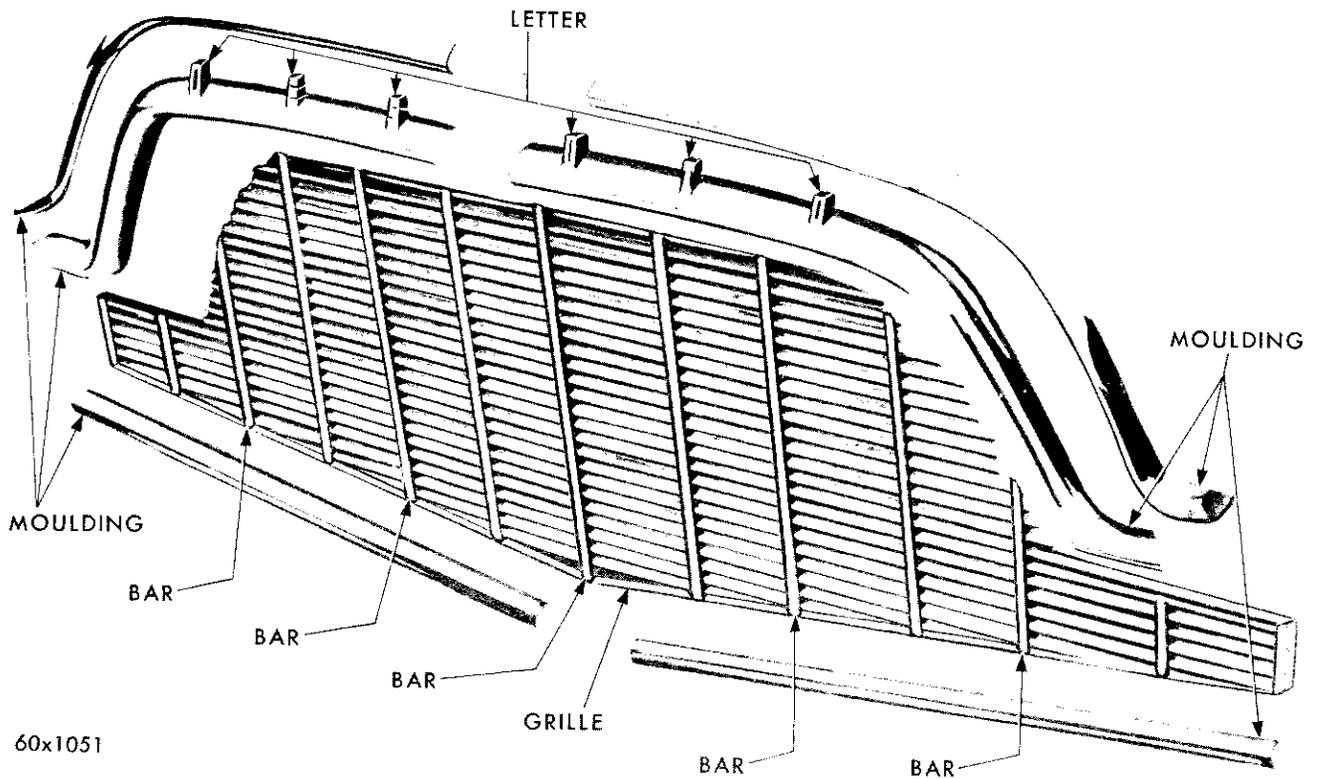


Fig. 102—Grille Assembly (Exploded View) (DeSoto)

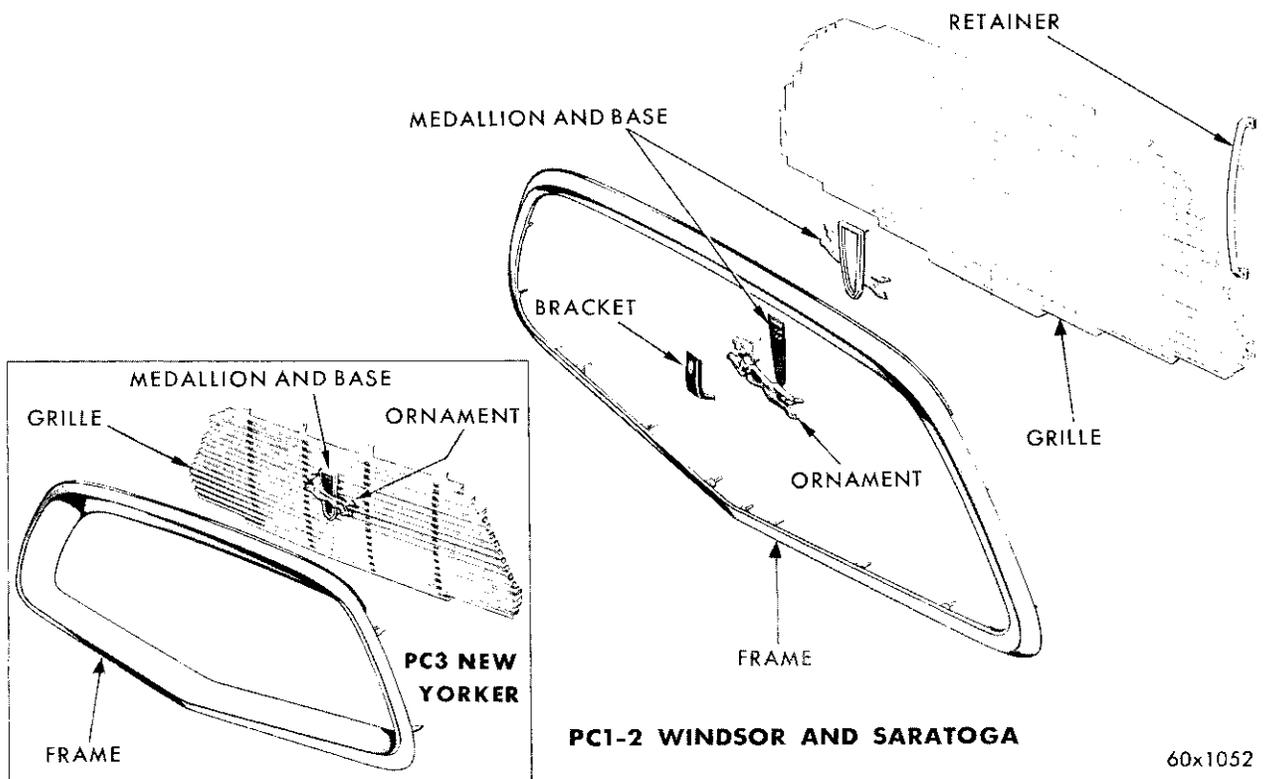
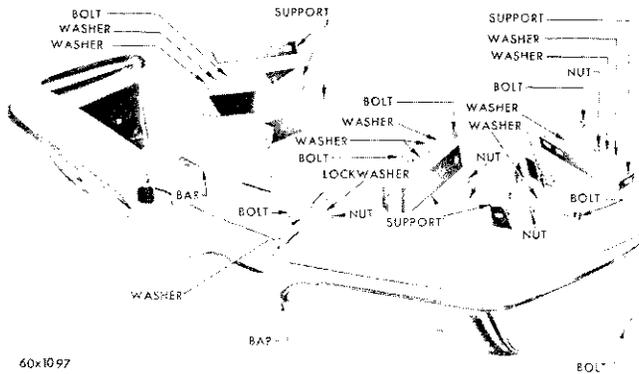


Fig. 103—Grille Assembly (Exploded View) (Chrysler)



**Fig. 104—Front Bumper Assembly (Exploded View) (Imperial)**

bolts loosely.

(3) Align the grille in its opening for correct spacing and tighten all retaining bolts securely.

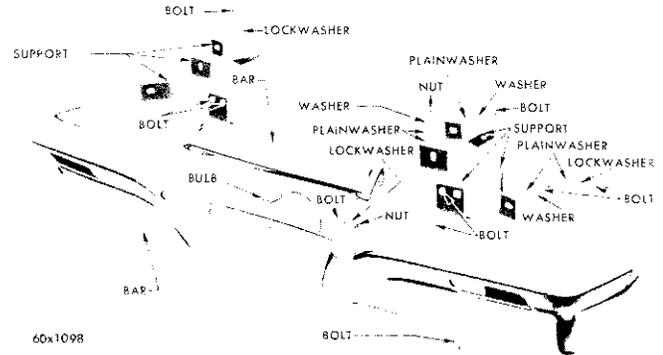
(4) Install the grille moulding.

**93. BUMPER — FRONT (Fig. 104) (IMPERIAL MODELS)**

**a. Removal**

(1) Disconnect the parking lamp wires.

(2) Remove the bumper to the support bar bolts and remove the bumper assembly.



