

der normal circumstances, no lubricant need be added between draining periods, but lubricant level should be checked every 1,000 miles as a safety measure.

In localities where the temperature does not fall below minus 10° F., SAE 90 Passenger Car Duty HYPOID LUBRICANT is recommended for use both in winter and summer. SAE 80 Passenger Car Duty HYPOID is recommended for use during the winter months in localities where the temperature drops below -10° F.

It is extremely important that only Passenger Car Duty HYPOID lubricants having the properties and characteristics necessary for the satisfactory lubrication of hypoid gears be used in the rear axle of the car.

The rear wheel bearings are of the shielded type, filled with lubricant when assembled, and need no further lubrication.

**Steering Gear**—Remove plug in housing and replenish, if necessary, with steering gear lubricant each 5,000 miles. Do not drain, as this unit is filled with an all-season lubricant at the factory.

**Universal Joint Lubrication**—The needle bearings at the transmission and the rear axle end of the propeller shafts are pre-packed with lubricant at the time of their manufacture; therefore, no attention need be given these bearings so far as lubrication is concerned.

**Front Wheel Bearing Lubrication**—The front wheel bearings should be lubricated every 5,000 miles. Approximately one tablespoonful of wheel bearing, high melting point grease should be spread throughout the ball bearings when they are reinstalled. An excessive amount of grease should not be used, due to the possibilities of the lubricant getting into the brake drums.

### GENERAL BODY LUBRICATION

1. Door lock—The door locks are lubricated when installed at the factory and usually need no attention for the first two years except at the lock bolt oil reservoir felt which should be dampened with machine oil every two months or so. Door Ease may be applied to the lock bolt or striker plate instead of the oil. Both should not be used at the same time.
2. Door hinges—Use engine oil and apply with pressure oil can.
3. Door lock cylinders — Apply a small quantity of powdered graphite.
4. Door check link—Oil at pivot joint and dry graphite on rubber bumper.
5. Door wedge plate and dovetail bumper assembly — An application of Door Ease grease stick is the cleanest and most efficient method of lubricating these parts. Clean off all old grease before applying grease stick. Give the parts a light coating only, as a heavy coating is wasteful and collects grime that may rub off on clothing.
6. Hood hinges—Use light engine oil.
7. Shroud and radiator shell hood lacing — Clean excess oil or grease off the lacing with gasoline and apply Door Ease grease stick.

### SPEEDOMETER CABLE LUBRICATION

Speedometer cable should be lubricated at least twice a year or every 5,000 miles.

When lubricating the cables, make sure that all old grease is removed from cable and casing. Apply a thin coating of graphite grease (AC Speedometer Cable Grease No. 846261) to the lower two-thirds of the cable only. This will properly lubricate the upper one-third of the casing, giving an even coating of lubricant the full length of the flexible shaft, without danger of excess grease working up into the speedometer head.

# BODY

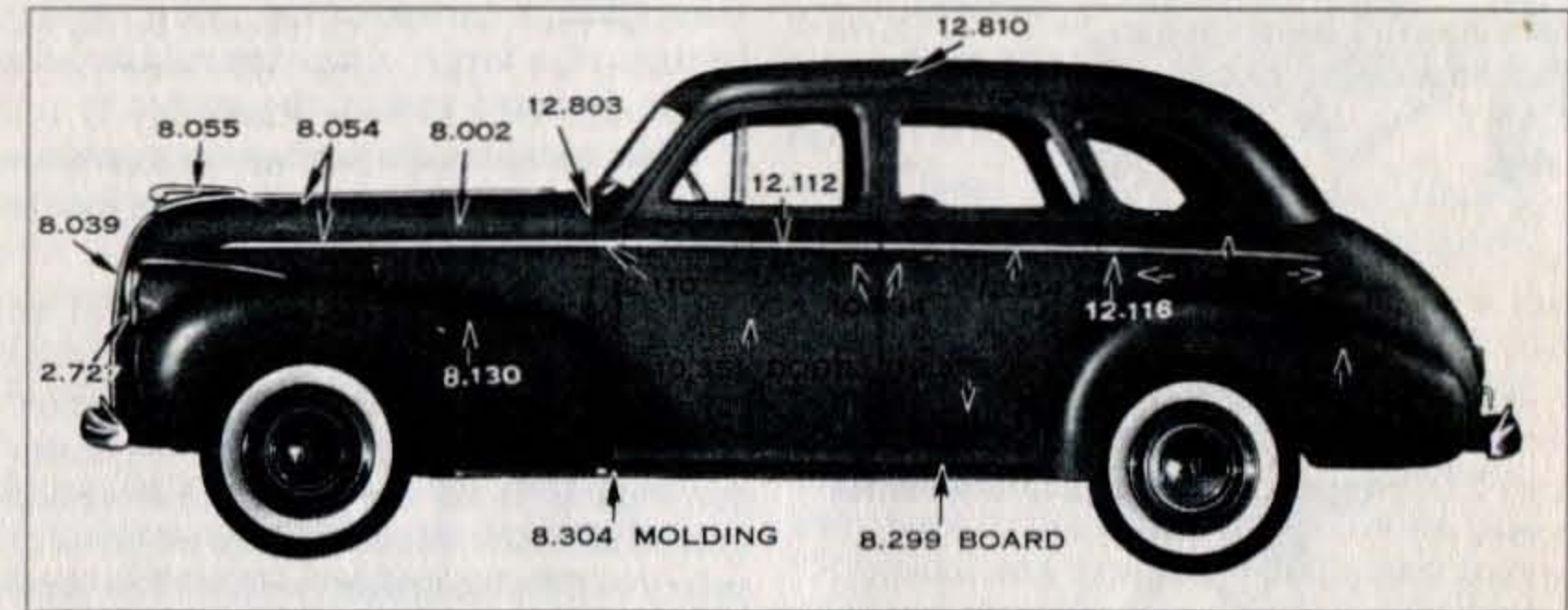


Fig. 2. Body Panels  
(Numbers Indicate Parts Group Numbers)

The 1940 Oldsmobile Unisteel bodies including the seat frames (except "L" front seat frame) and shelf boards, are fabricated entirely of steel.

The "F" and "L" model bodies are completely new in size, design details, and appearance. The bodies are more streamlined. The construction of all 1940 bodies assures maximum safety to passengers, and ready accessibility to all parts for servicing. All exterior exposed panels are bonderized and completely insulated on the inside with insulating materials, which, in combination with special ribbing of the flat panels, make the bodies silent and less effected by changes of temperature.

Wide steel main sills provide a strong foundation for the remainder of the body. A metal stamping having deep stamped ribs and further strengthened with metal cross sills spot welded on the underside, form the floor panel. To this panel is electrically welded, the inner and outer cowl,

the box shaped center posts, and other body panels and braces. The turret top panel is reinforced from beneath with channel section steel bows that prevent the collapse of the top in case the car is turned upside down. (See "Headlining", page 32, and also page 33.)

All joints are sealed with filler and compound to exclude dust, water and air drafts.

All inner door panel openings on the "F" and "L" are covered with sheet metal covers securely fastened and sealed with compound in order to prevent any moisture reaching the interior trim panels.

The check link of all "F" and "G" body front doors includes a "hold open" feature whereby the door is held open mechanically. (See Fig. 3.)

A "U" shaped drip molding welded to the turret top stamping, extends the length of the body and over the doors and windows, preventing any water drip-

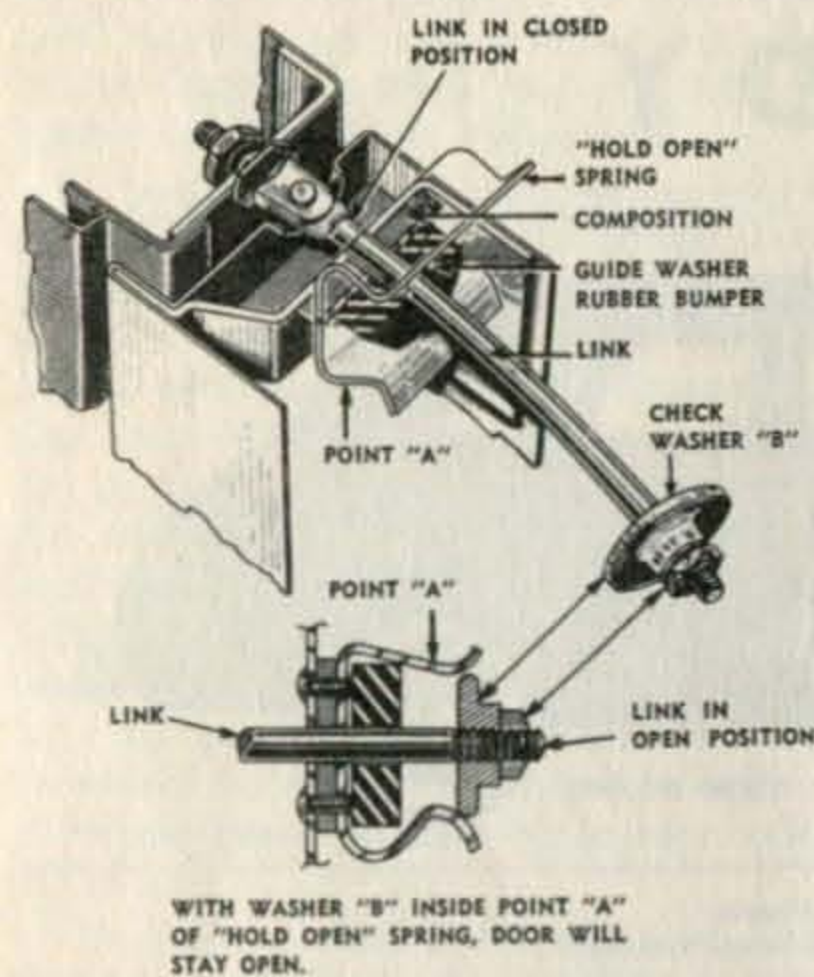


Fig. 3. "F"—"G" Front Door "Hold Open"

ping from the roof and into the door and window openings.

The dash is especially insulated against engine heat and noise by a thick insulating pad retained to the dash panel by means of spring retaining clips.



Fig. 4. Rear Quarter Drain Gutter

The "F" and "G" Rear quarter drain gutters are larger and designed in such a manner that water will not splash over the rear end and onto trim. Water in the gutter is carried away more rapidly because of a larger diameter rubber tube at the forward end of the gutter.

Wide windshield openings in combination with small, reinforced pillars insure exceptionally good visibility.

The glass used in the windshield of all models is of the newly developed safety plate—laminated Hi-Test construction. All remaining body glass in the 5-passenger models is of the same construction except the back window glass which is of safety solid plate construction. The door and ventilator glass in the two passenger models is of the safety plate laminated construction, and the back window construction is safety solid plate.

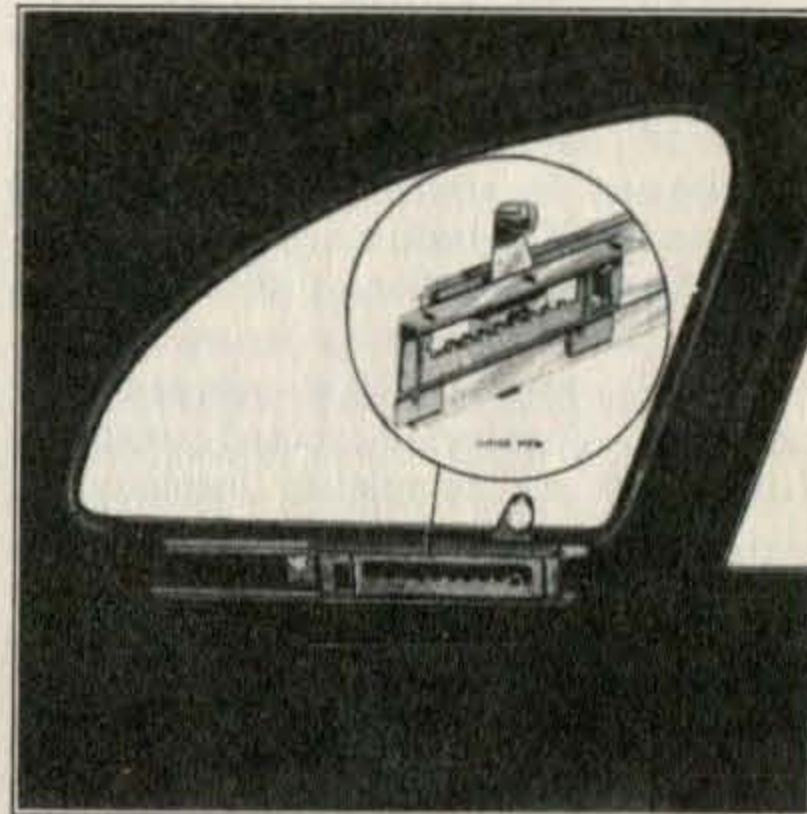


Fig. 5. Four-Door Sedan Rear Quarter Control

All sport coupes and "F" and "G" model four-door sedan rear quarter windows are controlled by a knob projecting above

the garnish molding. (See Fig. 5.) The control operates in a horizontal plane forward and backward, as does the glass which is mounted in the felt-lined window lower sash channel attached directly to the regulator arm.

The "L" model four-door sedan has no rear quarter window which is unnecessary because of the extra large rear doors. Ventilators are provided in the rear doors, the operation of which is the same as the front door ventilators.

A 1 $\frac{1}{4}$ " thick sponge rubber pad is used in the "L" model seat cushion assemblies. This pad is in addition to the cotton pads and cushion coils. The new rubber pads add considerably to riding comfort.

The top sides of the "F" and "G" model seat spring assemblies are covered with a special fabric and wire netting to keep spring coils from projecting into seat padding.

On the two-door models, the bucket seats are kept apart by a slotted metal bracket positioned between the seats at the center of the body. At the center of this bracket is a cam shaped rubber disc. By loosening the slotted screw at the center of the rubber disc, the clearance between the inner sides of the bucket seats can be increased or decreased.

The rear door locks on all four-door sedan models are designed in such a way that they can be made inoperative from either inside or outside the body. This feature adds considerably to the safety of small children riding in the rear passenger compartment. (See page 24, for further details.)

Belt moldings on all models are held on by clips similar to 1939 G-70 and L-80 models. However, when applying moldings to the "F" or "G" bodies, place clips in holes in outer body panel first and then

apply molding over them. On the "L", insert spring clips in molding and then apply moldings to body panels.

Bodies for the "F", "G" and "L" are different in size and design from each other.

#### BODY MOUNTING

The body is mounted on the chassis with the base of the body resting securely on the frame of the chassis, providing a rigid body mounting.

Composition shims separate the body from the frame. Six  $\frac{3}{8}$ " and four  $\frac{1}{8}$ " body bolts and two  $\frac{1}{8}$ " studs secure the body fast to the chassis frame on the "F" model and twelve  $\frac{1}{8}$ " bolts and four studs on the "G". On the "L", eighteen  $\frac{7}{16}$ " bolts and two studs are used.

#### DASH PANEL

The right side of the dash panel and insulating pad is pierced in production for radio mounting bolts.

The center has punched holes to accommodate installation of dash type heater and the defroster which is used in conjunction with the under seat type of heater.

#### SHROUD VENTILATOR

The shroud ventilator is of the same general design as in 1939, with the lid opening forward to deflect the greatest amount of air toward the control pedals, and provide cool air around the feet. The linkage remains similar to the 1939.

The ventilator lid is adjustable to three different positions by a handle conveniently located for the driver at the lower edge of the instrument panel.

A wire mesh screen fitted to the lid prevents entry of bugs into the body through the ventilator when in the open position.

Drainage of water from the trough around the lid is accomplished by means of a short pipe at the center.

A molded rubber hose attaches to the pipe and leads the water through a hole in the front of the dash panel.

The shroud ventilator lid may be adjusted to the shroud opening as follows:

For sideways adjustment, disconnect lid from cowl. Bend two levers on lid bracket spot welded to lid stamping in direction necessary to center lid. Again hook up lid linkage.

For fore and aft adjustment, loosen two lid bracket attaching bolts at both ends of lid. Bolt holes in bracket are elongated. (See Fig. 6.)

Tension of the lid onto the rubber seal is attained by loosening the screw at the center of the handle, shortening the handle throw.

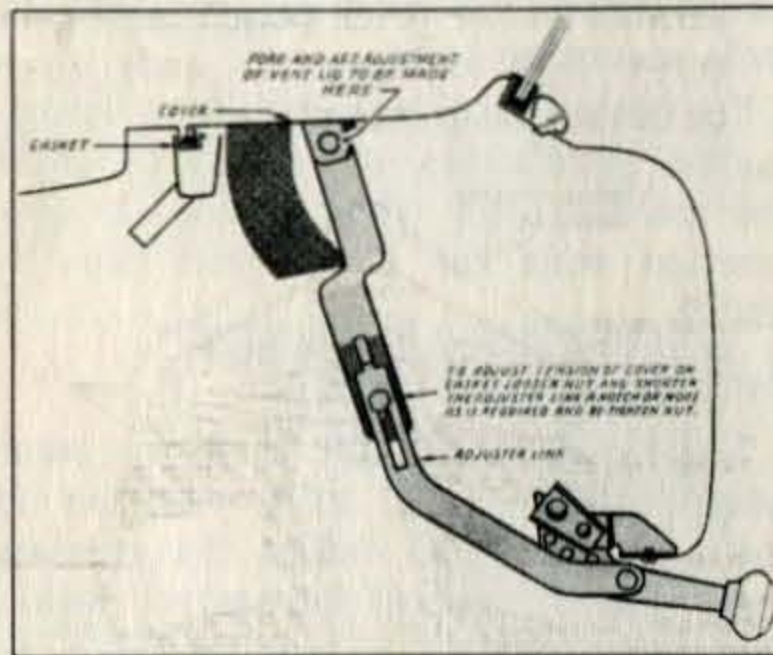


Fig. 6. Shroud Ventilator Adjustment

The ventilator has a sponge rubber seal on which the cover closes, the rubber is cemented in the channel of the ventilator with F. S. 621 rubber cement.

In the event the sponge rubber seal becomes detached or broken, a new unit may be installed without removing the lid.

When replacing, or installing a new rubber, the flange of the ventilator should be cleaned, then coat the flange of ventilator and the rubber with a light coat of cement, letting them become tacky before installing rubber to place.

## WINDSHIELD

The plane of the windshield slopes back sharply to lend a streamline appearance to the body. The windshield safety glasses are interchangeable from right to left.

Following is shown an information chart relative to interchangeability of windshield glasses:

Model	Interchangeable with other 1940 model w/s glasses	Interchangeable with similar 1939 w/s glasses
"F"	No	No
"G"	No	Yes
"L"	No	No

The windshield glasses are assembled in a molded rubber channel and the assembly held in place by a one-piece steel garnish molding. The molding is retained in place by slotted screws which are installed at an angle of 45°.

On all models, a "U" shaped stainless steel metal bead is pressed and cemented over the flange of the windshield opening. No rubber lip on the rubber glass channel is used. There is no need to ever remove the metal bead unless damaged.

The surfaces of the windshield glass rubber channel contacting the stainless steel bead are heavily coated with F. S. 621 rubber cement to prevent water leaks.

The windshield glass rubber channel is molded from rubber and "H" shaped. The center connecting section is an integral part of the channel. This construction eliminates the inner and outer center division molding gaskets. (See Fig. 7.)

## Windshield Glass Removal

1. On the inside of the body, apply painter's masking tape along the top edge of the instrument panel adjacent to the windshield garnish molding to prevent marring the finish.
2. Remove rear view mirror and center inner division molding.
3. Remove chrome plated outer center division molding by unsnapping it from center windshield opening metal brace.
4. Remove garnish molding.

NOTE — In removing the garnish molding, draw the molding in and down at top center, then overlap the ends. This will relieve the tension of the molding at the ends of windshield, and permit it to be more easily removed.

5. Push glass and windshield glass rubber channel from windshield opening toward inside of body, starting at the bottom.
6. Remove glass from rubber channel.
7. Clean windshield opening of sealing compound.

## Windshield Glass Installation

In the replacement of a cracked windshield glass, it is imperative that the cause of the glass breakage (other than by accident) be determined and corrected.

It is recommended therefore, that glass replacement procedure be as follows:

1. Check the panel flanges for being straight by using the old glass as a template (this can be more easily accomplished by using windshield glass holder B-197) as follows: Place the glass in the opening tight against the panel edges. Determine if there are any uneven contacts between the glass and edge of the cowl panel, by passing

- an .008" feeler gauge between the glass and panel edge. Any high or low points should be swaged sufficiently to just permit the gauge to slip by.
2. Coat the inner flanges of the stainless steel bead with a liberal coating of F. S. 621 rubber cement. (See Fig. 7.)
3. Insert glass into windshield rubber channel and then insert glass and rubber channel into windshield opening. Make sure to apply a heavy application of F. S. 621 to outer and under sides of rubber channel.
4. Reinstall windshield garnish molding by starting at the bottom and lower corners of the molding and following up the side, pressing firmly to position. Finish installing the garnish molding at the top center by engaging the ends of the molding together and press it into position. If one end of the molding overlaps the other end, insert a scratch awl or prick punch in the end screw hole and pry the ends apart until they snap into place.

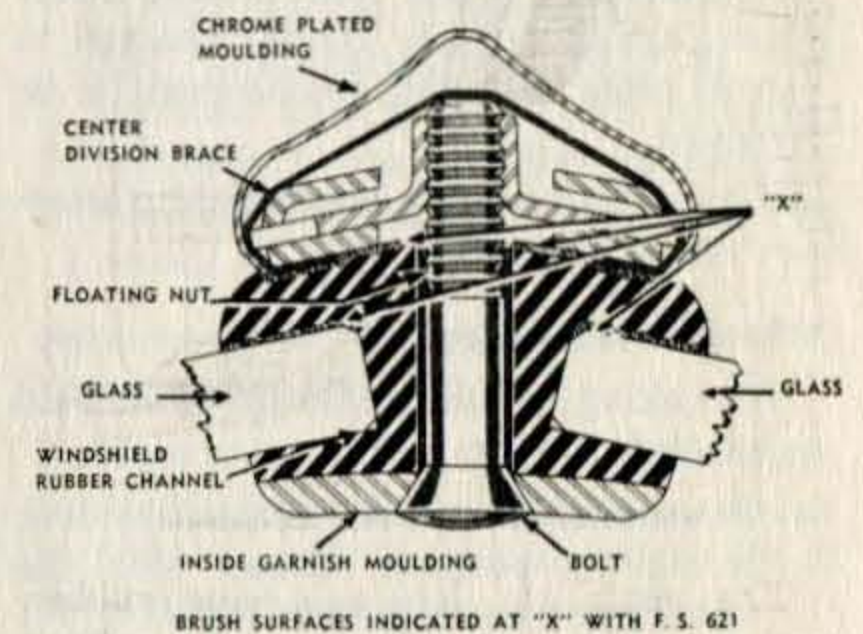


Fig. 7. Sealing Windshield Center Division Molding

5. Set all garnish molding screws evenly, then tighten.
6. Replace the windshield center division brace outer chrome cover and inner

molding, applying compound F. S. 621 to both sides of the center section of the windshield rubber channel to prevent water leaks.

In tightening the screws of inner molding, start at the center screw first, then the top and bottom. Tighten to a snug fit only.

7. Seal under the windshield wiper housing cap gasket of all models, using compound F. S. 621 in Gun B-182.

8. Remove masking tape and clean glass.

NOTE—See "Windshield" for glass interchangeability.

A Phillips screw driver supplied by Hinckley-Myers Co., Jackson, Michigan, under their part number B-206, is required to remove the garnish molding and concealed hinge screws.

The replacement of either the right or left windshield glass can be made independent of the other should it become necessary. To do this, follow instructions under "Windshield Glass Removal and Replacement," except remove only a sufficient amount of the rubber channel to permit glass requiring replacement to be removed.

The right and left windshield glasses are interchangeable.

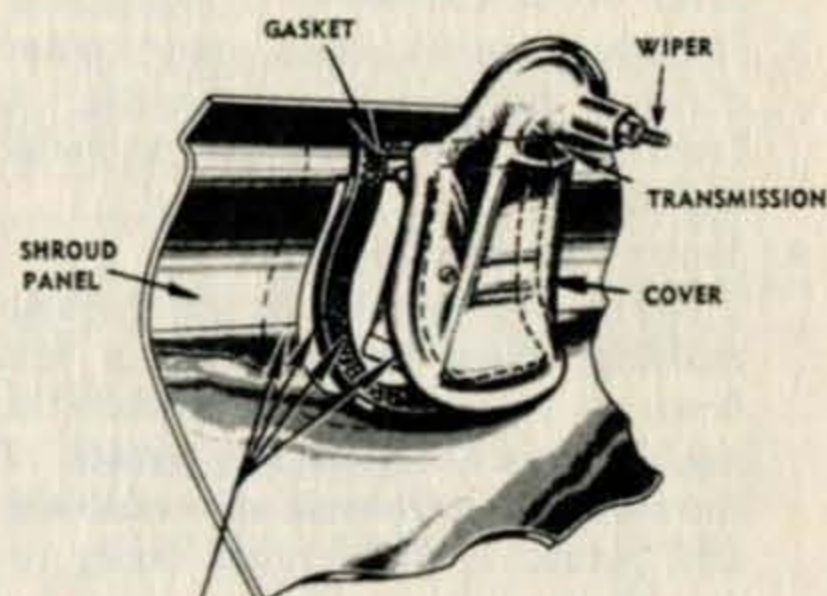
### Windshield Sealing

In making an inspection of windshield to check for water leaks:

1. Determine if shroud ventilator cover is making positive contact with the ventilator rubber gasket. (See Fig. 6.)
2. Inspect the center division brace outer chrome molding cover and inner molding and their seals, particularly at their lower end. If the leak is here, remove the above parts, rearrange the rubber channel and use sufficient Com-

pound F. S. 621 to make a permanent sealing job. (See Fig. 7.)

3. Make sure that windshield wiper transmission caps are securely sealed at the rubber gasket. It may be necessary to loosen or remove the caps to adjust them properly.



CEMENT WINDSHIELD WIPER TRANSMISSION GASKET TO SHROUD PANEL AND WINDSHIELD WIPER TRANSMISSION WITH F. S. 622 RUBBER CEMENT.

Fig. 8. Windshield Wiper Transmission Cap and Gasket

4. Seal between outer and under surfaces of the windshield rubber channel and windshield opening flange bead with pressure container, using F. S. 621 cement.

NOTE — Operation number four also applies to all solid rear window assemblies and windshields on convertibles, as well as quarter windows on all models except that of the five-passenger sedans, which are adjustable. F. S. 621 rubber cement and pressure container is available through the Hinckley - Myers Company, Jackson, Michigan.

### WINDSHIELD WIPERS

The windshield wiper blades on all models, are mounted at the lower edge of the windshield. The motor which is of

greater capacity in the 1940 models, is located slightly to the left of center of the cowl.

This method of mounting, combined with the larger capacity motor, maintains continuous efficient wiper blade performance.

Double windshield wiper blades and combination booster fuel pump are standard equipment on all models. The vacuum booster provides additional vacuum when the intake manifold vacuum becomes inadequate to keep the blades working efficiently.

The transmission and cap assemblies, wiper blades, link arms, and motors while looking alike are not interchangeable between the "F", "G" and "L".

The windshield wiper motors are retained by two machine screws and a bracket welded to the underside of the cowl. The wiper blades to motor connecting links are retained to the wiper motor arms by small coil springs and caps.

The wiper arm transmission and caps are installed similar to 1939, being retained to the cowl metal by a "U" shaped bracket on the underside of the cowl. A rubber gasket under the transmission cap prevents water seeping into the body. (See Fig. 8.)

### Windshield Wiper Motor Removal

1. Release the coil spring and clips that retain the connecting links to the wiper shaft arms at motor.
2. Disconnect vacuum line from motor.
3. Remove the machine screws holding motor to the bracket and remove motor.

### Windshield Wiper Motor Installation

1. Attach the wiper motor to the bracket at the under side of shroud.

NOTE—One end of bracket slotted for easy removal and installation of motor.

2. Connect vacuum line.
3. Set top end of wiper motor shaft arm to extreme right. This is the parked position of motor.
4. Attach the wiper connecting links to motor. The right connecting link attaches to the top arm of the wiper motor.

### Windshield Wiper Transmission Cap Removal

1. Remove the wiper arm and blade assembly.
2. Disconnect the wiper connecting link at the motor shaft arm.
3. Remove the nut and bracket from the transmission cap stud at underside of shroud and remove cap and link assembly.
4. Transmission caps not interchangeable from left to right.

NOTE—The transmission caps are not interchangeable right to left because of a plug on side covering windshield glass washer (accessory) opening. The opening must be toward center of body.

### Adjustment of Windshield Wiper Transmission Drive Chain

Adjustment of transmission drive chain for tightness on all body styles and models is made by loosening nut at lower edge of transmission assembly. (See Fig. 9.)

To adjust, loosen nut "B" and move lower end of chain up or down (to loosen or tighten). Then tighten nut securely again.

When replacing the wiper cap and connecting link, make certain that the rubber gasket is properly sealed both at cap and



Fig. 9. Windshield Transmission Chain Adjustment

at body panel. F. S. 621 cement is recommended for this purpose.

#### WINDSHIELD DEFROSTER

The prevention of frost or clouding on the inside of the windshield glass, or the accumulation of ice or snow on the outside, is made possible through the use of a warm air defroster available as an accessory.

This unit is designed to attach to the top of the dash type Oldsmobile hot water heater. The operation of the defroster is dependent upon a small centrifugal type blower, electrically operated and mounted on top of the hot water heater, which for 1940, will be mounted in the center of the dash.

The blower forces a portion of the hot air from the heater, up through two flexible fabric ducts, and through openings in the windshield garnish molding. The two openings direct warm air to both sections of the windshield glass.

In addition to the dash type mounted heater, an "under the front seat mounted heater" will be available. With this type of heater, heat is supplied both front and rear passenger compartments. A centrifugal type of defroster blower, electrically operated and mounted as a separate unit at the center of the dash, works in conjunction with this type of heater. The defroster is available at extra cost.

A removable stamped plate for ready

removal and substitution of the under-seat heater unit is provided immediately under the front seat assembly in the underbody stamping of the "G" and "L" models. The underbody of the "F" bodies contains punched holes for the installation of this same type heater.

#### REAR WINDOW GLASS

The rear window glass in all models is of one piece. The glass is held firmly in place by means of a one piece garnish molding retained with slotted head screws.

The rear glass is not interchangeable between the "F", "G" and "L" models.

#### Rear Window Glass Removal

The rear window glass can be removed as follows:

1. Remove the garnish molding.
2. Remove the glass and rubber channel assembly.

NOTE—The same procedure as applies to checking panel, removing and installing, and sealing windshield applies to rear window glass. (See "Windshield Replacement.") Do not disturb chrome-plated metal bead on "L" model openings.

#### DOORS

All doors are made up of an inner and an outer metal stamping, securely spot welded together.

The inner frame embodies the hinge pillar, door lock pillar, door bottom panel, door header, and regulator panel all fabricated of steel.

The outer door panel is a single stamping on the inside of which is cemented a thick silencing pad. A vertical metal brace is spot welded at the center lower section of the panel to further reinforce the inner and outer panels.