**Fig. 105—Rear Bumper (Exploded View) (Imperial)**

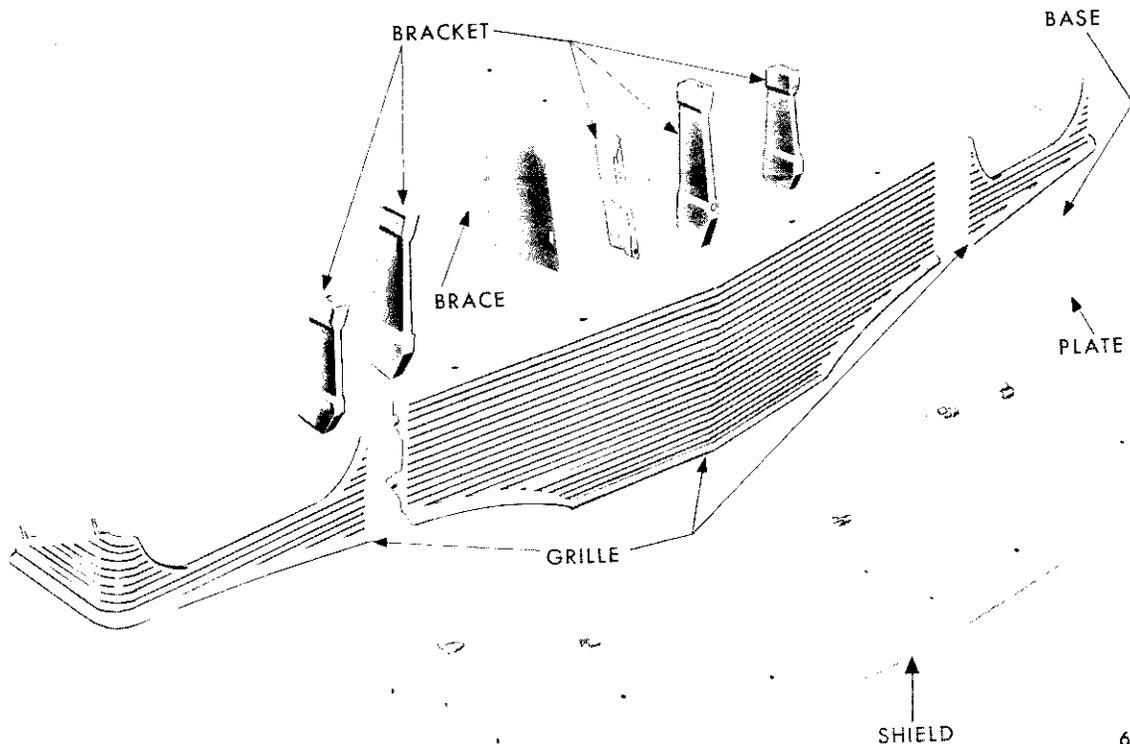
(3) With the bumper removed, remove the bumper center section and the parking lamps.

**b. Installation**

(1) Position the parking lamps on the bumper and install the mounting bolts securely.

(2) Install the bumper center section on the bumper.

(3) Carefully position the bumper assembly on the support arms and install the mounting bolts. Do not tighten the support arm bolts until the bumper is correctly aligned. Tighten the bolts securely.



**Fig. 106—Grille Assembly (Exploded View) (Imperial)**

(4) Connect the parking lamp wires.

**94. BUMPER — REAR (Fig. 105) (IMPERIAL MODELS)**

**a. Removal**

(1) Remove the screws attaching the license plate lamp to the rear bumper and slide the lamp up out of the way. Disconnect the back-up light wires.

(2) Remove grommet from deck lid lower panel (one each side of center). Remove nut from two upper studs. Remove nuts from exposed bolts through face bar lower.

(3) Support the rear bumper to prevent it from falling and remove the bolts attaching the bumper to the support arms and the rear side of the frame cross member. Remove the rear bumper assembly.

(4) Remove the bumper center section and the license lamp and back-up lights.

**b. Installation**

(1) Install the bumper center section and the license lamp and back-up lights on the bumper.

(2) Feed the stud in the upper part of bracket through supports, tighten finger tight, assemble the nuts to exposed bolts through the lower face bar finger tight.

(3) Align the bumper with the rear quarter panels and tighten all bolts securely.

(4) Connect the back-up light wires.

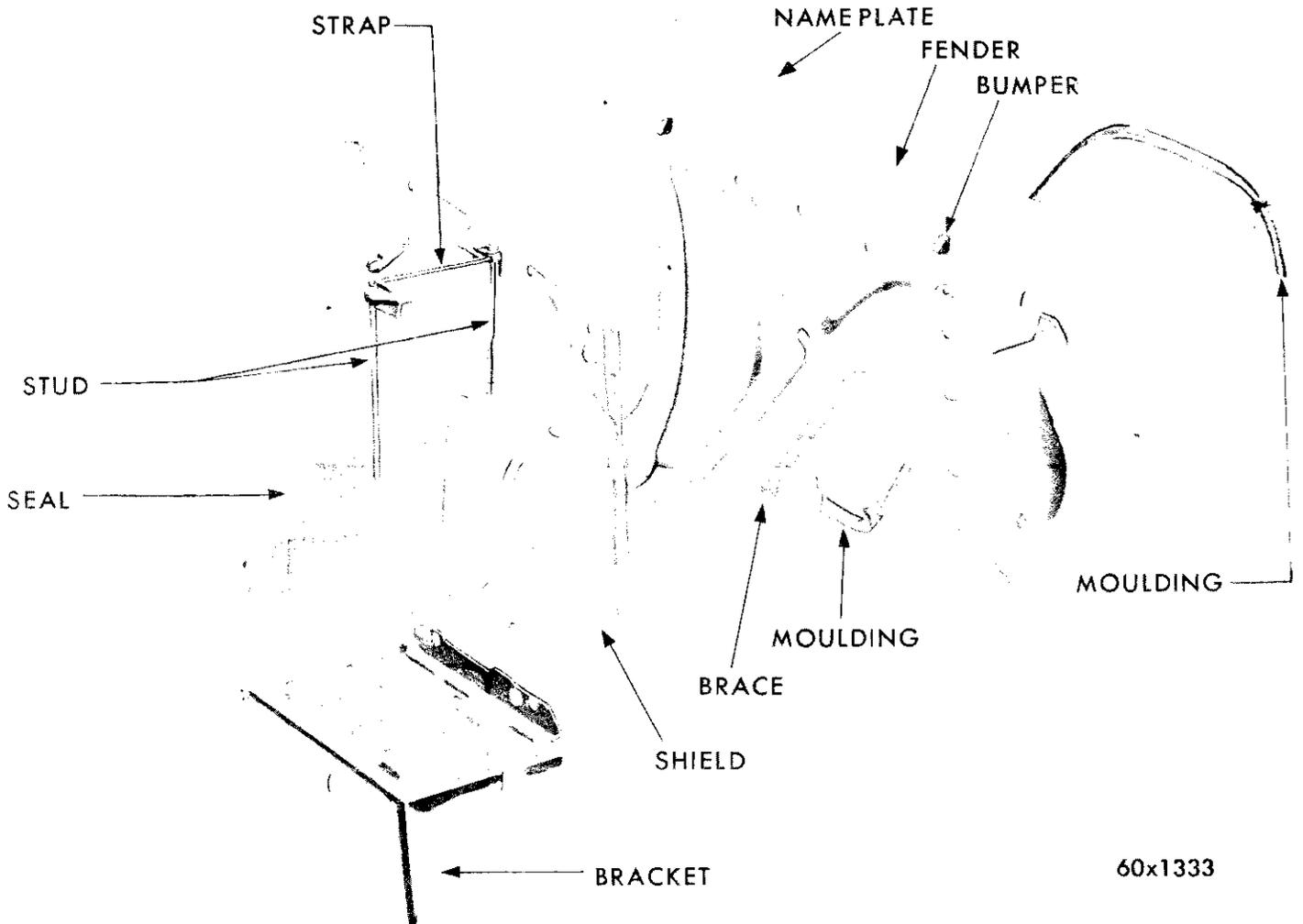
(5) Install the license lamp on the bumper, and connect the wire.

**95. GRILLE (IMPERIAL MODELS) (Fig. 106)**

**a. Removal**

(1) Remove the grille to center support bracket screws.

(2) Remove the nuts attaching the grille to the front fenders (the nuts are accessible from under the fenders).



60x1333

**Fig. 107—Front Fender and Splash Shield Assembly (Exploded View) (Chrysler)**

(3) Remove the bolts attaching the grille to the shield.

(4) Pull the grille straight out to remove.

(5) Remove the bolts attaching the outer grille sections to the center section.

**b. Installation**

(1) Connect the outer grille sections to the center grille section.

(2) Position the grille in its opening and install the grille to stone shield bolts.

(3) Install the nuts on the grille outer sections retaining studs under the front fenders.

(4) Install the grille to the center support bracket screws.

**96. DEFLECTOR (IMPERIAL MODELS)**

**α. Removal**

(1) Remove the bumper.

(2) Remove the bolts attaching the grille brackets to the stone shield.

(3) Remove the stone shield to the fender splash shield bolts.

(4) Remove the grille to support bracket bolts and the screw attaching the shield to the yoke and carefully remove stone shield.

**b. Installation**

(1) Slide the stone shield into position and install the screws attaching the shield to yoke and the support brackets.