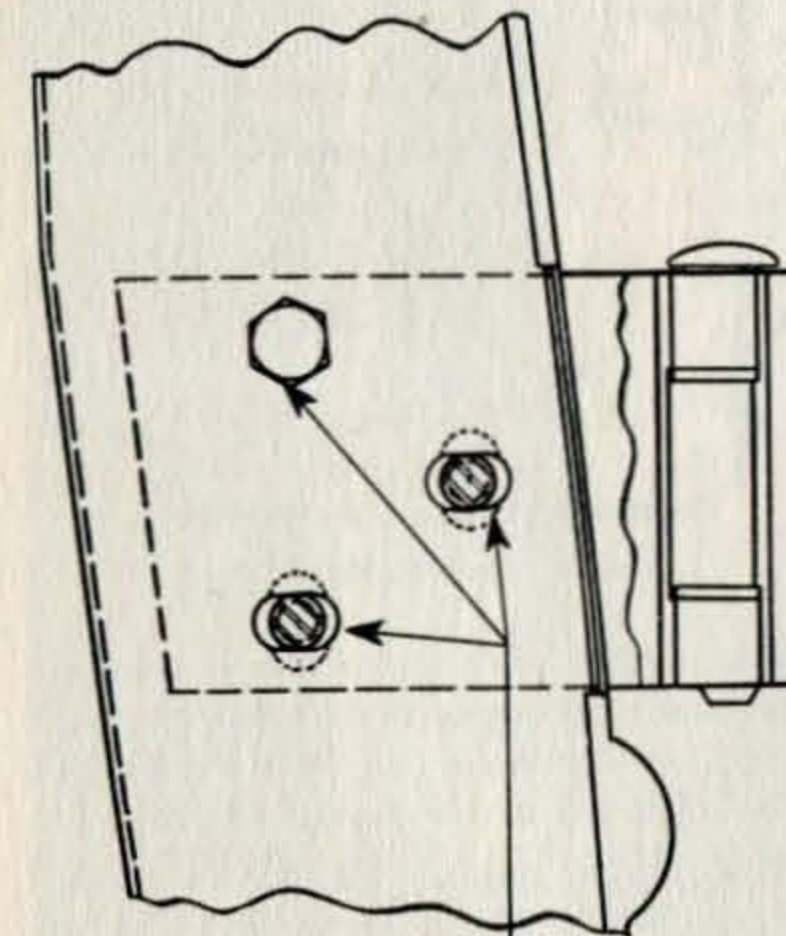
Elongated drain holes are provided at the lower edges of all model doors.

#### Door Opening Rubber Weatherstrip

All model and body style doors are tightly sealed by means of molded rubber strips cemented all around the outer edges. No attaching clips are used.

#### Adjustment and Servicing Doors

The all-metal doors and door units can easily be serviced by studying the following assembling and adjustment operations:



ELONGATED HOLES IN PILLAR FOR HINGE MOUNTING CAP SCREWS

Fig. 10. Door Hinge Adjustment

All doors are adjustable in and out, and up and down in the body opening. The conventional exterior hinges are attached to the body hinge pillar and door hinge pillar with cap screws that thread into the hinges and secured with shake proof washers.

The holes in the body pillar are elongated horizontally and the holes in the door pillar are elongated vertically to permit the above quoted adjustments.

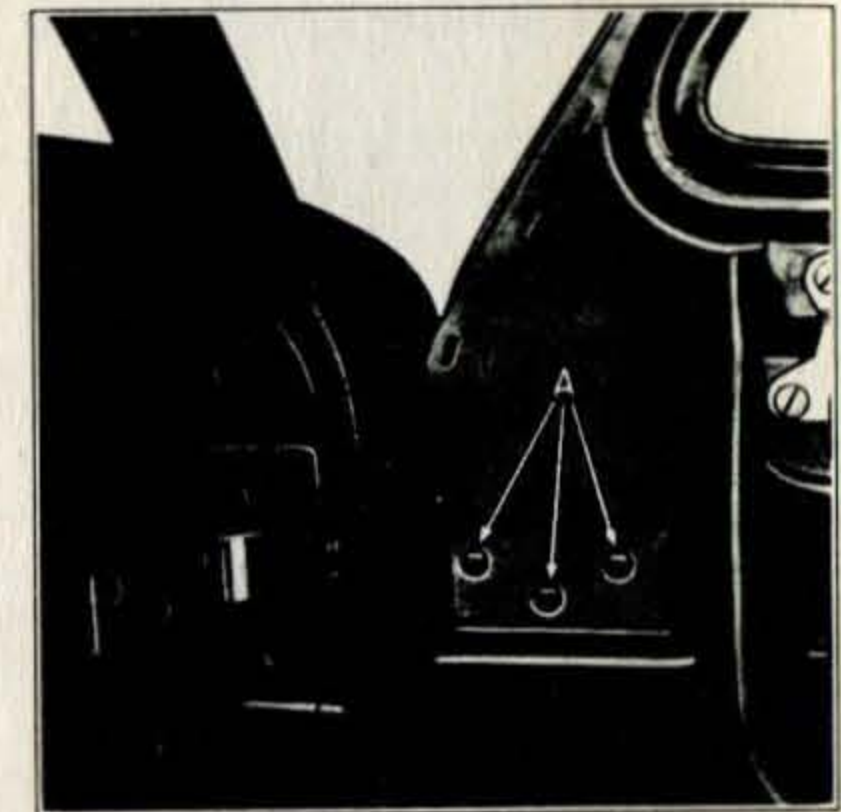


Fig. 11. "G"—"L" Door Concealed Hinge

The concealed hinges are attached to the body hinge pillars with three slotted head screws and to the door hinge pillars with three more  $\frac{3}{8}$ " cap screws that thread into a floating tapped block on inside of the door. The holes in the door pillars are oversize and permit the same adjustments.

#### Adjustment—All Models

1. Open door and with a piece of soft chalk crayon, at intervals of 6" mark the outer edge of the body panels across the top of door, the outer face of the body lock pillar, the outer face of the sill cover and the corner of the body hinge pillar. (See Fig. 12.)
2. Next, close the door to full latched position (do not slam door) to bring the door and weatherstrip in contact with the chalk lines on the body panels.

- Open door and note chalk contact or lack of contact of the weatherstrip on the door with body panels. Any portion of the door weatherstrip not showing chalk indicates that that section of the door must be brought closer to the body.
- All door hinges may be adjusted in or out to bring the door closer or farther away from the body, or they may be adjusted up or down to vertically raise or lower the door. On external type hinges, elongated or oversize holes in the body hinge pillar and door hinge pillar respectively make this possible. In the case of concealed hinges, loosening three  $\frac{3}{8}$ " cap screws in door hinges at "A" Fig. 11, will permit forward and backward adjustment, while shimming behind the hinges will adjust the door in or out.
- The door striker plate on each door opening is adjustable in or out, to

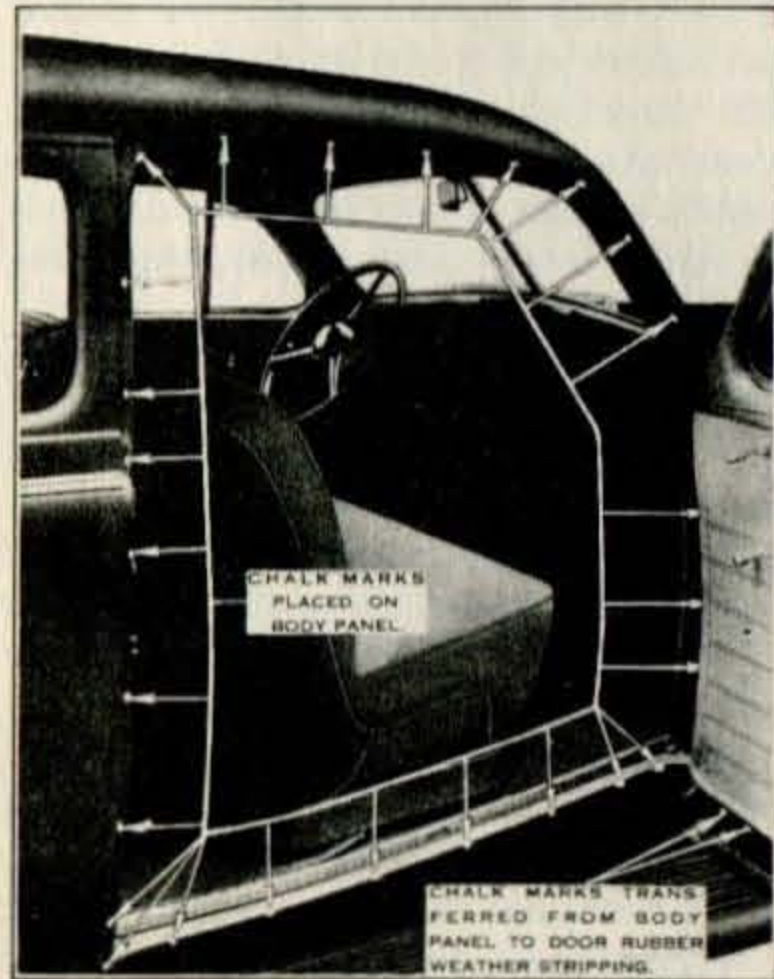
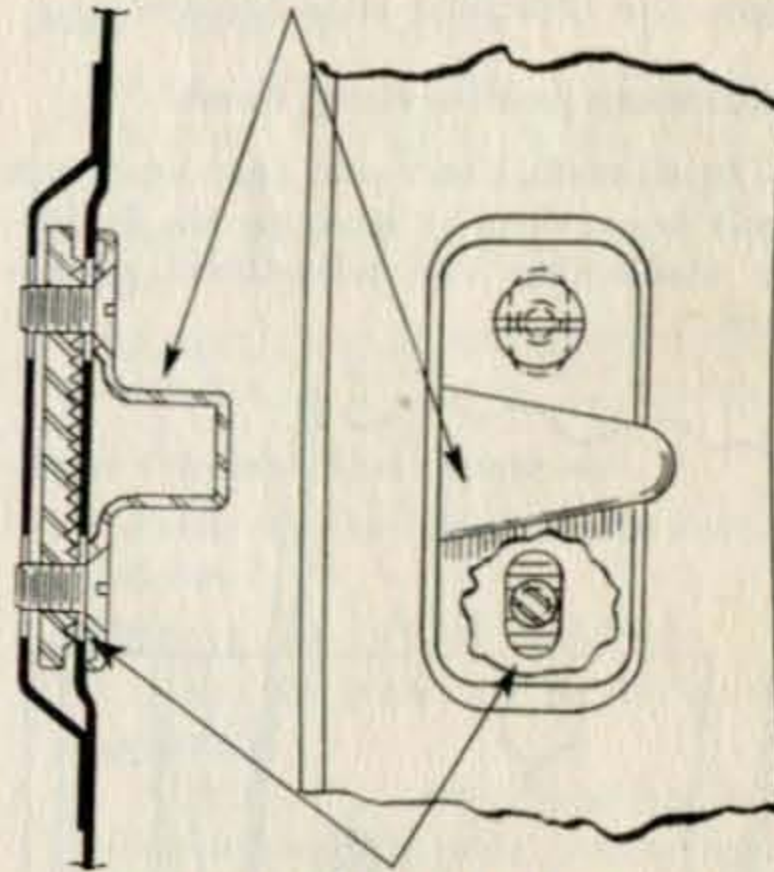


Fig. 12. Checking Door Alignment

- bring the door closer or farther away from the body allowing for easier opening or closing of the door.
- Wedge plates on all doors are adjustable up or down to cause it to enter centrally into the dovetail assembly. (See Fig. 13.)



SCREW HOLES IN PILLAR ELONGATED  
Fig. 13. Adjustable Wedge Plate

The wedge plate is serrated on base side and has elongated holes through which two screws enter, thus allowing it to be adjusted to the proper position.

Wedge plate bumper assemblies are not adjustable. They are serviced as an assembly only.

The upper rubber bumper is spring loaded at the rear end, and can move forward and backward. Thus, when the door is opened, the bumper assists in opening the door.

The front door pillar weathercord on all models is assembled to a metal trim strip, which strip is assembled to the front door hinge pillar facing by a number of screws.

The screw holes in the strip are elongated horizontally, so that by loosening the screws, the weathercord and strip assembly can be adjusted in or out for better sealing of the doors.



Fig. 14. Adjustable Door Weatherstrip

#### DOOR HINGE—REMOVAL Exterior Type

- Remove hinge pins using a drift punch.

NOTE—A special hinge pin removing tool No. B-170 is available through Hinkley-Myers Co. The tool safely and easily removes the pin and lessens the danger of damaging the panels.

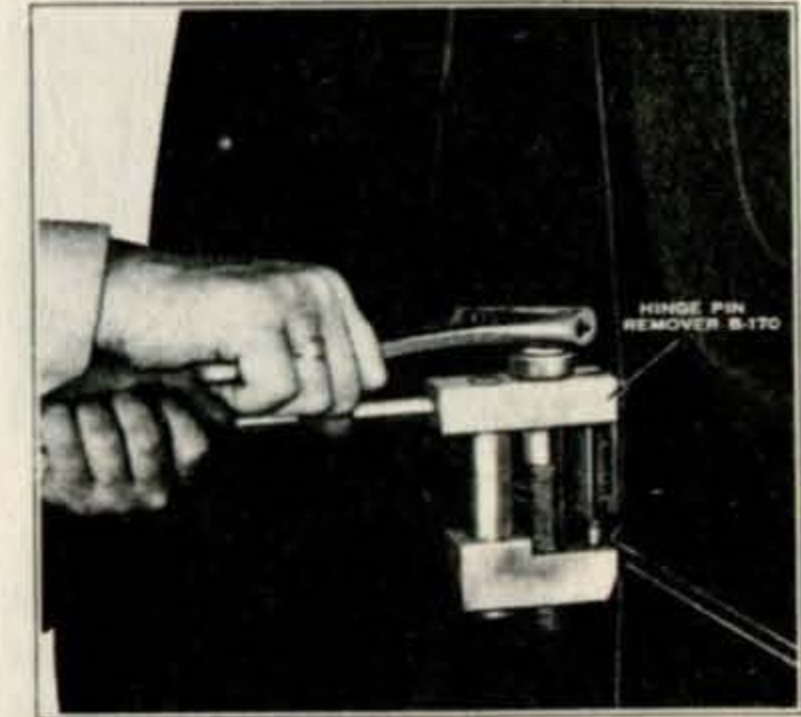


Fig. 15. Hinge Pin Removal

Hinge Pin Bushing Tool set B-99 is also available for removing, reaming and installing the bronze bushings in the door hinges. This set is made up of the following:—

- B-128 Hinge Pin Bushing Extractor.
  - B-129 Hinge Pin Bushing Replacer.
  - B-130 Spiral Expansion Reamer for Hinge Bushing.
  - B-131 No. 3 Ratchet Wrench.
  - B-132 SSR-12 Ratchet Wrench.
  - Metal Packing Box.
- Remove cap screws holding hinge assembly to body and door pillar. Hinge can now be removed from both door or hinge pillar.

#### Concealed Hinge Type

- Remove cap screws from door panel or slotted screws from body hinge pillar and pin. (See Fig. 16.) Hinge halves can now be removed.
- Remove hinge pin. (See item "1" above.)