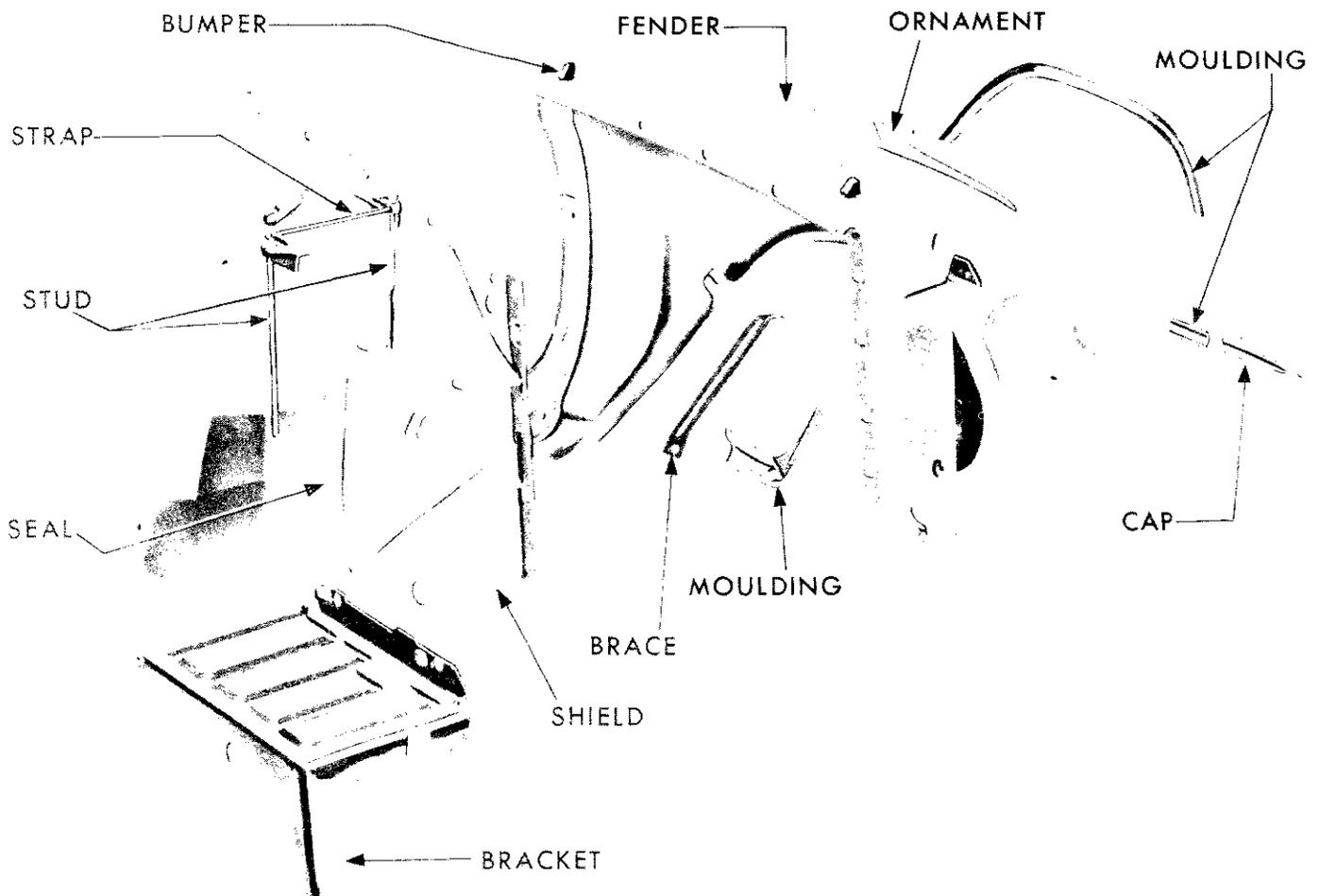
(2) Install the stone shield to the fender splash shield bolts.

(3) Install the grille bracket to the stone shield bolts.

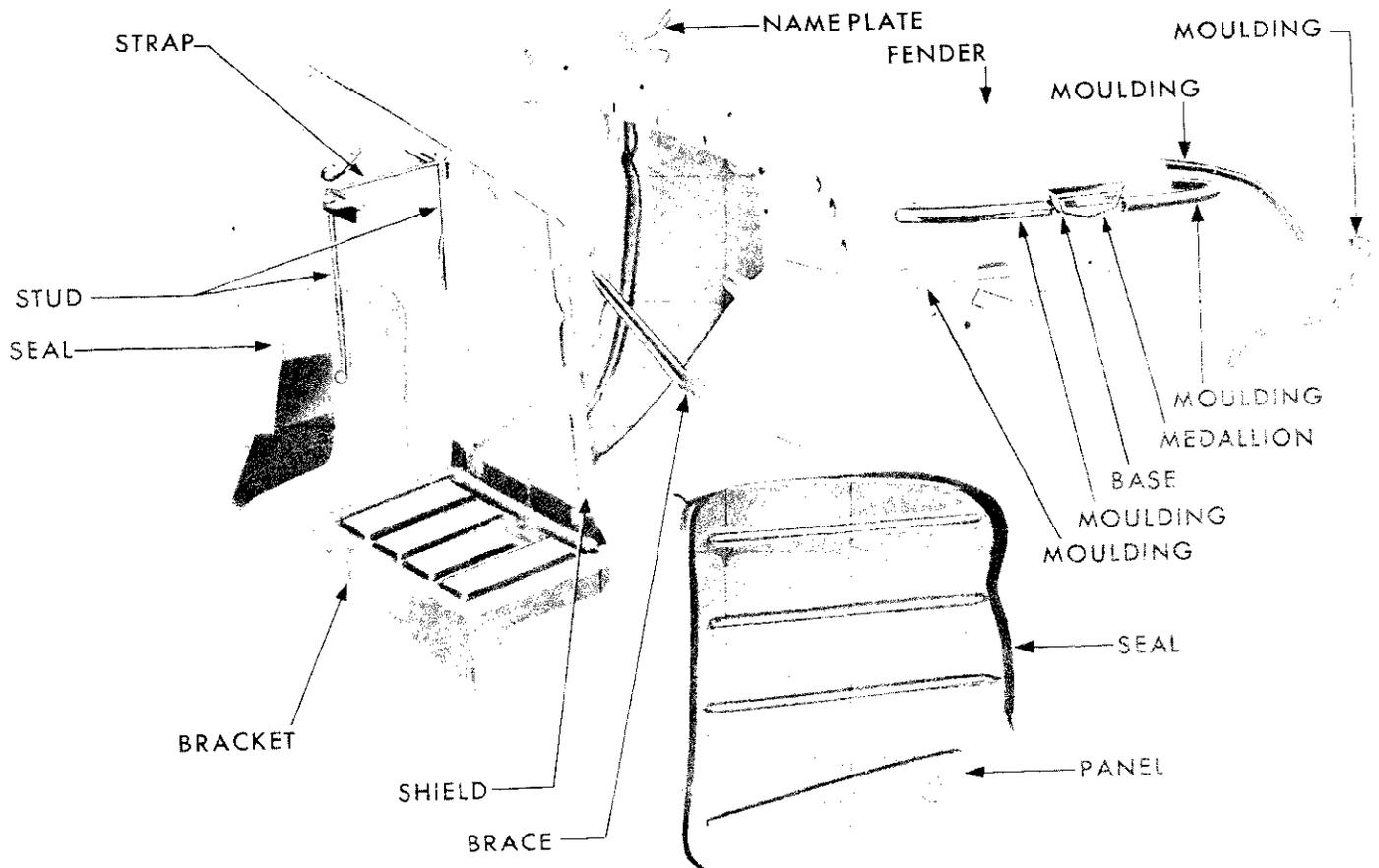
(4) Install the bumper assembly.

**97. FENDER (Figs. 107, 108 and 109)**

Removal and installation of the front fenders should



**Fig. 108—Front Fender and Splash Shield Assembly (Exploded View) (DeSoto Models)**



60x1149

**Fig. 109—Front Fender and Splash Shield Assembly (Imperial)**

not present any unusual difficulties except that the cowl to fender bracket studs and nuts (Fig. 110), should be removed to facilitate the removal of the fender assembly.

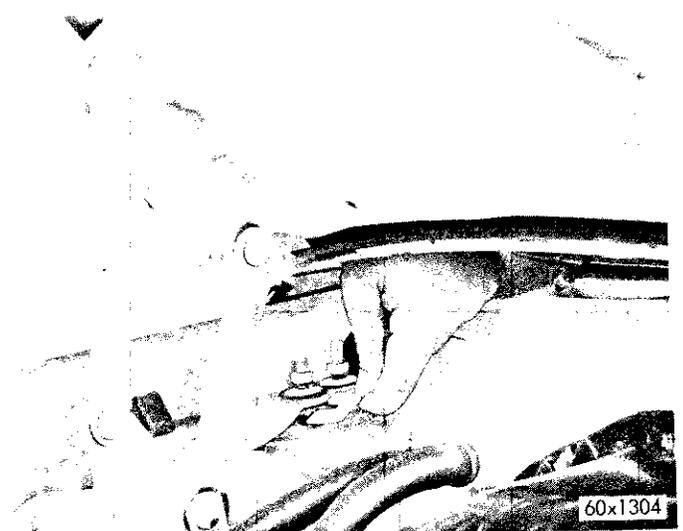
**a. Removal**

- (1) Raise the hood.
- (2) Tape the leading edge of the front doors and cowl to fender area to avoid damage to the finish.
- (3) Remove the fender to splash shield, radiator yoke, grille bar, and fender to body attaching bolts.
- (4) Remove outside rear view mirror and antenna lead, if so equipped.
- (5) Remove head lamp, horns, and wires. Remove the fender assembly.

**b. Installation**

- (1) Install the splash shield, yoke, grille body brackets attaching bolts.
- (2) Install the head lamp, horn and antenna and outside mirror if so equipped.