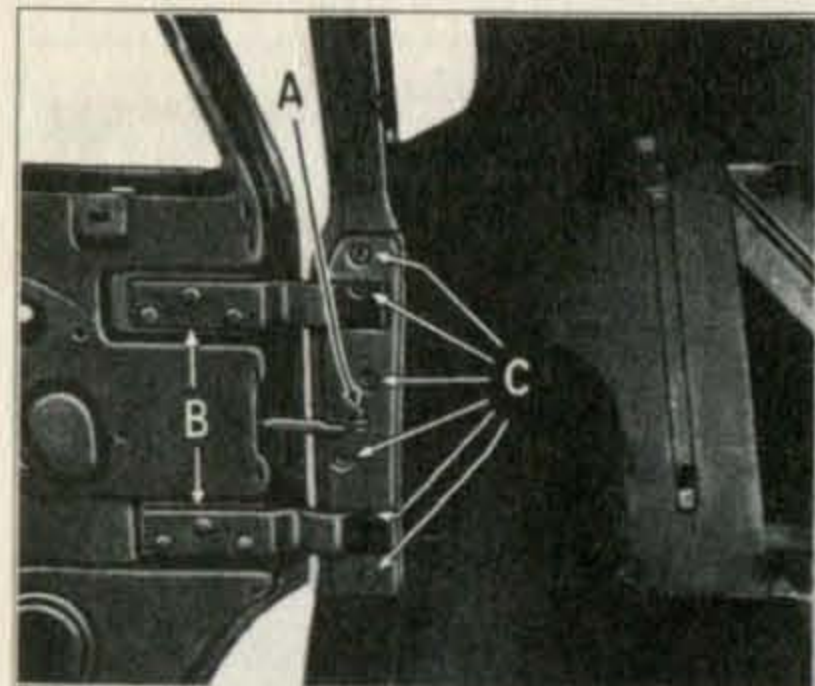


Fig. 16. Door Hinge

**DOOR HINGES, BUSHINGS AND PINS**

The door half of the hinges are bushed with two bronze bushings. Worn bushings may be replaced with new bushings and reamed to fit standard size hinge pin, using Hinckley-Myers tool set No. B-130 and operations are as follows:

1. Remove the old hinge pin and the door half of the hinge. Use Hinckley-Myers bushing extractor B-128 to remove old bushings. Press in new bushings, using Hinckley-Myers pilot bushing replacer B-129.
2. Ream bushed half of hinge with B-130 spiral flute expansion reamer to fit of standard 1/4" hinge pin.

NOTE—To replace concealed hinge bushings, hinge must be removed.

**DOOR OUTSIDE HANDLES—All Models**

To remove the door outside handle, remove with a small screw driver, the retainer screw to be seen through a hole in the face of the door lock. This screw when taken out will permit the handle to be pulled out of the door.

The "F" model door outside locking handle has a locking cylinder and key.

The handle is a hollow shell into which the cylinder and detachable shaft is housed.

To remove the cylinder, drive out the pin "D" (see Fig. 17) and pull out the cylinder with the key.

The cylinder is removed from its shaft assembly by sliding the sleeve from the cylinder down on the shaft and disconnecting the shaft from the cylinder.

After reassembling the cylinder to the handle again, make sure the retaining pin "D" is inserted and swaged to secure it to place.

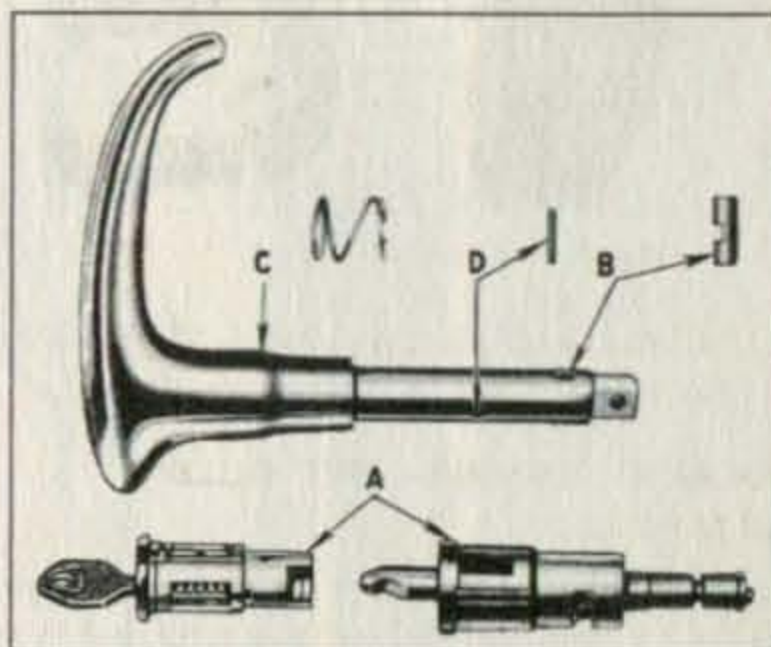


Fig. 17. Locking Handle Disassembled

**"G" and "L" Models—Right Front**

The right front outside door handle on the "G" and "L" models is plain and similar to the left front door handle. The door lock is located just below and independent of the handle.

The lock in the "G" and "L" models can be removed by pushing the door rubber weatherstrip next to the lock back and forcing clip out from the door. (See Fig. 18.) After replacing clip, weatherstrip should be recemented to door with FS-621.

The key number for the lock will be

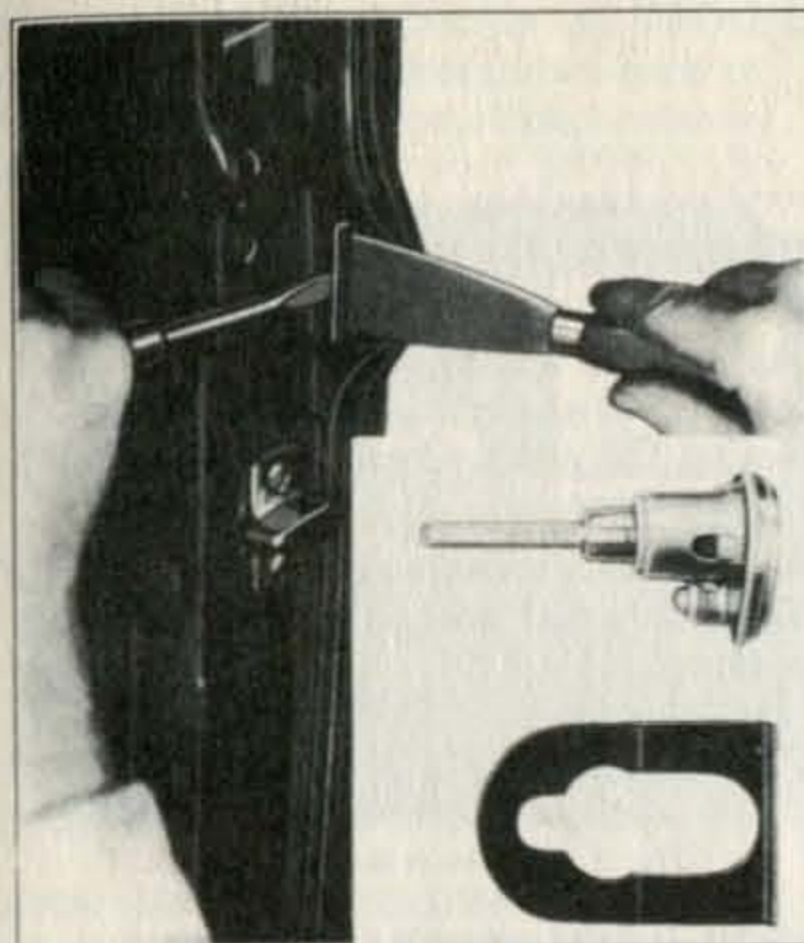


Fig. 18. Door Lock Removal "G"—"L"

found stamped on the barrel of the lock cylinder just back of the outer flange.

**LOCKING HANDLE—LEFT DOOR—All Models**

Special requests have been made especially by commercial representatives, for the installation of a left door locking handle.

This can be accomplished by ordering and installing a right hand front door lock handle for the "F" model or a right front door lock only in case of the "G" and "L" models.

When ordering a new handle assembly, give the number of the right handle lock key so the new handle lock may be duplicated, eliminating different keys.

**DOOR LOCK REMOVAL—All Doors**

1. Remove the door inside locking button. ("F" and "G" models only.)
2. Remove all inside handles.

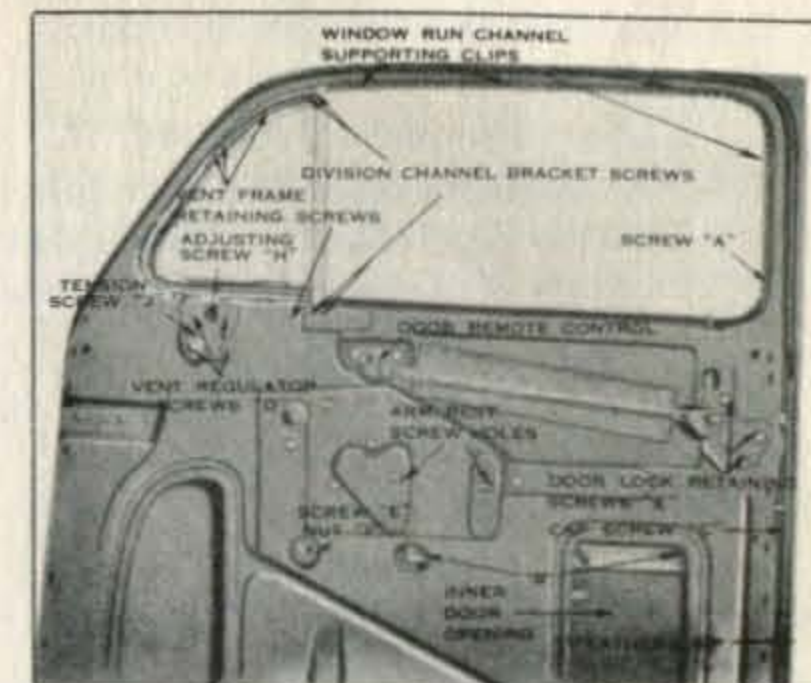


Fig. 19. "F" Front Door—Inside View

3. Remove door handle.
4. Remove garnish molding.
5. Release the door trim sufficiently for access to the four lock screws "E." (See Figs. 19 and 20.)
6. Remove the four screws "E" (on "F" and "G" models) retaining the lock to door framing.

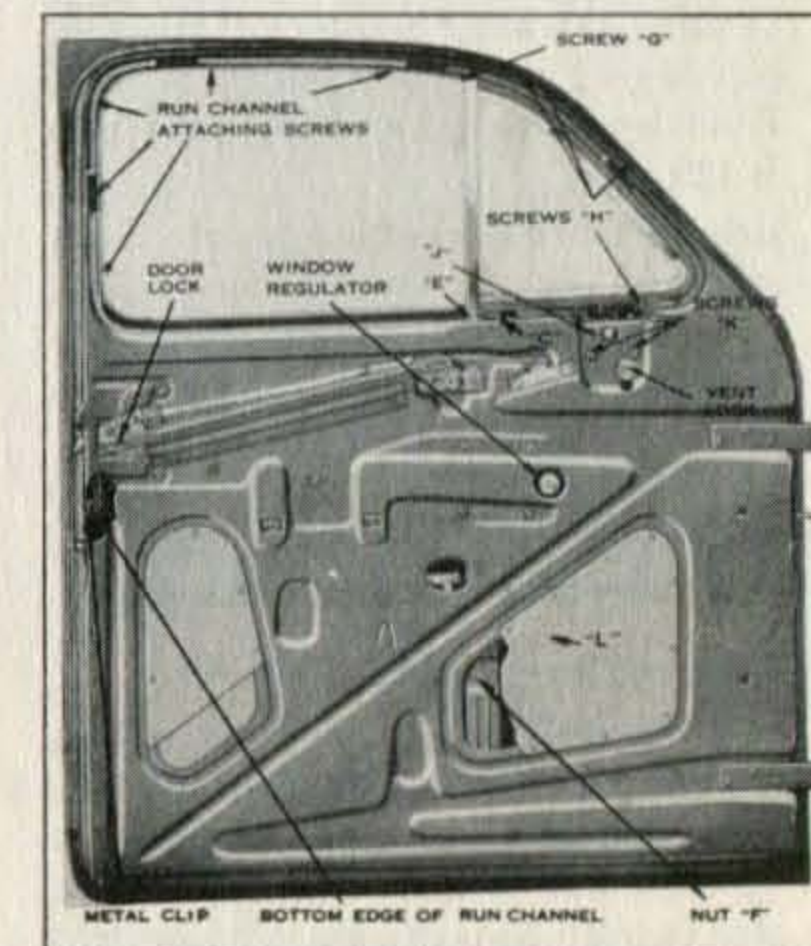


Fig. 20. "L" Front Door—Inside View

- Remove lock through opening in inner door panel.

NOTE—On model "F" and "L" bodies, a metal cover held in place to the inner door panel by self tapping screws must be removed to get lock out of door. The door trim panel must be entirely removed from door.

#### DOOR REMOTE CONTROL REMOVAL (All Models and Doors)

Release the garnish molding, hardware, and door trim sufficiently to remove the two machine screws holding this assembly to the door inner panel. (See Figs. 19 and 20.)

NOTE—The screw hole openings are elongated horizontally to permit the adjustment of the remote control and connecting link forward or backward.

IMPORTANT—The inside rear door locks of four-door sedans are so designed and made that the remote control can be made inoperative by simply pushing the inside door lock button but part way down on the "F" and "G" models and by turning the small inside lever on the "L" model. Through this arrangement, small children are less likely to open the rear door while the car is moving and fall out. Front and rear door inside lock assemblies are not interchangeable.

#### DOOR INSIDE HANDLES

The inside handles are held on the shaft by means of a retainer spring, part No. 4090144, which is the same as 1939.

#### To Remove the Handle:

- Insert tool B-201-A between the handle and escutcheon plate. (See Fig. 21.) Tool B-201-A now incorporates a "vee" notch at open end. Notch section is used to pull edge of door trim panels loose from inner panels.

- Insert tip of tool B-133-A under retaining spring and push spring out and remove handle and escutcheon plate.

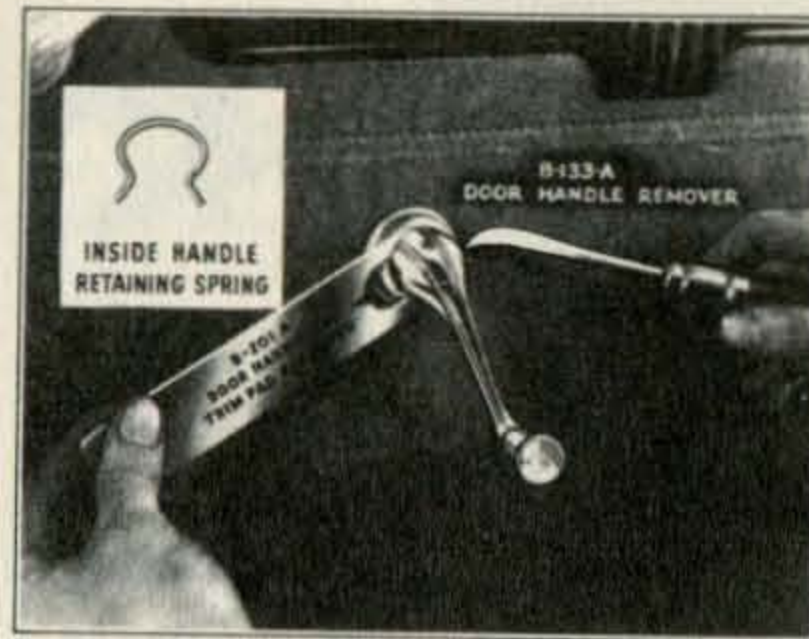


Fig. 21. Door Inside Handle Removal

#### DOOR INSIDE HANDLE RETAINING SPRING INSTALLATION

- Insert the handle spring installing tool B-202 in the handle and snap the retaining spring in the spring slot. (See Fig. 22.) Handle can now be applied to regulator shaft by pushing on handle.