- (3) Install the cowl quarter to fender bracket studs and nuts.



**Fig. 110—Removing or Installing Fender Shims**

(4) Install the head lamp wires.

(5) Check the hood to fender and the fender to door alignment.

**98. FENDER ALIGNMENT**

Before aligning the front fenders make sure the body bolts are tight and the rear edge of fender is even with the contour of the front door.

**a. Top Rear Edge of Fender too Close to Cowl**

Raise the hood and loosen the top fender bolt. Pry up the front end of the fender bracket with a screw driver and install a U-shaped rubber shim, as shown in Fig. 110. Remove the screw driver and tighten the fender bolt.

**b. Top Rear Edge of Fender too Close to Cowl**

Loosen the fender top bolts. Pry the rear edge of the fender away from the cowl with a screw driver. Retighten the fender bolts.

**c. Bottom Rear Edge of Fender Lower Than the Sill Panel**

Install the bumper jack with extension between the radiator support and the dash panel. Use only enough pressure to maintain the front and rear position of the fender.

Loosen the fender-to-cowl attaching bolts. Then roll a floor jack into position under the bottom rear edge of the fender. Protect the fender edge with a cloth pad. Raise the jack until the bottom edge of the fender is in line with the bottom edge of the sill panel. Retighten the fender attaching bolts and removing jack.

**d. Rear Edge of Fender Extends too Far Striking Door and Front Edge of Fender Short of Hood**

Install the bumper jack with the extension between the radiator support and the dash panel.

**e. Gap Between Rear Edge of Panel and Fender — Spacing Correct at Upper Section**

Loosen bottom fender to cowl attaching bolts. Place a two-by-four (2 x 4) board between the tire and the fender. Protect the edge of fender with a cloth pad. Pry back the fender to close the gap, then retighten the attaching bolts.

**f. Fender too Far Forward at Upper Door**

Loosen the fender-to-cowl attaching bolts. Apply pressure to the forward section of the fender until correct alignment is obtained. Then tighten fender-to-cowl attaching bolts.

**99. FENDER SPLASH SHIELD (Figs. 107, 108 and 109)**

**a. Removal**

- (1) Disconnect the battery.
- (2) Jack up the front of the car and remove the front wheel and tire assembly.
- (3) Remove the fender lower brackets attaching bolts.
- (4) Remove the splash shield to frame attaching bolts.
- (5) Remove the fender to splash shield attaching bolts. If removing the left hand splash shield, it will be necessary to disengage and remove battery, unclip the wire harness and remove the lead wires that connect to the starting motor solenoid.

(6) Remove the horn and the yoke to shield the fender attaching bolts.

(7) Detach the voltage regulator and solenoid from the splash shield.

(8) Remove the wire harness from the splash shield clips.

(9) Remove upper splash shield to fender attaching bolts.

(10) Lift rear of fender up slightly and pull out and away from body. Support the fender in the position, then pull out and away from body, push down and back, then slide it from under the car.

**b. Installation**

- (1) Slide shield under the car and up into position.
- (2) Install the necessary bolts and nuts to hold the shield in place, but do not tighten.
- (3) Push the fender back toward the body, lift slightly and slide into position.
- (4) Install the necessary bolts and nuts, sheet metal screws but do not tighten.
- (5) Install the attaching bolts and nuts securely.
- (6) Reinstall and connect the battery.
- (7) Reclip the wire harness to shield and install the lead wires to starting motor solenoid.
- (8) Install the horn.
- (9) Connect the battery.
- (10) Check the hood fender alignment as described in fender installation.

**100. SERVICING (THE REAR FENDER) — (QUARTER PANEL)**

(1) The rear fender (quarter panel) replacement should only be necessary when the panel is dam-

aged to the extent that body bumping could not restore it to its original condition.

(2) The type and the extent of the damage to the quarter panel is the determining factor in the portion of the panel to be replaced. The repair of a damaged quarter panel can be handled the same as it always has been on any other body panel.

(3) When a section of the rear fender (or quarter panel) has been damaged or torn beyond repair, the damaged section of the quarter panel should be roughed out and shaped as much as possible to allow for correct measurement. Measure the piece of metal to be cut out.

(4) This measurement should be taken from a definite point such as a moulding or bead. Cut out the damaged section with a suitable cutting tool. A similar section should be cut from a new quarter panel, and welded in position on the damaged quarter.

(5) Should the entire rear quarter panel be damaged beyond repair, one of two conditions may develop.

(6) If only the outside quarter panel skin is damaged, then the repair can be made by cutting away the damaged section and installing a new quarter outer panel.

(7) If the outside quarter panel attaching brackets are also damaged beyond repair, a complete new

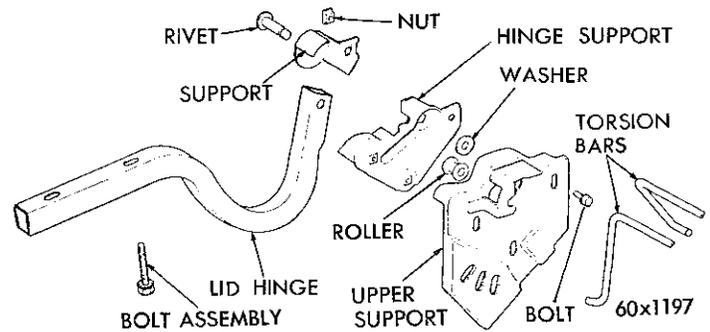


Fig. 112—Torsion Bar and Deck Hinge Assembly (Exploded View)

quarter panel assembly should be installed. All the necessary inside mounting and supporting brackets (less wheel houses) are welded to the outside panel to make up the service replacement quarter panel assembly.

**NOTE:** If difficulty is experienced in separating spot welds where the damaged panel is attached, the panel can be cut away from its flange leaving the old flange intact. The new panel can then be welded over the old flange.

**101. REAR DECK LID, HINGES AND LOCKS — REMOVAL, INSTALLATION ALIGNMENT**

The rear deck lid is attached to the body with two hinges and is held closed by the lid latch and lock.

The weight of the lid is counterbalanced in all positions by the tension of two torsion bars. (See figure 111). The torsion bars are long, small diameter steel bars, that are free at one end and anchored to support bracket at other. (See Fig. 112). A roller sleeve on free end, operates against a "cam contour" on back face of hinge. As deck lid is raised, action of rollers against hinges cause bars to twist, exerting a torsional resistance that balances the lid. To permit adjustment of torsion bar tension, four slots are located in each support plate.

**102. DECK LID**

**a. Removal**

Adjustment of the deck lid is obtained by loosening the bolts and shifting the lid from side to side or front to rear. It is often possible, however, to properly fit deck lid by adjusting the striker plate, latch or both. Should it become necessary to remove the deck lid for replacement or repair, refer to Figure 111.

(1) Raise the deck lid and remove one of the two bolts in each hinge that attach the lid to the hinge arm. (Leave the remaining two bolts finger loose.)

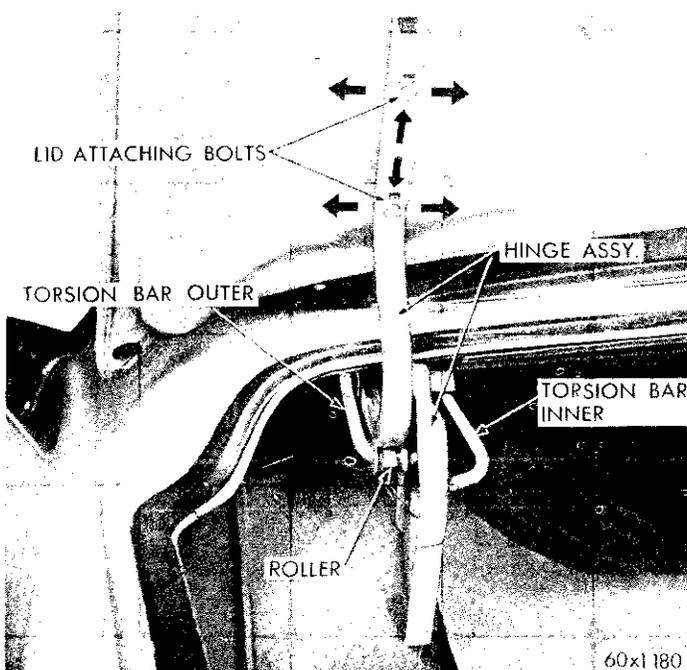


Fig. 111—Deck Lid Torsion Bars

(2) Brace the deck lid in such a manner so as to hold the lid in position while removing the last two bolts. (This will keep the lid from sliding down and damaging the rear deck.)

(3) Remove the last two bolts and lift the deck lid up and away from rear of the car.

**b. Installation**

(1) Lift the lid and slide down into position. Install the attaching bolts. Do not tighten them, just snug down.

(2) Lower the lid and check fit.

(3) If necessary adjust lid, check adjustment of latch and striker plate.

**103. DECK LID HINGES**

**a. Removal**

The deck lid hinge upper mounting flange is fastened to the deck lid by two bolts at each hinge. The bolt holes are slotted and slightly oversize to permit fore-and-aft and lateral adjustment of the deck lid.