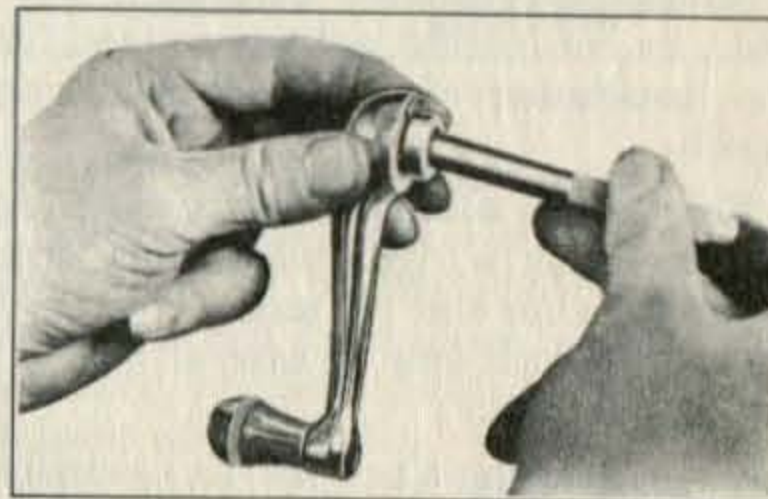


Fig. 22. Installing Handle Retaining Spring

#### DOOR WINDOW GARNISH MOLDINGS "F" Model

The garnish moldings are retained by stamped lugs at the top section of the door lower panel. The lower section of the molding is retained by pressing it over

the lugs. The sides and top of moldings are retained by special sheet metal screws installed through the top of door header, and at the face of door pillars. (See Fig. 23.)

#### "G" and "L" Models

The procedure is the same as for the "F" model except the lower edge of the garnish molding fits over inner door panel extension clips in a manner similar to the lugs referred to under "F" model above. There is no need to remove the clips at any time.

The garnish molding screws on the "L" enter the garnish molding and then thread into the door inner panel.

#### DOOR GARNISH MOLDING REMOVAL— All Models

- Remove the door inside locking button.
- Remove the garnish molding screws from garnish moldings at top of door and at door hinge and lock pillar. (See Fig. 23.)
- Draw top of molding in, and raise molding to disengage the bottom section from the door panel lugs and inside locking rod.



Fig. 23. "F" and "G" Door Garnish Molding

NOTE—On "L" model, remove front door inside locking lever by removing spring clip.

#### FRONT DOOR GLASS REMOVAL TWO DOOR SEDAN AND COUPE "F" and "G" Models

- Remove garnish molding.
- Loosen lower half of door trim by prying edges of trim panel away from inner door panel. Make sure to unhook trim panel from clip on inner panel by raising up on trim panel. (Remove trim panel entirely on "F" model.)

Bottom of door trim pad is held fast by a metal flange that pinches trim firmly in place. No nails are used. After reassembling lower edge of trim pad inside flanged strip, secure pad by striking a long strip with rubber mallet. This is true of all model doors. (See Fig. 24.)

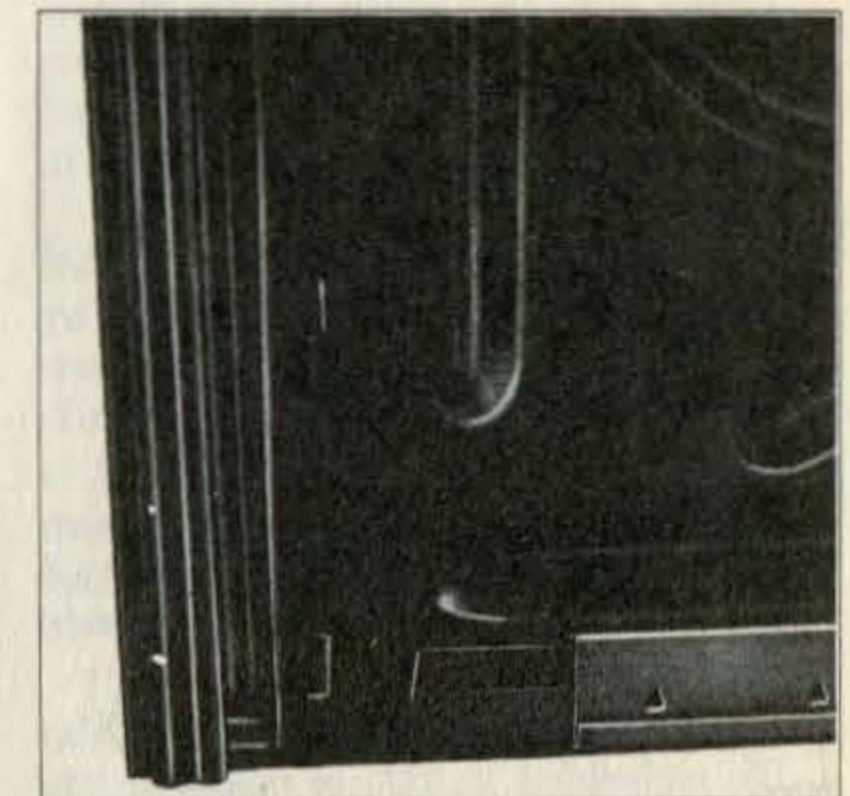


Fig. 24. Attachment of Lower Edge of Door Trim Panel

- While glass is in lowered position, remove 4 lower window sash channel to cam regulator screws "B." (Fig. 19.)
- Loosen clip and drop end of upper window run channel retaining clip located



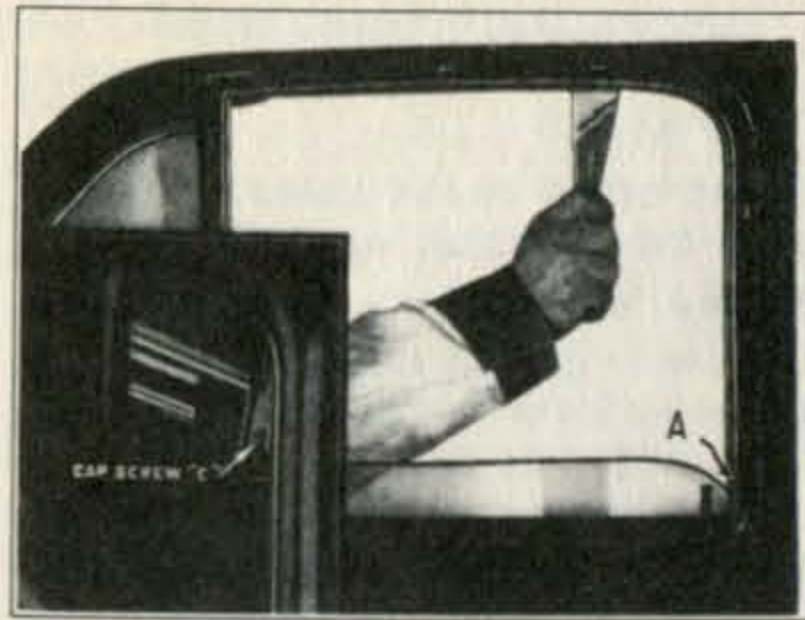


Fig. 25. Front Door Window Run Channel Removal

approximately 3" from division channel. Clip can be removed by inserting thin edged tool such as wood chisel between the outer and upper edge of the door panel and the glass run channel. (See Fig. 25.) Push straight up on chisel to partially collapse prongs of spring clip, then push handle of tool away from body to force clip from door panel. Clips are secured to run channel and enter into pierced holes in door panel.

NOTE—On Model "L" bodies, felt window run channel is held in place by five sheet metal slotted screws. Screw heads will be found embedded in felt.

Lock pillar end of run channel is held fast to pillar by one small clip on the "L" sedan and two clips on the "L" coupes. The clips fit into slots in inside edge of door pillar.

- Remove small slotted screw "A," Fig. 25, embedded in felt of window run channel just above lower window opening edge on lock pillar side of door.
- Loosen  $\frac{3}{8}$ " hex cap screw "C" at extreme lower end of window run channel—lock pillar side. A clip replaces bolt on "L" model.
- Remove two division channel upper

bracket screws, also two clip screws on division channel located at lower edge of window opening, and single slot head screw "E" and hex shaped check nut "F" at lower end of division channel. (See Fig. 19.)

- Remove division channel by pulling upward and inward. (Ventilator should be opened first.)
- Glass can now be removed by raising upward and toward inside of body. Sash channel on lower edge of glass will have to be removed from regulator cam when glass is in uppermost position.

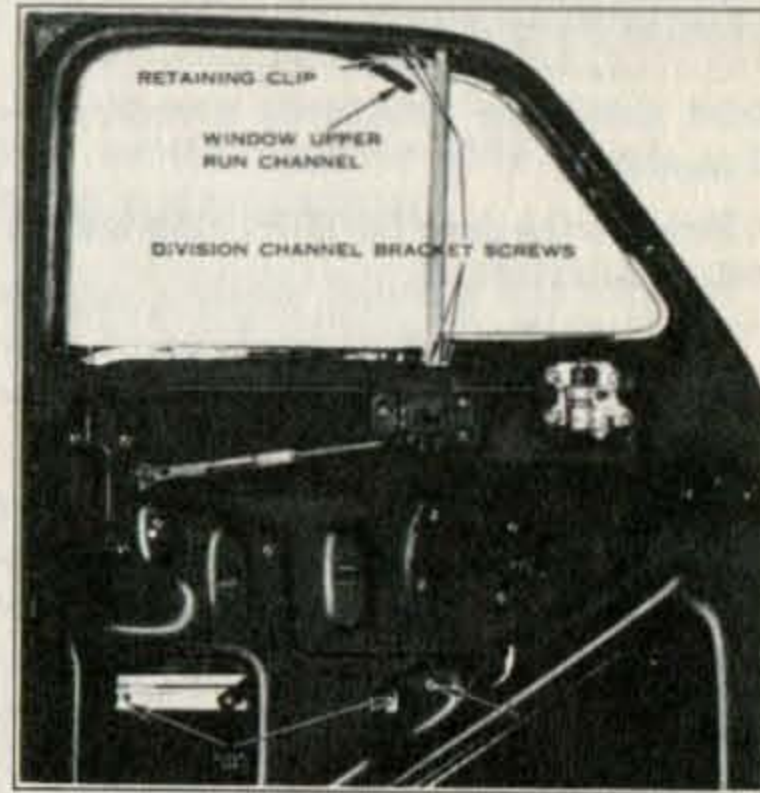


Fig. 26. "G" Front Door Inside View

#### INSTALLATION

Reverse removal instructions for all models.

#### FRONT DOOR FOUR DOOR SEDAN GLASS REMOVAL

##### All Model Four Door Sedans

For all 1940 model glass removal, follow two-door sedan door glass removal instructions covering the "F" and "G" models except "3" will not have to be done.

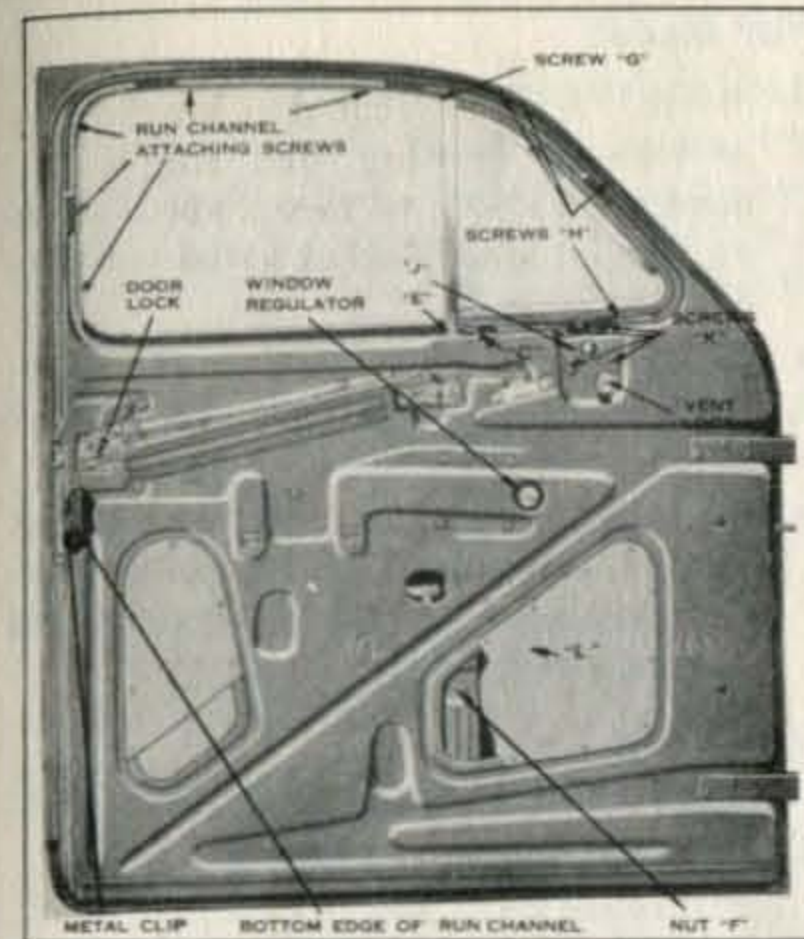


Fig. 27. "L" Front Door—Inside View

#### FRONT DOOR VENTILATOR REMOVAL AND ADJUSTMENT

##### "F" and "G" Models

- Remove garnish molding.
- Loosen upper one-half of lower door trim panel.
- Remove the screws holding the ventilator assembly to the door. (See Fig. 19.)
- Remove two upper and loosen lower slotted screws "D" holding the ventilator regulator to the door inner panel.
- Loosen adjusting screw "H."
- Open ventilator glass slightly and pry top of ventilator inward sufficiently to clear top of door. Close glass and remove ventilator assembly.

NOTE—In the event a ventilator glass only requires replacement, it is not necessary to replace the complete ventilator assembly.

The glass can be removed from the ventilator frame through the use of Hinckley-

Myers ventilator glass removing and replacing tool B-180.

NOTE—For quick, easy new glass installation, see 1939 Fisher Service News, Vol. 2, No. 6.

The adjusting screw "J," Fig. 19, may be set to exert more or less friction on the shaft of the regulator to cause the ventilator to operate loose or stiff.

The adjusting screw at "H" may be tightened in case the ventilator shaft is loose in the slot and causes the glass frame assembly to flutter.

##### "L" Model

- Remove garnish molding.
- Remove door trim pad assembly.
- Remove center division channel from door by removing screw "G," two screws "E" and nut "F."
- Remove four ventilator to door frame screws "H." (See Fig. 27.)
- Remove screw "C."
- Loosen four ventilator gear box to door attaching screws "K."
- Remove gear box adjusting screw "J."
- Remove ventilator frame by pulling ventilator assembly toward rear of body.

Adjust ventilator as shown under "F" and "G" models.

#### FRONT AND REAR DOOR VENTILATOR GEAR BOX REMOVAL

##### "L" Model

Follow instructions as shown for "L" model Door Ventilator Removal but in addition—

- Entirely remove attaching screws "K." (See Fig. 27.)
- Remove cover "L" from inner door panel.
- Gear box can now be removed through hole in inner door panel.



### REAR QUARTER VENTILATOR REMOVAL AND INSTALLATION—FOUR DOOR SEDAN

#### "F" and "G" Models

1. Remove garnish molding.
2. In the window opening, remove the three screws holding the Ventilator Frame and Garnish Molding Front Support Clip.
3. Tip the Ventilator Assembly inward at the top and lift the ventilator up and out.

To replace ventilator assembly, reverse foregoing operations. However, prior to assembling the frame attaching screws, the regulator is to be set in the extreme forward position and the glass is to be held securely against the front edge of the rear quarter ventilator body opening and the outer panel weatherstrip.

### REAR DOOR VENTILATOR REMOVAL "L" Model

1. See Front Door Ventilator Removal and adjustment.

### REAR DOOR VENTILATOR GLASS REMOVAL

#### "L" Model

1. Open ventilator.
2. Remove glass using ventilator glass removing tool, B-180. Also see note regarding glass replacement, page 27.

### TRUNK AND REAR COMPARTMENT LID

The trunk and rear compartment lids of all models are sealed against entry of dust and water by a hollow molded rubber which is cemented to the gutter with FS-621 rubber cement.

The lid on 5-passenger models is locked by means of a single handle which operates two locking bolts through locking plates to the underside of the drain gutter.

For easy operation of the lid lock, keep the center eccentric lock and locking plates well lubricated.

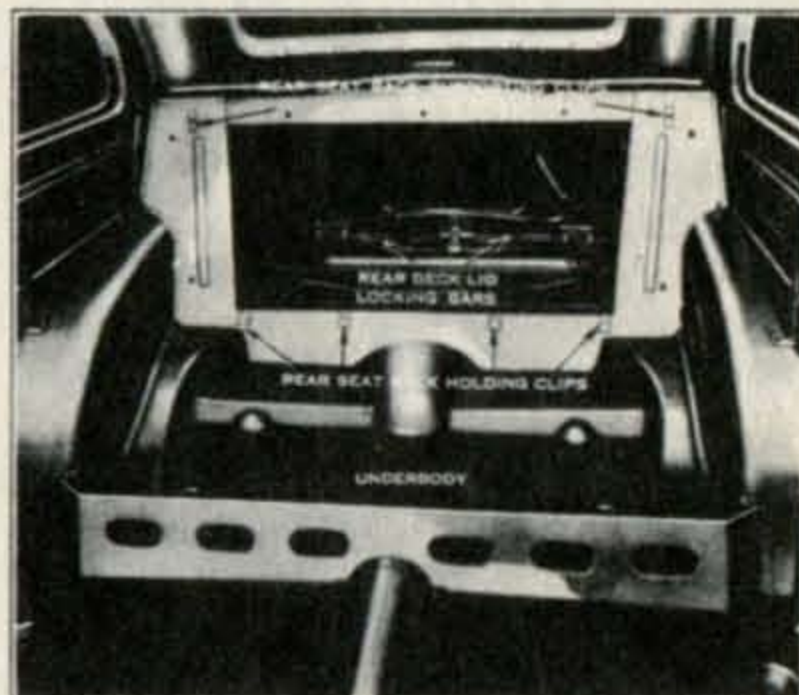


Fig. 31. Trunk Lid Lock—Five-Passenger Sedans

To adjust the lid to provide even spacing on all sides of the opening, loosen the hinge screws at the lid on all models. Close the lid and adjust the opening by inserting wood wedges where needed. It will be necessary in an adjustment of this kind to have a helper on the inside of the car so that he can tighten the hinge screws when the lid has been centered in its correct position.

Additional movement of the lid on the 5-passenger body styles can be had by loosening the lid hinge screws at the rear panel end. The holes in this panel for the hinge are oversized.

Because of the revised shape of the rear deck lid on the "F" and "L" model coupes—they now taper toward the lock end—a new type of lid lock is used on these models.

The lock, including a latch that slides up and down within a stamped track, is attached to the lid by four attaching screws.

The stamped catch is mounted within

the tool compartment well in the underbody stamping and held in place by two screws and shakeproof washers.

Both the lid lock and catch can be adjusted up and down independently, providing a means of obtaining an easy operating lock combined with tight sealing of the lid to the drain gutter rubber seal.

**CAUTION**—To prevent head injury, always place rear deck lid lock handle in locked position any time lid is raised. This will raise catch beneath lid edge. See Fig. 32.

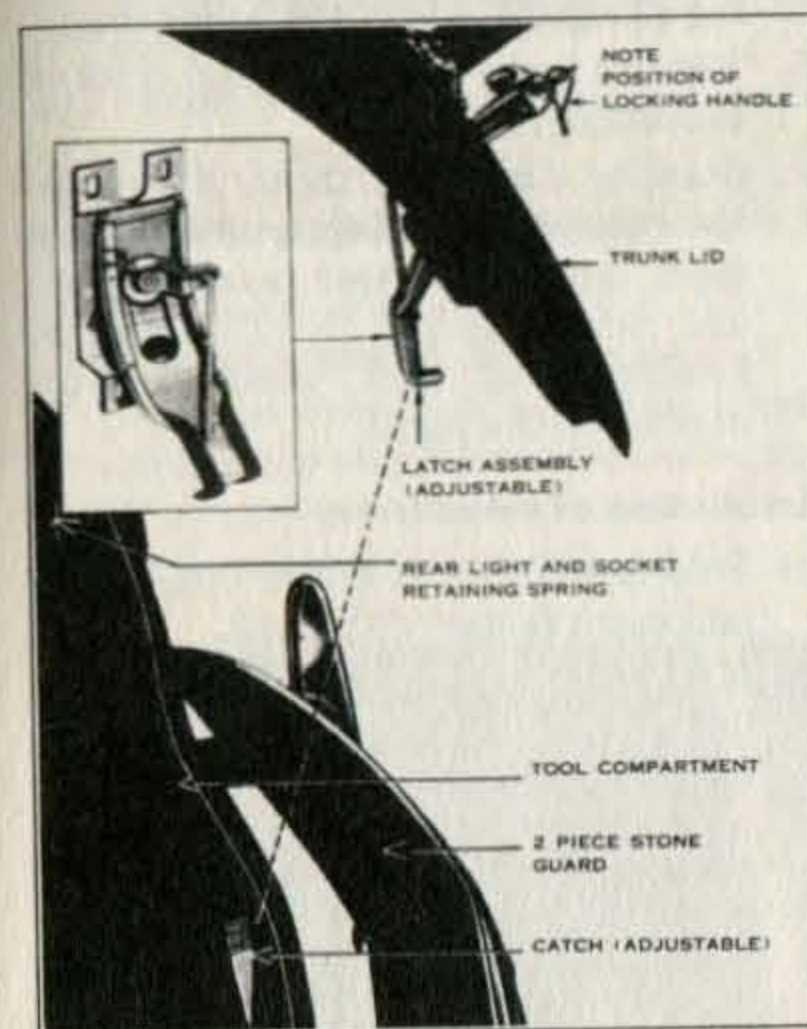


Fig. 32. Rear Deck Lid and Lock—Two-Passenger Coupe

### SUN VISORS

The sun visor is mounted to the header with a single easily adjusted swivel bracket retained to the header by three machined screws.

At the socket is an adjusting screw, to maintain proper tension between supporting bracket and sun visor shaft. Tightening the adjusting screw will keep

the visor in the elevated position.

The sun visors on the "F," "G" and "L" are not interchangeable, varying in size from each other.

### TRIM SPECIFICATIONS

TRIM No.	TYPE TRIM	MODEL USED WITH
1	Two-Tone Cloth	"L" Closed
2	Tan Pattern Mixture Cloth	"F" Business Coupe
3	Striped Cloth	"F" Sedan-Coach Club Coupe
4	Bedford Cord	"G" Business Cpe. Club Coupe
6	Bedford Cloth	"G" Sedan-Coach
7	Canda Cloth	"F"- "G" Closed
8	Tan Leather	"F"- "G"- "L" Clsd. "F"- "G" Conv.
9	Black Leather	"F"- "G" Convert.
10	Gray Leather	"G" Convertible
11	Green Leather	"F"- "G" Convert.
12	Blue Leather	"F"- "G" Convert.
13	Red Leather	"F"- "G" Convert.
14	Tan Two-Tone Bedford Cord	"G" Convertible
15	Tan Leather and 2-Tone Bedford Cd.	"F"- "G" Convert.
16	Red Leather and 2-Tone Bedford Cd.	"F"- "G" Convert.

#### Model "G"—

Standard Top Material—Tan 7-T-1540  
Optional Top Material—Gray 9-T-1540  
Optional Top Material—Black 11-T-1540

Model "F"—  
Standard Top Material—Tan  
Optional Top Material—Black

### HEADLINING

The headlining comprises the complete roof upper structure trim. The lining extends from the front of the roof at the windshield, to the back of, and down to the belt line of the body.

Listing strips are sewed to the headlining support wires extending through the full width of the listings.

At the underside of the roof are located steel cross bows and listing supports. At the front edge of the cross bows is a series of barbed hooks to which the front half headlining listings are attached.

At the rear section of the roof are four listing supports. Each support is attached to the rear window paneling on either side by means of one screw. These supports are assembled through lining rear listing strips so that the headlining may be suspended from them.

Both ends of the steel bows at the front half of the top are welded solidly in place to the upper side rails. The listing supports are adjustable up or down. See Fig. 33.

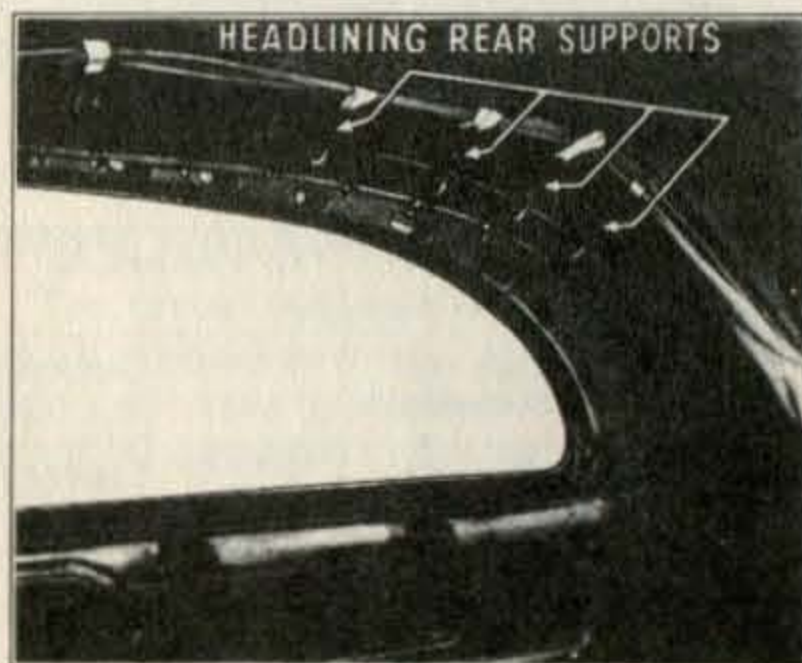


Fig. 33. Top Bow Attachment

### Headlining Removal

1. Remove seat cushions.
2. Remove rear window garnish molding.
3. Remove rear window shelf board top trim strip.
4. Release the trim back of and across the top of the rear side windows.
5. Remove sun visors and brackets.
6. Remove windshield garnish molding.
7. Remove dome light.
8. Turn down the finishing trim molding along the side of the headlining.
9. Remove tacks from ends and sides of headlining.
10. Starting from the front, disengage the headlining listing wire supports from cross bows and rear supports and remove lining. NOTE—End of headlining at back window is cemented to the panel.

### Installation of Headlining

1. Fold headlining at center lengthwise and mark center with chalk.
2. Match the center line to the center line of roof and engage the rear listing and wire support to the headlining rear support. Continue to the front, attaching all listing wires to their respective hooks.

**CAUTION**—In attaching listing wires to these hooks, be sure to smooth out the listing to avoid wrinkles and insure proper tightness.

**NOTE**—The paper wrapped wires running through the headlining listings are formed and cut to length for their respective locations.

If removed for any reason, see that each one is replaced in its proper listing.

3. Cement the rear end of headlining to

- the rear seat shelf panel and back window panel.
4. Install shelf panel trim strip.
5. Tack headlining to rear quarter trim strips and refasten rear quarter upper trim pads in place, using brads. Draw finishing trim over brad heads.
6. Cut and tack headlining at dome lamp block and install dome lamp assembly.
7. Tack headlining to front trim strips.
8. Tack headlining to roof side trim strips.
9. Install sun visors and garnish moldings.
10. Install rear seat back and seat cushions.

### DOOR TRIM PAD REPLACEMENT

1. Place lower edge of trim pad in metal trim pad retainer. See Fig. 34.
2. Bend the trim pad corrugated nails along sides slightly as shown in Fig. 34, so they will engage in the slots in the door panel.

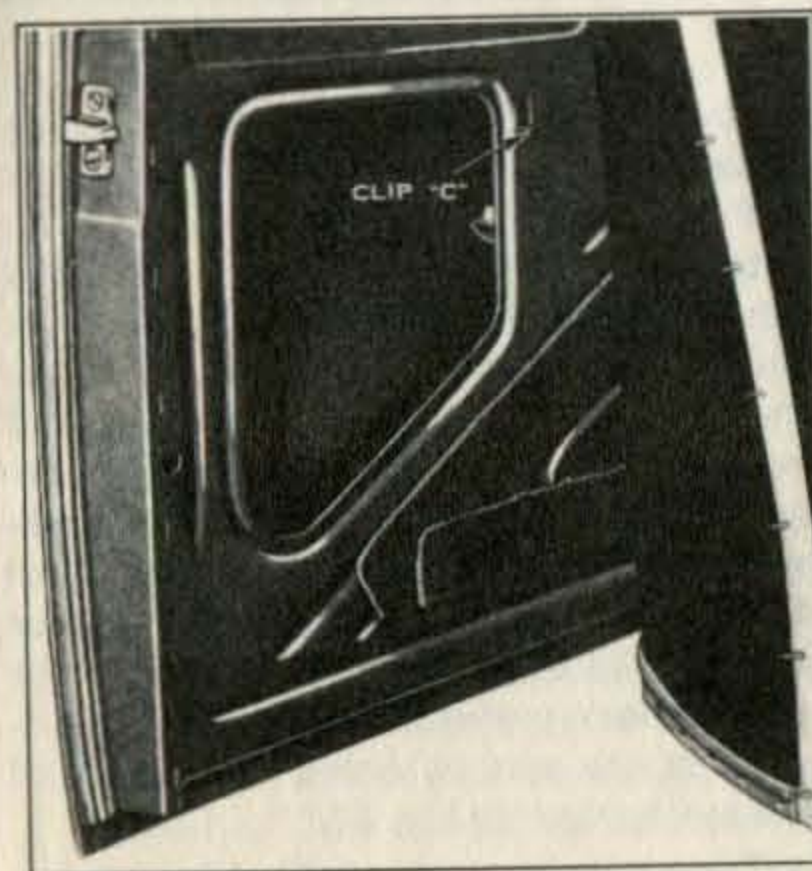


Fig. 34. Door Trim Pad

3. Engage the clips "C" in the trim pad to the door inner panel.
4. Align the door trim pad flush with edges of the door pillars, and with a rubber mallet drive the trim pad and corrugated nails into the slots of the door panel. Also flatten metal fastening flange along bottom with rubber mallet.

**NOTE**—Each nail should be driven in a little at a time until all nails are driven in to get an even installation of the trim pad assembly.

5. Install the two self-tapping screws at the lower corners of the trim pad.
6. Install the window garnish molding, door inside handles, locking rod button and the door arm rest.

**NOTE**—In the event a nail breaks off in the trim pad nailing strip, it should be replaced by turning back the trim material on the trim pad, and inserting a replacement tab. This replacement tab has a nail welded to it and is serviced under part No. 4073068. See Fig. 35.

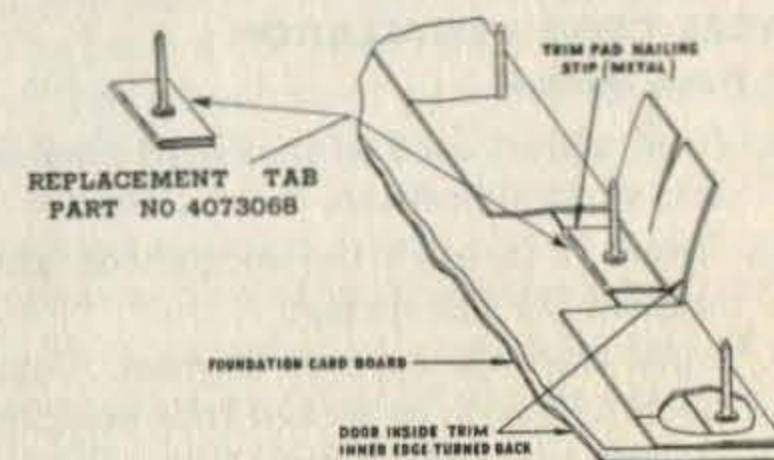


Fig. 35. Replacement Tab

### ARM RESTS

The front door arm rests are attached to the retaining plate with two Parker-Kaylon screws, part No. 4063396, from the under side of the arm rest. These screw heads are covered by a lap of the trim which is retained by two chrome

plated screws. To remove the arm rest, remove the two screws from the underside of the arm rest, turn the trim down, then remove the two arm rest retaining screws.