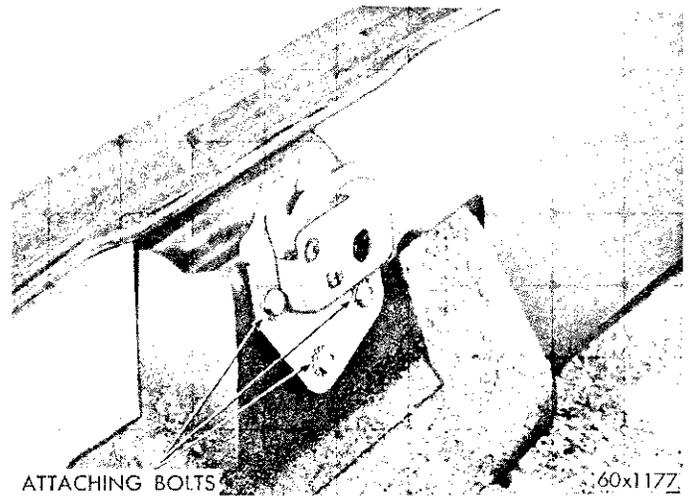
Should it become necessary to remove and install either of the rear deck lid hinges, for repair or complete replacement, refer to Figures 111 and 112 and proceed as follows:

(1) Raise the deck lid and brace the lid on the corner where the hinge is to be removed.

(2) Remove the torsion bar from the side the hinge is to be removed.

(3) Remove the bolts that hold the deck lid to the hinge arm.

(4) Remove the three bolts that hold the hinge pivot plate on the support bracket.



**Fig. 114—Deck Lock and Latch Assembly**

(5) Disengage the hinge from the bracket and remove from the rear compartment.

**b. Installation**

(1) Slide the hinge into position in trunk rear compartment. Install the bolts. Do not tighten, just snug down.

(2) Install the bolts that hold the hinge to the deck lid. Do not tighten, just snug down.

(3) Remove prop and lower the lid to check fit.

(4) Make the necessary adjustments to center the lid in the opening. Check the adjustment of the latch and striker plate. After adjustments have been made, prop the lid open and install the torsion bar.

**104. REAR DECK LID ALIGNMENT**

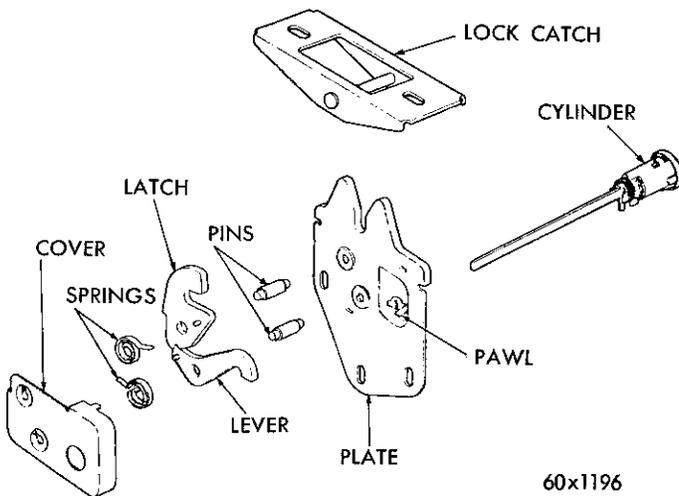
The deck lid hinges, lock and striker plate are adjustable (Figs. 113, 114 and 115), enabling a proper fit of the deck lid with little effort.

**105. CENTERING DECK LID IN OPENING**

The two bolts in each of the deck lid hinges are oversize, thereby permitting the lid to be moved ahead or back, and from side to side. When positioning, locate the lid so the extreme rear portion along the sides are both flush with the body panel as well as equally spaced in the opening. To adjust, loosen the hinge bolts (one hinge at a time) as shown in Figure 111. Move the lid in desired direction, re-tighten the bolts. Repeat this operation on the opposite side until the lid fits flush with the body panel and is equally spaced all around.

**106. CORRECTING DECK LID CAMBER**

Incorrect camber of the deck lid should not be confused with the deck lid being improperly located on



**Fig. 113—Deck Lid Lock and Catch Assembly**

its hinges. The deck lid spacing across top must be uniform but at the same time, must be flush with the body quarter panels. The lid camber can be changed a slight amount by bending. For instance, if the camber were increased, the lid would become shorter whereas, if the camber were decreased, the lid would become wider. Each time the lid camber is changed, in all probability the lid would have to be relocated on the hinges.

**a. To Increase the Deck Lid Camber**

Insert a plastic mallet between the lid and quarter panel, then apply pressure on the lower corner of lid. Remove the mallet and check the fit and flushness at the rear of the deck lid. Readjust the lid on its hinges, if necessary.

**b. To Decrease Deck Lid Camber**

Insert the large end of Tool C-3011 in the opening at the underside of the lid, hooking the exposed end of the tool under the rear quarter panel. Pull out on the rear end of the deck lid to decrease camber. Remove the tool and check the fit of the lid at the body lower panel and the space across the top. Readjust the lid on its hinges, if necessary.

**c. Raising or Lowering the Upper Corners of Deck Lid**

**To Raise**—If either of the upper corners are too low, open the deck lid and loosen the bolts that hold the hinge bracket. Insert small fiber block under the low corner between the lid and side panel. Slightly lower the lid. Tighten the bolts and check the fit.

**To lower**—Raise the deck lid and loosen the bolts, as in the paragraph above. Press down on top of the deck lid at the high corner until correct fit has been obtained. Tighten the bolts, check the adjustment of the latch and striker plate.

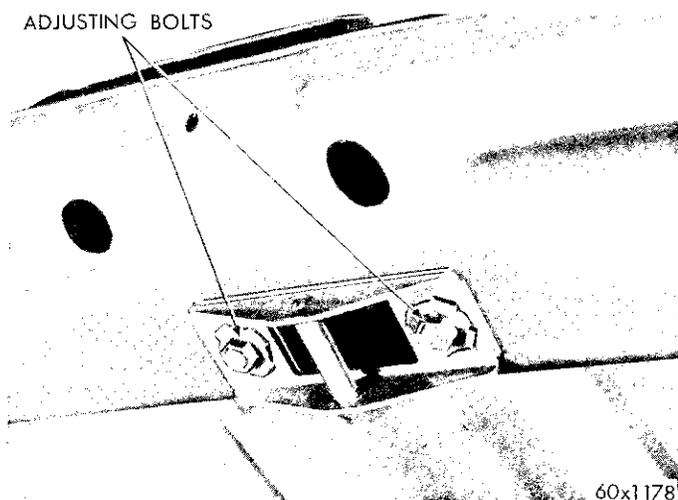


Fig. 115—Deck Lid Lock Catch

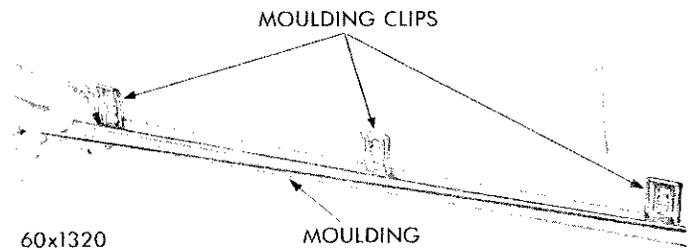


Fig. 116—Removing or Installing Lower Rocker Panel Moulding (DeSoto)

**d. Checking Latch and Striker Plate**

Both latch and striker plate are adjustable, but better results can be obtained by adjusting the striker plate. The striker plate is adjustable in two directions, forward and backward, and to either side, as shown in Figures 114 and 115. As plate moves to the rear, it also rises making it easier to close the lid. Moving the plate forward lowers it and makes the lid close tighter.

**e. Adjusting Latch**

Loosen the mounting bolts, as shown in Figure 115, and move the latch into the proper engaging position. Tighten the bolts securely.

**f. Checking for a Correctly Fitted Deck Lid (Fig. 87)**

A correctly fitted deck lid is one that is centered in the opening, and fits flush with the body panels. A

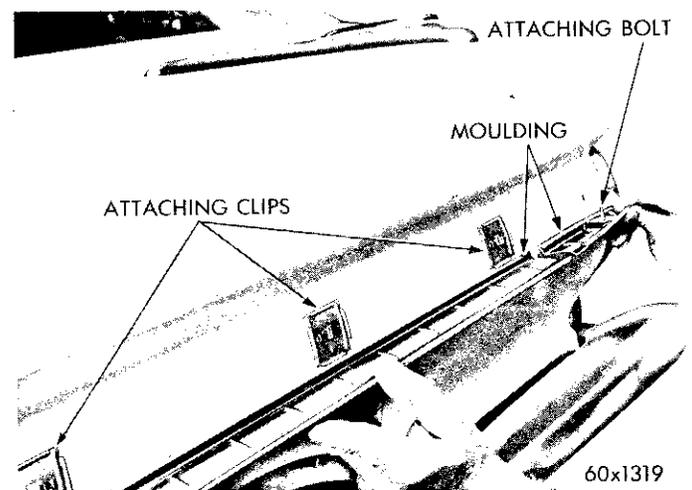
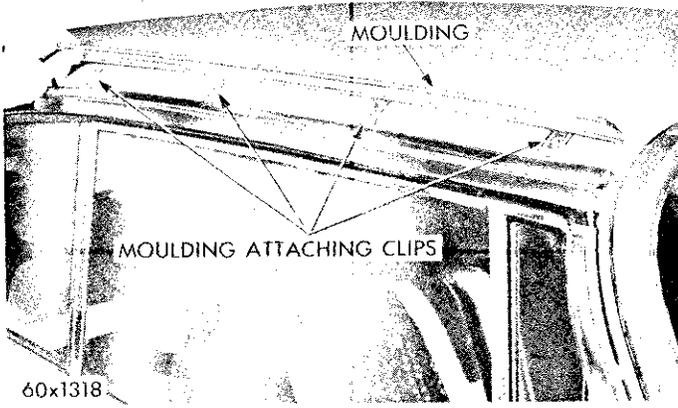
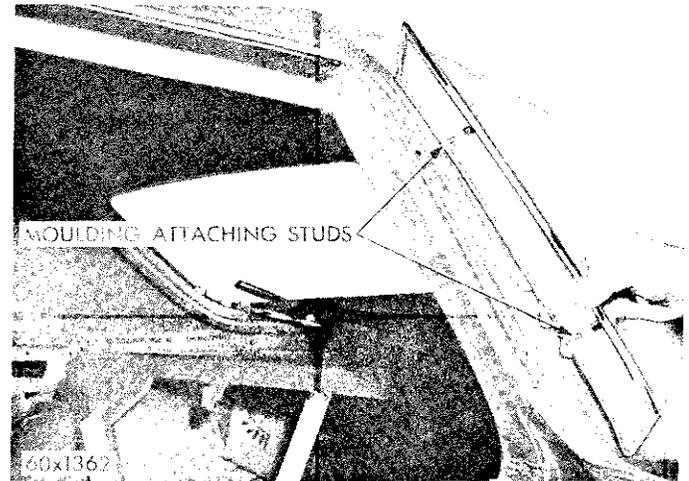


Fig. 117—Removing or Installing Lower Body Moulding (Rear)



**Fig. 118—Removing or Installing Upper Roof Moulding (DeSoto)**



**Fig. 119—Removing or Installing Rear Side Moulding (Imperial)**

check for proper fitting and seal of the deck lid can be made with strips of paper. Insert the strips of paper (about an inch wide) along the edge of the deck lid opening and close the lid. (See Fig. 87.) If the papers fit snug all along the edges of the lid as they are pulled out, a good seal is evident. If the paper fits loosely on one side, and tight on the other, the deck lid should be aligned.

**g. Body Moulding removal and installation**

The removal of body moulding on the Chrysler and DeSoto models (Figs. 116, 117, 118, 119 and 120) should create no special removal and installation problem. On Imperial models the headlining must be removed on specific models to remove the roof



**Fig. 120—Removing or Installing Roof Moulding (Imperial)**

and side mouldings. Care must be emphasized, however, when removing or installing the mouldings on all models to avoid damage to paint and other finishes.

## CONVERTIBLE COUPE TOP (CHRYSLER AND IMPERIAL MODELS ONLY)

**107. OPERATING THE CONVERTIBLE COUPE TOP**

**a. To Lower the Top**

Release the safety catch on the locking handle located in the center of the header, pull the handle down and to the rear. Push header free of windshield. Be sure the Convertible Top storage compartment is free of articles. Unzip the rear window and drop into the storage compartment. On Chrysler models, the rear window need not be unzipped. Operate the engine in NEUTRAL at a speed above idle. Turn the top control switch located on the instrument panel to the right and hold in this

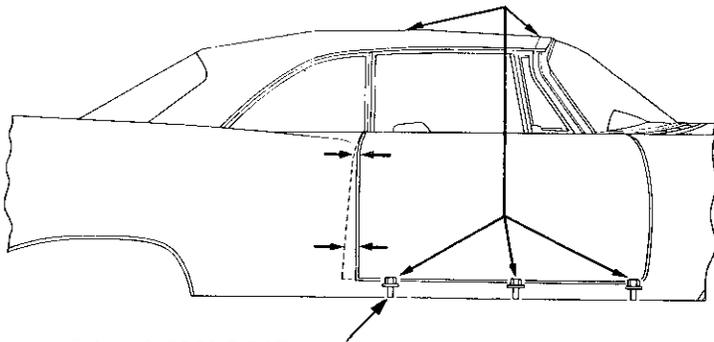
position until the top is fully lowered. Fasten the top boot over the compartment snapping it at the sides and rear.

**WARNING:**

**Never attempt to raise or lower the top while the car is in motion. It is advisable to raise and lower the top at least once a month to keep the top mechanism in working condition.**

**b. To Raise the Top**

Unsnap the top boot at the sides and rear and fold into the storage compartment. Turn the top



SHIM BODY BOLT HERE TO CORRECT THIS FIT  
 57x705  
**Fig. 121—Shimming Body for Door Alignment**

control switch to the left and hold in this position until the header rests on the windshield. Zip up rear curtain. Pull the top down firmly on the top header. Push the locking handle all the way forward until safety catch engages.

**108. ADJUSTING THE CONVERTIBLE COUPE TOP**

Five adjustments on each side will allow the top to be moved ahead, back, and the front portion from side to side and to correct the curvature of the side rail to fit the contour of the rear quarter windows. This could also affect the clearance between the cloth top and the door.

Before making any top adjustments, determine the cause of the difficulty before proceeding, then correct as follows:

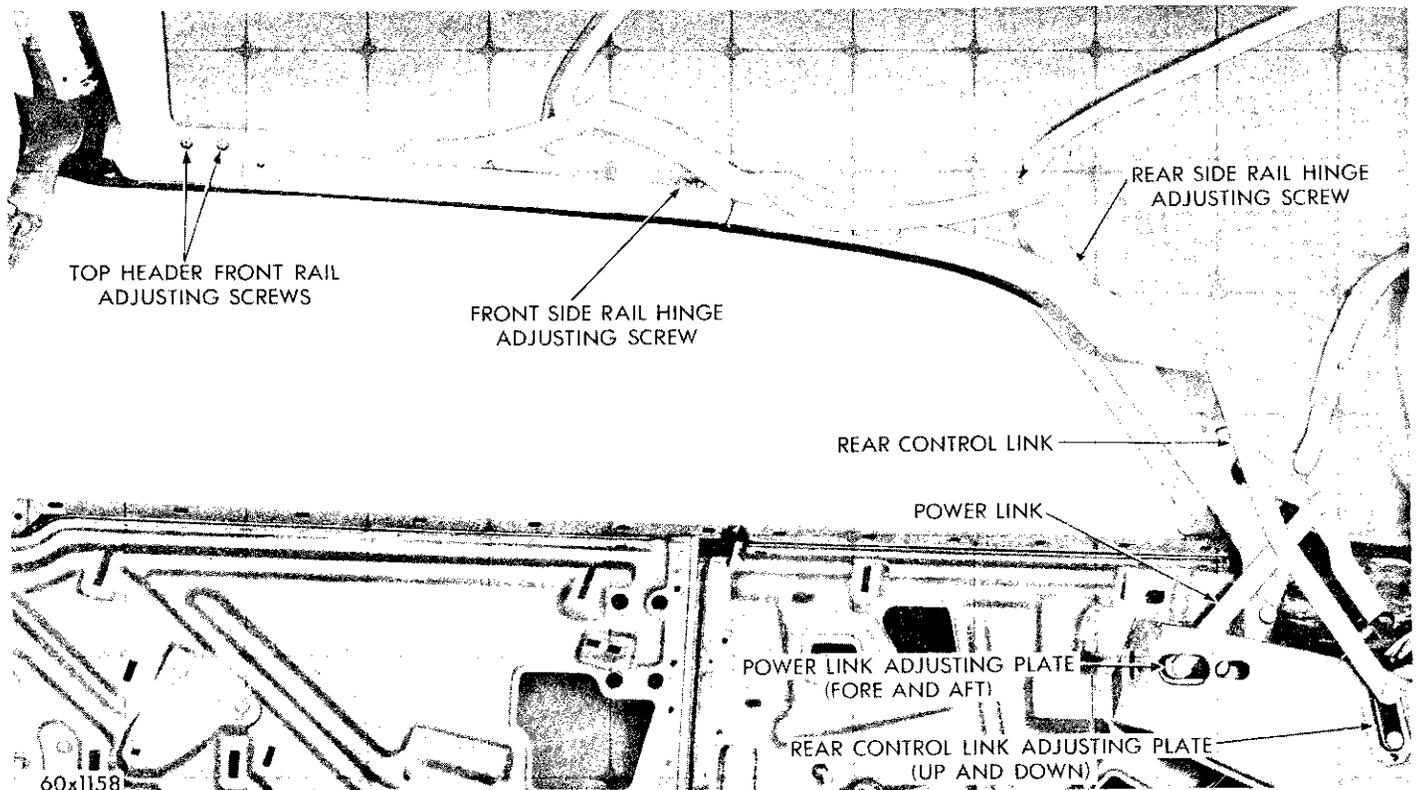
**α. Body Alignment (Imperial Only)**

An important factor in the proper alignment of the doors and convertible top is the attachment of the body to the frame of the car. Uneven tightening of body bolts, the use of too many or not enough shims, or overtightening of the body bolts may result in distortion of the body sill and cause misalignment of the doors and top fit at the header.

Therefore, before any adjustments are performed to correct the door or the top misalignment, be sure that all the body bolts are tightened to 18 foot pounds torque. In some cases, it may be advisable to loosen the body bolts and drive the car a short distance to permit the body to settle evenly on the frame. Then, tighten the bolts to the specified torque.