### ROBE CORD REMOVAL

#### 5 Pass. Models

1. Push in on one end of the cord and rotate it one quarter of a circle (90 degrees). It does not matter if the cord is rotated clockwise or counter clockwise. This will free the robe cord hook "B" from the vertical pin "D." See Fig. 36.

NOTE—Robe cord escutcheon now made of steel, chrome plated.

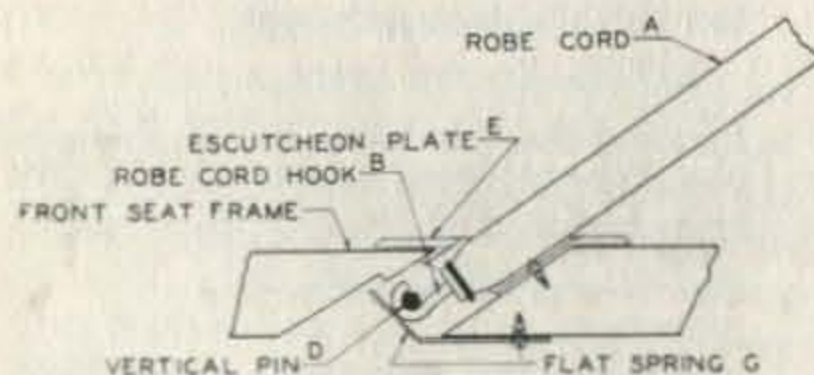


Fig. 36. Robe Cord Removal

### ROBE CORD INSTALLATION

#### 5 Pass. Models

1. Hold end of cord so that cord hook is in a vertical position.
2. Insert it through the escutcheon and against the flat spring.
3. Turn the robe cord 90 degrees. Cord hook will now be locked into position around the vertical pin.
4. Make sure of this by pulling on one end of cord.

### FRONT SEAT CUSHION

The front seat cushion assembly is not removable; the spring and cushion assembly is installed and trimmed to the seat assembly.

The seat frame back (except "L" models) is entirely of steel with tubular shaped steel sections replacing wood at both sides of the seat cushion. Also see page 13.

### FRONT SEAT ADJUSTMENT

The front passenger seat in all model and body styles can be moved forward or backward for a total of 4 inches. The positioning of the seat is by means of a handle control at the center left side of the seat cushion. A new ratchet mechanism prevents the seat assembly moving while the control handle is in the normal position. See Fig. 38.

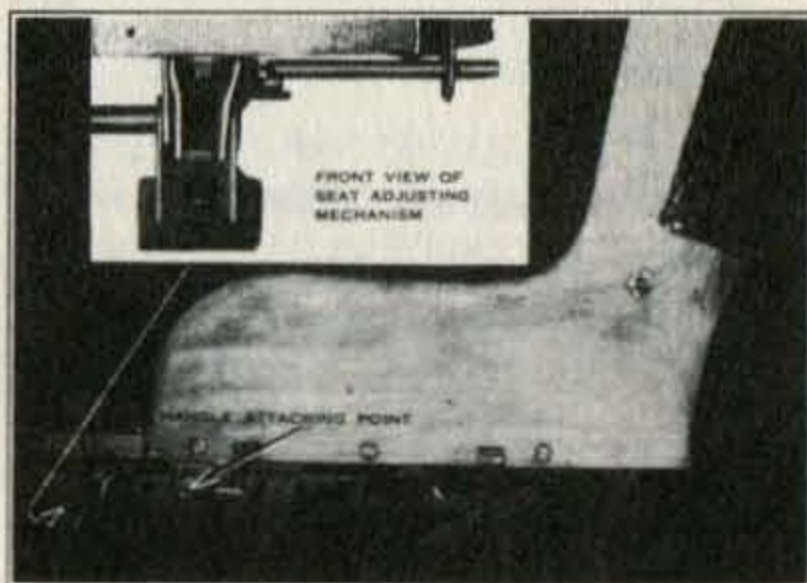


Fig. 37. "L" Side View—Front Seat

The new seat adjusting mechanism is bolted securely to the underside of the seat frame. The mechanism consists of an outer metal channel in which an inclosed inner channel section of metal travels. A set of rollers toward the rear end of the mechanism and between the inner and outer channels minimizes the effort required to move the seat forward or backward. A strong coiled spring attached to the rear end of the inner channel further reduces the effort to move the seat. The ratchet lock preventing too rapid movement of the seat is shown at the side of the mechanism in Fig. 37.

The entire seat plus adjusting mecha-

nism is held to body floor panel by a bracket and bolt at the forward end, and a lever on the mechanism and a bracket on the floor at the rear of the seat frame.

Holding the handle at the left end of the cushion "up" releases the inner channel and permits movement of the seat forward and backward.

### FRONT SEAT REMOVAL—All Models

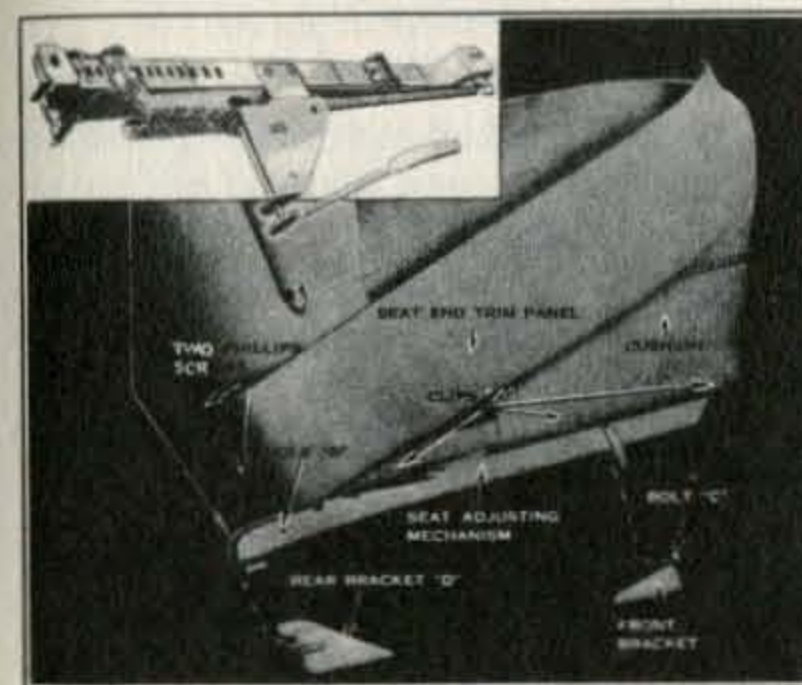


Fig. 38. Removing Front Seat

1. Remove trim panels across end of front seat cushion.

NOTE—End trim panels are held to seat cushion frame by two cross head screws at rear end and one at front end. The center section is held fast by means of slots in trim panel resting over clips "A" on seat frame. To remove end trim panel, remove three screws, seat adjusting handle and raise up. See Fig. 38.

2. Place large closed cotter key or nail in hole "B" through either side of seat adjusting mechanism. See Fig. 38. The cotter keys or nails should be left in adjusting mechanism until seat assembly is again entirely reassembled in body. They must then be removed in order for seat to slide back and forth.

3. Remove cap screws "C" from front end of seat adjusting mechanism.
4. Slide seat back and remove seat from seat support lower bracket "D."
5. Seat assembly can now be removed.

### REAR SEAT BACK CUSHION REMOVAL—All Models

The rear seat back is retained at the top to the belt of the body by three screws installed from inside the rear compartment. The screws attach through the belt into the seat back. At the bottom, the seat back is retained by four vertical clips equally distributed and on inside of body.

To remove seat back, remove composition division board; remove the three screws at top of seat back. These screws are accessible through the rear luggage compartment. Raise cushion straight up and free of four clips.

### GLOVE COMPARTMENT DOOR LOCK—All Models

The glove compartment door lock is now a part of the glove compartment lid. The face of the lock is flush with the face of the compartment panel lid as an additional safety feature. To open the compartment, press in on the center of the locking cylinder, which acts as a plunger, releasing the catch from the catch plate.

To remove the lock assembly, open glove compartment lid and remove one screw holding lock retainer to lid.

Insert ignition key in lock. Turn key in clockwise direction as far as possible while holding latch at rear of lock down. Cylinder can now be removed by pulling it out.

To replace, place key in cylinder, place both in lock. Holding latch down, turn key counter clockwise as far as possible. Remove key.

## LOCKS AND KEYS

Each car is equipped with two sets of matched tumbler locks and two sets of keys. The hexagon head key is coded to the door handle lock, and fits the ignition lock and door locking handle.

The oval headed key is coded to the rear compartment lock and fits the rear compartment, glove compartment locks, fender well tire locks and in the case of the convertible body, fits the tire compartment as well.

Door lock key numbers are stamped on the shank of the locking handles and it is necessary to remove them to locate the numbers.

The glove compartment lock is not stamped. However, the code of either the key or locking cylinder can be duplicated by using the combination of the rear compartment handle lock.

This also applies to the ignition lock; however, in duplicating the ignition lock or key the code should be taken from the door locking handle.

All key numbers are stamped on an identification tab which is a part of the key head. The number should be recorded, and then the tab should be knocked out and kept by owner for future reference, eliminating possibility of unauthorized duplication of keys.

## CODING CYLINDER LOCKS AND KEYS

The ignition lock in production is assembled with one set of tumblers cut to fit the combination of the door locking handle key.

Parts for duplicating this lock are available with the locking cylinder and the locking bar staked in place, less tumblers, requiring the proper color or combination of tumblers to be used in building up the lock combination to code with the door

lock number. Lock codes are recorded in Briggs & Stratton Corp. code, list furnished only to authorized dealers servicing locks.

There are four different cut tumblers used in coding lock cylinder combinations—namely—

- C—Copper
- N—Nickel
- B—Black
- Y—Yellow

To assemble a locking cylinder, hold the cylinder with the end that the key enters away from you. Next, pick up a tumbler of the color shown in code and hold it so that the small notch at the end is to the left, and with the long end of the tumbler down, drop the tumbler into the cylinder slot.

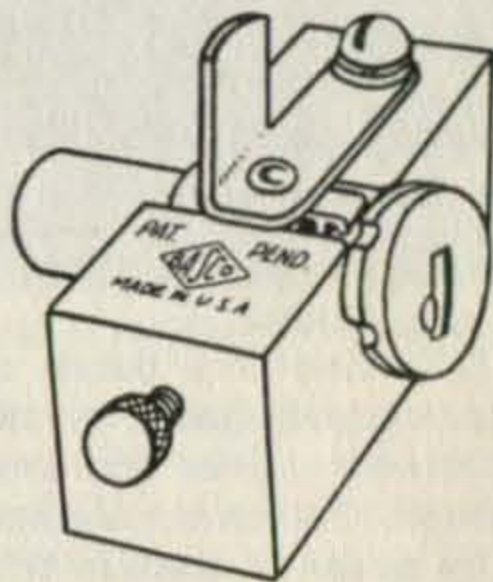


Fig. 39. Bar Lock Checking and Staking Tool 45765

The tumblers must be set in the cylinder in rotation and according to the number of the key code. After all the tumblers are installed place one of the small coil springs over the center tip at the top of all tumblers and press the coil spring retainer down over springs holding retainer in place. Next, place the cylinder assembly in the lock staking tool and prick punch the ends of the cylinder to hold the retainer in place. See Fig. 39.

## CUTTING KEYS

To cut a key to a special code number proceed as follows: Place the blank key in the key cutting machine and tighten the clamp thumb screw. See Fig. 40.

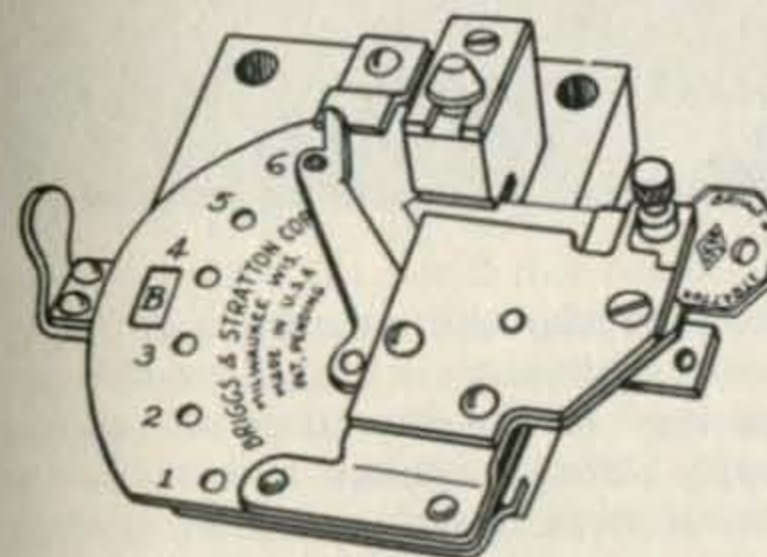


Fig. 40. Key Cutting Machine

Start from number one as shown in combination number. (See Fig. 40.) Place the machine lever on number one and pull the slide handle out until the letter "B" as shown in code appears in the opening.

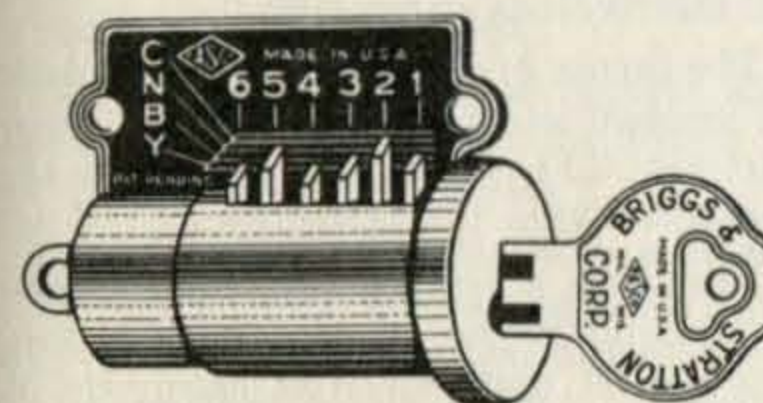


Fig. 41. Key Decoder

Then with a hammer strike a sharp blow on the cutting tool. Continue operation of cutting to complete combination of code.

After key cutting operation is completed, check with the key decoder. (See Fig. 41.) The new key should lift the tumblers in the decoder in line with the combination of color and numbers on the

decoder as represented in the original Briggs & Stratton code book.

## INSTRUMENT PANEL

The instrument panel is of new design. The instruments are grouped in a cluster immediately in front of the driver.

The independently removable speedometer is in the form of a long, horizontal dial with speed figures from 0 to 100 miles. Immediately below the speedometer dial is included an odometer. Over the horizontal dial and a part of the face is a long horizontal narrow strip at the center of which is a short slot flanked on either side by the words "Upper" and "Beam." The slot shows red when the lights are in the upper beam position.

The temperature and oil gauge at the right end of the cluster is removable as a unit. The oil gauge line diameter has been reduced slightly, eliminating oil gauge and line noises. The ampere and gas gauge at the left end of the cluster is also removable as a unit. The entire cluster panel is also removable as a unit.

The light switch is operated by a knob located immediately below the gasoline gauge. It is of the push-pull type having the three positions "Off," "Parking," "Bright."

Alongside of the light switch is a knob similar in appearance to the light switch for hand control of the carburetor throttle valve, removable plug for a cigar lighter and ignition lock.