If body shimming is necessary to obtain the proper door alignment, this should be done before attempting to make adjustments of the top linkage.

Figure 121 illustrates how to correct a door fit which is tight at the top and open at the bottom. If the door fit were open at the top and closed at the bottom, it would be necessary to add shims at



**Fig. 122—Convertible Top Side Rail Assembly**

the body mounting near the front and rear of the door. In some instances, add shims on the right side of the car and remove them on the left side or vice versa. The important thing, however, to keep in mind is that shimming of the body as illustrated changes the fitting of the top header at the windshield frame.

**b. Roof Side Rail Alignment**

The adjustment of the front side rail and header panel to the windshield, Figure 122, is controlled by the rear control links which are fastened in the quarter panel pockets.

Leveling of the top can be accomplished by lowering or raising the rear control link bracket. When adjusting the rear control link, care should be taken to adjust both sides equally to maintain parallelism between header panel and windshield frame. Before making this adjustment, loosen the top header at the windshield to remove tension from linkage.

Also affecting the side rail weatherstrip sealing at the top of door glasses are the front side rail hinge adjusting set screws and the rear side rail hinge adjusting set screws. If the front side rail joints are open when the top is fully raised, turn the front side rail hinge adjusting screws counter-clockwise until the joints are closed. If, after mak-

ing this adjustment, the clearance between the door glass and the side rail is increased or decreased, adjust the rear adjusting screws to obtain the desired clearance.

**c. Power Link Adjustment (Chrysler Only)**

With the top and all door and quarter window glasses in raised position, carefully inspect both door and quarter glasses for proper fit to the top side rail seals and vertical seals. Adjustment for proper alignment of quarter window glass-to-roof rail weatherstrip is made at the power guide link adjusting plate with the top in a partially raised position.

To decrease the clearance between the quarter glass and roof rail weatherstrip, move the bracket forward. Move bracket rearward to increase the clearance. The adjustment should be approximately the same on both sides.

**d. Top Header Panel Adjustment (All Models)**

If the header does not close easily on the dowels, loosen the header panel-to-side rail screws and shift the header panel forward or backward as required to obtain the desired clearance.

On Chrysler models only, the adjustment of the header to windshield frame weatherstrip sealing against entry of water or air is controlled by two

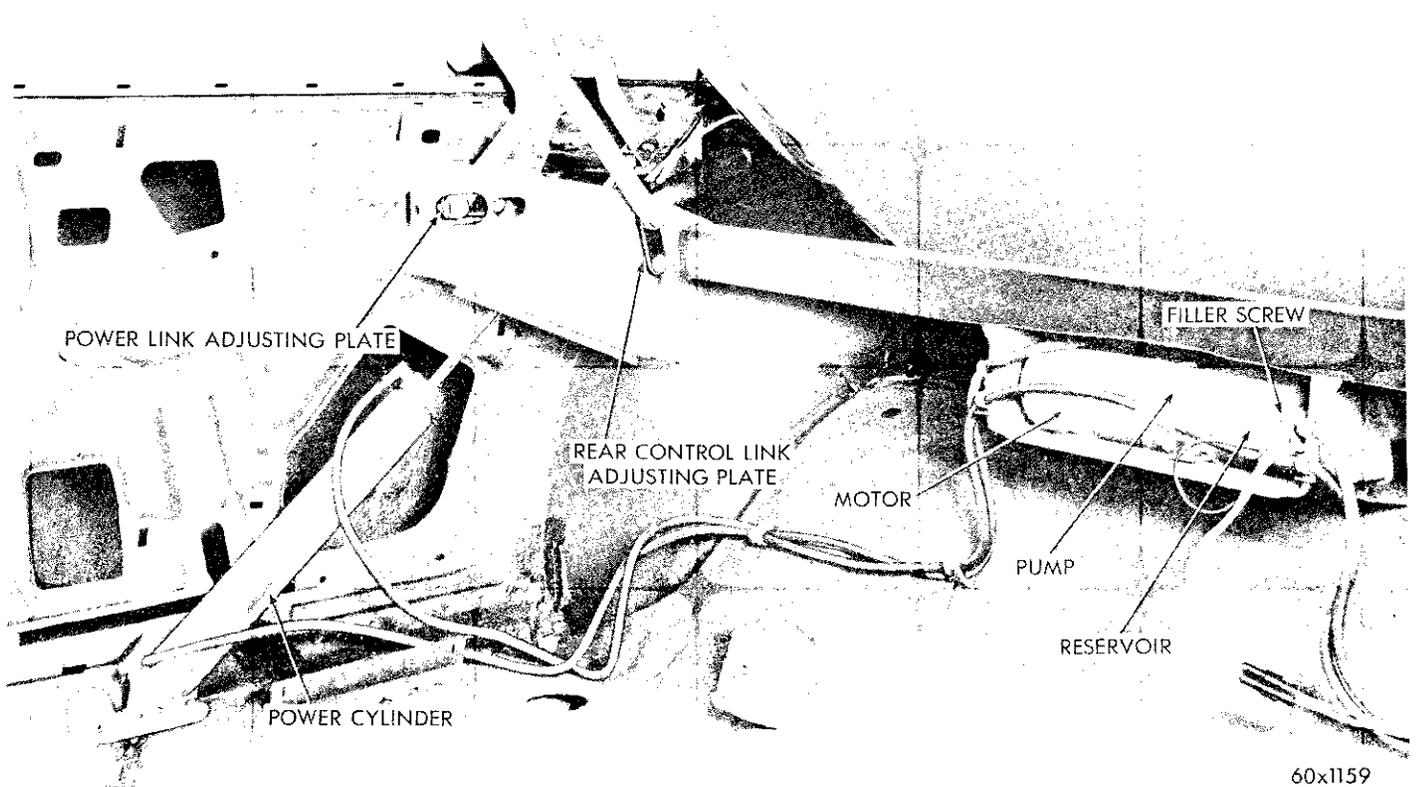


Fig. 123—Convertible Top Hydraulic Folding Mechanism

torsion bar adjusting screws, one on either side, accessible through slots in the under side of the header near the dowels. Turn the screws counter-clockwise to loosen or clockwise to tighten the tension on the seal. Care must be taken, in making this adjustment, to avoid too great a locking or unlocking effort on the locking handle in the center of the header.

### 109. SERVICING THE TOP FOLDING MECHANISM

The electric-hydraulic top folding mechanism, Figure 123, consists of two cylinders, a piping system, an electric motor, a pump and reservoir assembly, and a double-throw rotary switch. The wiring and motor are protected by a separate circuit breaker, as shown in Figure 124.

The pump is a two-direction, reversing motor type and is connected to the cylinders by flexible lines and tubing. A valve and port assembly in the reservoir directs flow of fluid in the system. The motor, pump, and reservoir assembly can be replaced as a unit, or the electric motor can be replaced separately. The cylinders are sealed units and must be replaced as assemblies. If difficulty is encountered in raising or lowering the top with motor running, with sufficient fluid in the reservoir, and with pivot points operating freely without binding, the cause is probably improper linkage alignment and adjustment.

### 110. CHECKING FLUID LEVEL IN RESERVOIR

Insufficient fluid in system may cause the top to raise slowly or cause noise in the pump and motor during the operation. Check the fluid level in the reservoir. If low, check for a leak due to a broken line or a loose connection. Replace the line or tighten connection as necessary. Fill the reservoir

until the fluid runs out of the filler holes. Use a Heavy Duty Brake Fluid.

**NOTE:** After filling reservoir, raise and lower top several times to force out air that may be trapped in system. Always check the fluid level when the top is lowered.

### 111. TOP WILL NOT RAISE OR LOWER

Hook one wire of a test lamp to a good ground and the other wire of the test lamp feed to terminal on control switch. The test lamp should light. If test lamp does not light, test on each side of the circuit breaker, and replace the faulty wire or the circuit breaker, as necessary.

### 112. TESTING THE TOP CONTROL SWITCH

Disconnect the black wire at the top control switch and hold it firmly against black and red wire terminal on the control switch. The top (if raised) should start to lower. Repeat this test with a green wire. The top (in the lowered position) should start to rise. If the top operates during these tests, but fails to operate when the control switch lever is moved to right or left, the switch is at fault and should be replaced. If the top fails to operate during these tests, follow the procedure outlined for Adjusting the Top, Checking the Fluid Level in Reservoir and Testing Wires between the Control Switch and the Pump Motor.

### 113. TESTING WIRES BETWEEN CONTROL SWITCH AND PUMP MOTOR

This test can be made from the luggage compartment. Check the pump motor ground wire (black wire between the pump motor and the ground) to make certain it has a good, clean ground connection. Hook one wire of test lamp to the black wire terminal on the pump motor and ground the other wire of the test lamp. Move the top control lever to right. The test lamp should light. If test lamp does not light, the black wire between the pump motor and the control switch is defective and should be replaced. Repeat this test at the green wire terminal, moving the top control lever to the left. If the test lamp lights in both cases, but the pump motor fails to operate, replace the pump motor.

### 114. REAR WINDOW (CONVERTIBLE COUPE)

The rear window is made from flexible vinyl plastic material and special attention should be given to cleaning and storage of the window. To clean the window, rinse with a cold water spray to remove grit and dirt. Lather the surface with suds of a mild soap (such as Castile), using the palm of the hand. Rinse thoroughly and allow to air dry. Do not use a towel, sponge, or chamois to apply suds or

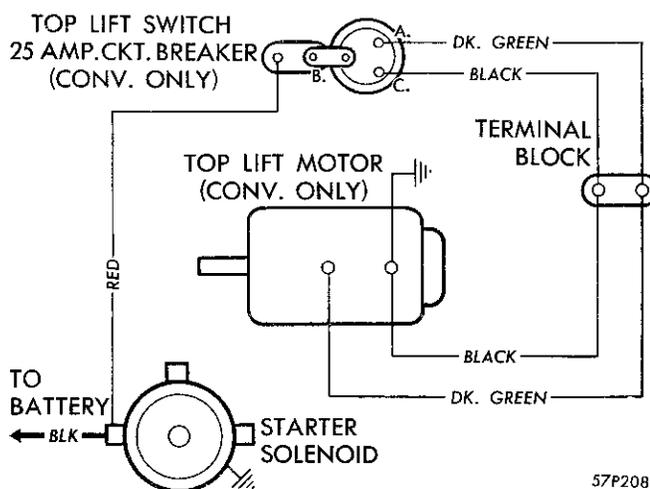


Fig. 124—Wiring Diagram Electric Hydraulic Top

to dry the window. Otherwise, the surface may become scratched. If this procedure does not clean the window thoroughly, a solution of 40 per cent rubbing alcohol and 60 per cent clean water should be used. Apply with palm of hand and rub surface of window with circular motion. Use solution generously.

**115. CARE AND CLEANING OF TOP**

Frequent brushing and vacuuming will keep the top free of abrasive dust and dirt. Wash top with warm water and mild soap, lathering well with soft cloth or sponge. Rinse with plenty of clean water to remove all traces of soap. Allow to dry completely before lowering.

# TOWN AND COUNTRY

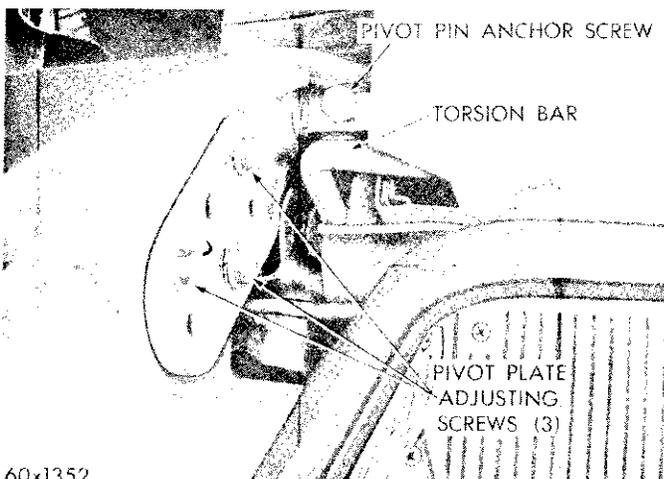
**116. TAIL GATE**

The tail gate of the Town and Country model is hinged at the lower corners and is counterbalanced by two torsion bars to aid in raising and lowering. The 3 seat Town and Country is equipped with an electric window which is optional on the other models. The electric window is controlled by a switch on the instrument panel or at the left side of the tail gate opening. An externally operated lock cylinder switch provides for external operation of the window.

A squeeze and pull type handle is located in the center of the upper inside garnish moulding to unlatch the tail gate. The tail gate is held closed by two rotary type locks mounted on the sides of the tail gate. These rotary locks engage two-stage strikers attached to the pillar post.

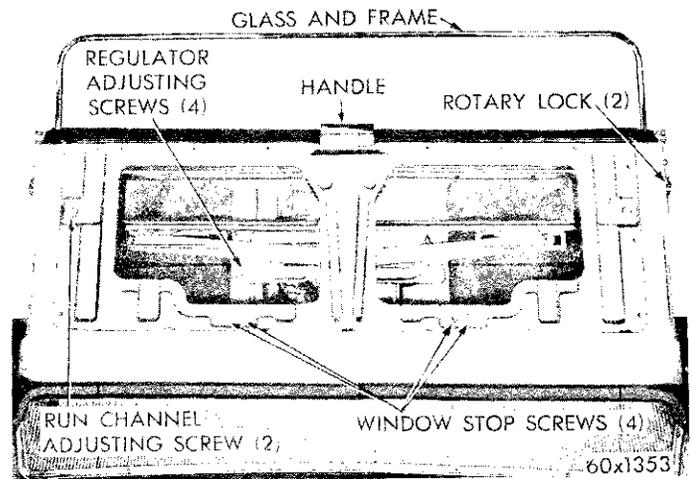
**a. Removal (Tail Gate)**

(1) Remove the rear bumper face bar to enable the tail gate to be removed down and out of the body opening.



60x1352

**Fig. 125—Torsion Bar, Hinge and Aligning Points**



**Fig. 126—Tail Gate, Adjustment and Aligning Points**

(2) Under the tail gate door, remove the torsion bar brackets from the pillar posts.

(3) Open the tail gate and support on jacks or stands.

(4) Loosen the hinge pivot pin locking screws (Fig. 125).

(5) Use a pencil and outline the hinge plate position on pillar post for future assembly.

**NOTE:** On cars with an electric window, remove the trim panel and disconnect the terminals at the control switch on the left edge of the tail gate.

(6) Remove the hinge plate attaching bolts from the pillar post (Fig. 126).

(7) Slide the hinge plate and the torsion bar in through the guide toward the center of the tail gate.

(8) Lower the tail gate down and out of the body opening.

**b. Installation (Tail Gate)**

- (1) With the torsion bars and hinge plates pushed in toward the center of the tail gate, engage the hinge plates into the lower opening of body.
- (2) Attach the hinge plate attaching bolts into the pillar posts and locate the hinge plates in relation to the previous pencil marked positions.
- (3) Tighten the attaching bolts firmly enough to hold the position and check the alignment.
- (4) Close the tail gate and center in opening.
- (5) Attach the torsion bar brackets to the pillar posts.
- (6) Open the tail gate and tighten the locking screws on the hinge pivot pin.
- (7) Connect the wires to the control switch and install the trim panel.
- (8) Operate the tail gate window and check for alignment.

**117. TAIL GATE GLASS**

**a. Removal**

- (1) Lower the tail gate glass and open the tail gate.
- (2) Remove the attaching screws and remove the garnish moulding and the handle.
- (3) Remove the inside trim panel.
- (4) With an assistant holding the instrument panel switch in the up position, operate the control switch on the left side of the tail gate and support the glass as it emerges.
- (5) Remove the retaining clips and the regulator arms from the window frame and remove the glass from the tail gate.

**b. Installation**

- (1) Insert the glass into the tail gate run channels deep enough to engage the regulator arms into the window frame.
- (2) Install the inside trim panel.
- (3) Install the garnish moulding and the handle.
- (4) Operate the window and check for misalignment.

**118. TAIL GATE GLASS RUN CHANNEL**

**a. Removal**

- (1) With the tail gate glass removed, remove the

channel attaching bolts (Fig. 126) and remove the channel.

**b. Installation**

- (1) Position run glass channel into the tail gate and install the attaching bolts only finger tight.
- (2) Install the tail gate glass into the run channel and engage the regulator arms and install the retaining clips.

**c. Adjustment**

- (1) Run the tail gate glass to the bottom stop and close the tail gate.
- (2) Operate the glass up and down several times to center or position the run channel.
- (3) Tighten the run channel attaching bolts and reinstall the trim panel, the garnish moulding and the handle.

**119. FOLDING THIRD SEAT (TOWN AND COUNTRY)**

The folding third seat and seat back are adjustable to assure a level floor condition when in a closed position. The seat and seat back may also be removed to provide additional cargo space by removing the hinge bracket attaching bolts.

**120. QUARTER GLASS**

**a. Removal**

- (1) Remove the inside garnish mouldings.
- (2) Remove the outside moulding attaching screw from the lower rear corner of the quarter glass.
- (3) Insert a tapered fiber stick between the window fence and the weatherstrip and loosen the weatherstrip from the body.
- (4) With an assistant to hold the glass from outside, press out the glass from the lower rear corner and remove the glass, weatherstrip and moulding assembly from the window opening.
- (5) Bend up the attaching tabs of both the upper and lower corner moulding caps and remove the mouldings from the weatherstrip.
- (6) Roll the weatherstrip off of the glass.

**b. Installation**

- (1) Inspect the weatherstrip for tears, cuts or distortion.
  - (2) Apply a small coat of weathersealing cement to the edge of the glass and starting at the front corner, roll the weatherstrip onto the glass.
-

(3) Starting at the front upper corner of the weatherstrip, work the trim moulding into the groove of the weatherstrip.

(4) Install the front corner moulding cap and insert the attaching tab through slot of weatherstrip and bend under.

(5) Install the lower moulding.

(6) Install the rear corner moulding cap and insert the attaching tab through slot in weatherstrip.

(7) Place the glass, weatherstrip and moulding assembly on a padded table with inside of glass up.

(8) Starting at the lower center of the weatherstrip insert a pull-cord in the flange groove with the ends of the cord crossed.

(9) With an assistant holding the glass, weatherstrip and moulding assembly in approximate position in the window opening, slowly work the weatherstrip over the window fence by pulling the cord.

(10) Position the glass into place by bumping glass with the palm of the hand.

(11) Install the rear corner moulding attaching screw.

(12) Install the inside garnish mouldings.

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