Below the die cast grille at the center of the instrument panel and extending for its entire length is a radio grille facing panel. At the center of this panel is a smaller panel bearing the word "Oldsmobile" that can easily and quickly be removed for the installation of a radio control head. At either side of this small

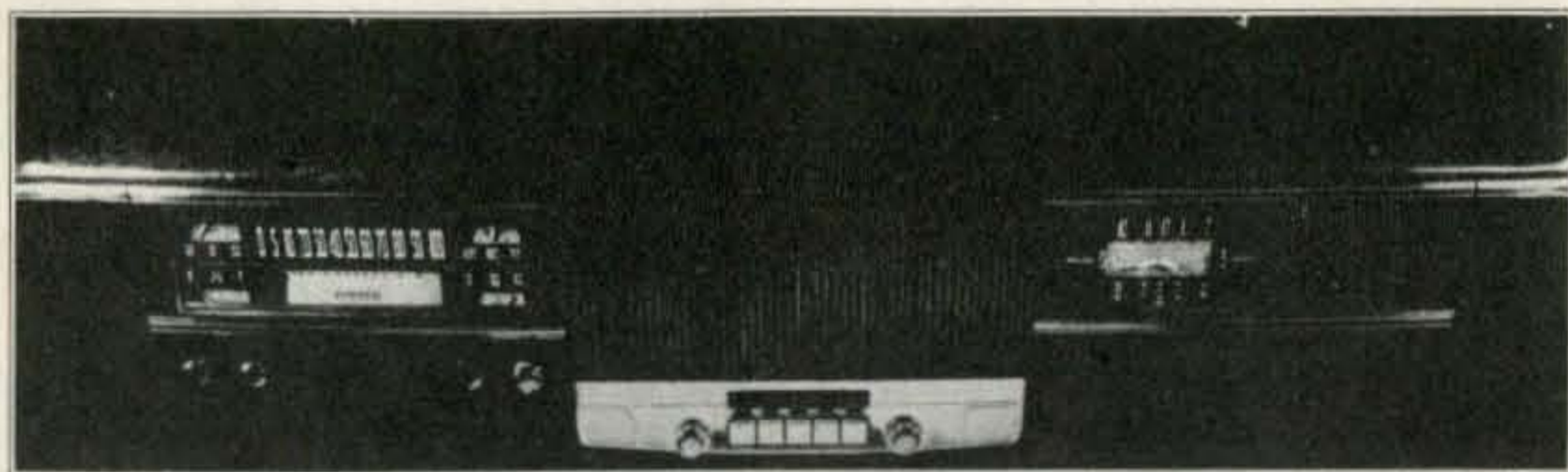


Fig. 42. Instrument Panel

panel, circular removable plugs are located. When removed, the openings provide a location for the radio control knobs.

The instrument panel lights are controlled by an auxiliary rotary switch, mounted on the lower edge of the instrument cluster panel. This switch is connected to the main lighting switch to prevent instrument panel lamps from being left "ON" when other lights have been turned "OFF."

The design of the ignition switch cylinder body includes a small hole through which a small amount of light from the instrument panel lights can filter to flood the switch key opening at night.

A wiring harness and bulb, part No. 982181, has been made available as an accessory. This part when installed, floods the inside of the glove compartment with light automatically any time the compartment lid is opened and the head lights turned "ON."

#### ASH RECEIVER

A large ash receiver is located within the right side of the instrument panel die cast grille.

The lid hinges at the lower end. To open, push bottom end of grille in toward engine. The ash receiver can be removed for cleaning by opening it, then pushing

down circular ash deflector and lifting receiver assembly out of instrument panel opening. Two small rollers on receiver supply sufficient tension to keep the receiver operating easily and from rattling.

#### LAMPS

The tail and stop lamps are assembled to the body by two studs projecting from their base, through the body panels and retained by nuts located inside of panels. The nuts can be readily reached from the inside of rear luggage compartment without interference of any trim.

The license bracket lamp and rear deck lid emblem is attached to the rear compartment lid by studs and nuts which are accessible from the underside of the lid.

The lamp wires are connected to the body wiring harness by means of bayonet type socket connections at each side of rear luggage compartment.

Replacement of the tail and stop light bulbs can be made by removing the bulb and socket assembly from their spring clip retainers. The lamps will not have to be disturbed except for the changing of the lens, in which case the lamps will have to be removed. See Fig. 32.

To replace the license lamp lens or bulb, remove one small screw at both sides of lamp.

#### SPRAYING IRIDESCENT LACQUER

The process of applying iridescent lacquer differs from the method used to apply ordinary lacquer.

Iridescent lacquer contains a small amount of fine aluminum pigment, which tends to float more easily than the ordinary lacquer when applied.

The floating of this pigment causes rings or a mottled appearance if not applied correctly. To avoid this condition, iridescent lacquer must be sprayed drier. The dryness of spray is governed by the distance the spray gun is held from the work. Application of this type of lacquer necessitates holding the spray gun further away from the work than when applying ordinary types of lacquer.

While applying iridescent lacquer watch the surface of the old color and the new lacquer being applied. As soon as it is observed that the lacquer being sprayed has attained the depth of the original color, it indicates that a sufficient amount of lacquer has been applied.

If spraying is continued beyond this point, the spot sprayed will be deeper in color than the original finish.

NOTE—It is recommended as a means of insuring good lacquer adhesion that only lacquer thinner of the highest quality be used whether ordinary or iridescent lacquer is involved.

#### BODY AND STYLE NUMBER PLATE

The body and style number plate shows:

1. Style (The year and style number of body).
2. Body number.
3. Trim number (Combination code number of trim).
4. Paint number (Color specification number).

5. Cars assembled at General Motors Division in California can be identified by a prefix letter "C" on the chassis



Fig. 43. Body and Style Number Plate

serial number plate; cars manufactured at Linden, New Jersey, can be identified by the prefix letter "L" on the serial number plate.

When recording reports, corresponding, or ordering parts, it is necessary that these letters and numbers be made to appear on the report, order form, or in letter.

#### COMPOUNDS

The following four compounds and materials are commonly used in body service and should be in all dealer's stock available for use.

FS-796 Trimmers cement, for cementing trim to foundation boards and metal panels. Available in quart cans only, Hinckley-Myers, Jackson, Mich.

FS-731 Rubber cement, for cementing trim materials to wood or cardboard trim rails. Available in quart cans only, Hinckley-Myers, Jackson, Mich.

FS-621 Heavy brushing cement, for cementing cloth on wood, fabric, rubber, or metal. This material is very handy any place where sealing or an adhesive is required. Available in pint cans, Hinckley-Myers Co., Jackson, Mich.

FS-1044 Deadener felt adhesive cement, for sealing body floor pans, body panels

to sills, cementing jute pads to metal floor, as well as cementing sound silencing pads to roof and other panels. Available in gallon cans only, Hinckley-Myers Co., Jackson, Mich.

**GENERAL BODY LUBRICATION**

See Lubrication Section, page 7.

**BODY STRAIGHTENING**

Damage to the body is involved in many car accidents. The extent and kind of damage varies considerably. The correc-

tion procedure must be indicated by the type and extent of the damage.

Greater success in doing a satisfactory body correction, particularly in the case of serious body damages, will result if the system of "X" checking the various body sections is resorted to. This system is fully explained in the Fisher Body Manual of Construction and Service for 1937 and 1938, pages 121 to 125. If this book is not available to any dealers, write in care of the Service Department, Lansing, Michigan.

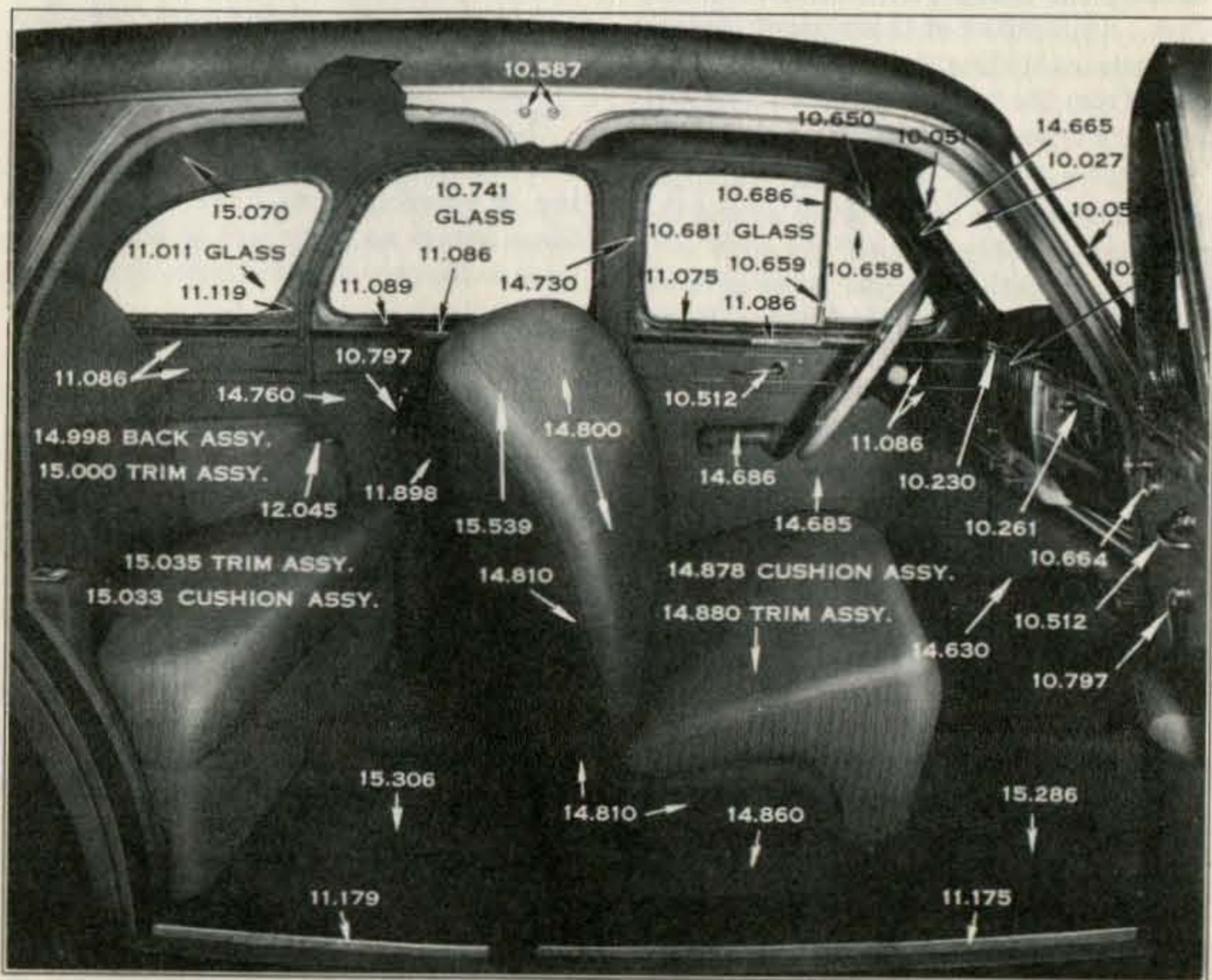


Fig. 44. Body and Trim Units

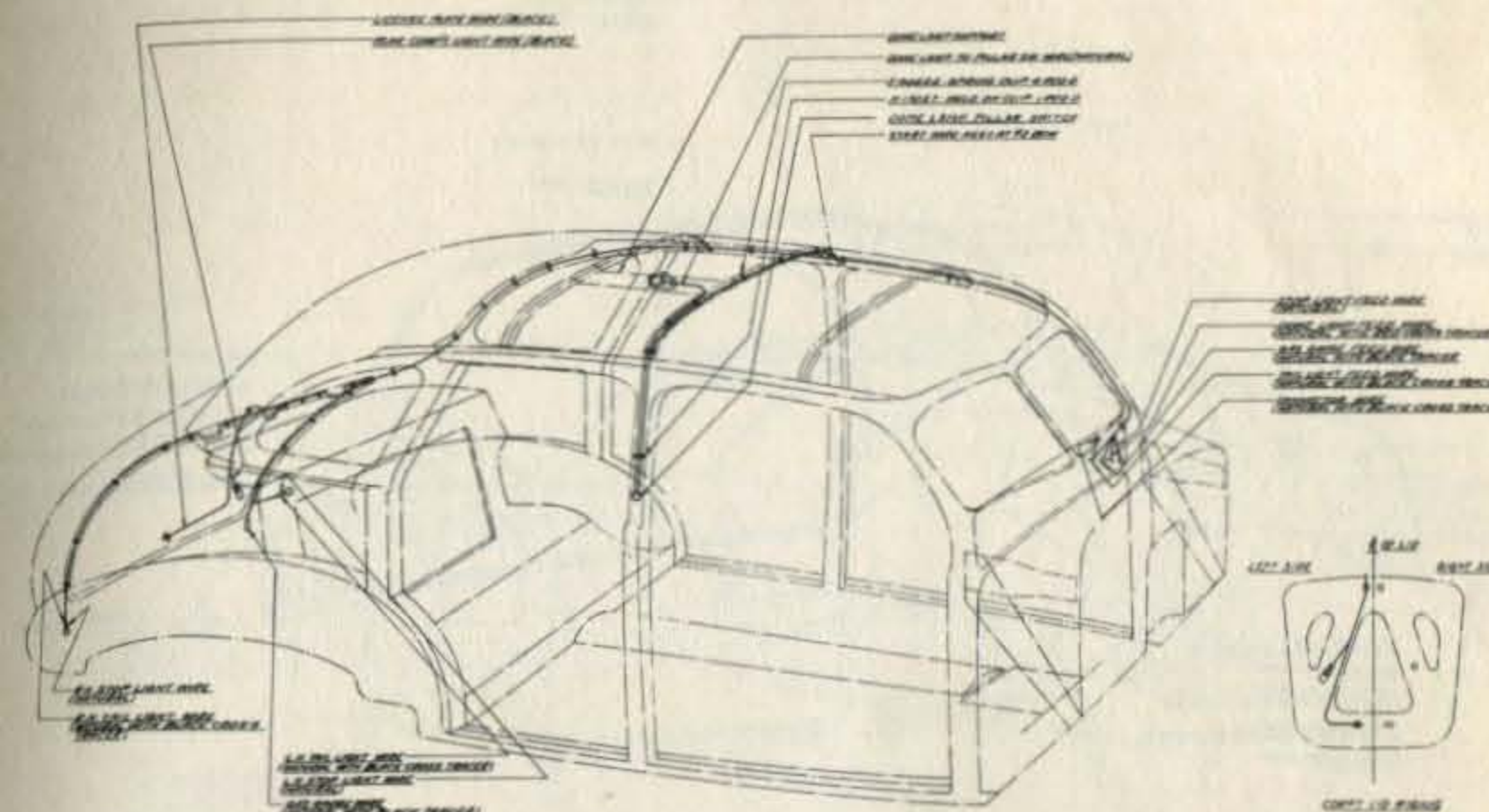


Fig. 45. "F" Body Wiring Diagram

**PAINT SPECIFICATIONS FOR LANSING PLANT—RINSHED-MASON**

COMB. NO.	BODY AND SHEET METAL	*RAD. GRILLE "F"- "G" WHEEL SPOKES	WHEEL STRIPE MODELS "F"- "G"	STONE SHIELD	FELLOE
40	Black RM-20498	Black RM-10402	Vermilion RM-10504	Black RM-20498	Black RM-10402
41	Titian Maroon RM-20633	Titian Maroon RM-10608	Vermilion RM-10504	Titian Maroon RM-20633	Black RM-10402
42	Prospero Red RM-26694	Prospero Red RM-10610	Vermilion RM-10504	Prospero Red RM-26694	Black RM-10402
43	Egyptian Ivory RM-20799	Egyptian Ivory RM-10716	Orange RM-10717	Egyptian Ivory RM-20799	Black RM-10402
44	Cherbourg Blue RM-PS-257	Cherbourg Blue RM-10229	Cream RM-10718	Cherbourg Blue RM-PS-257	Black RM-10402
45	Vagabond Blue RM-PS-280	Vagabond Blue RM-10227	Blue RM-10219	Vagabond Blue RM-PS-280	Black RM-10402
46	Autumn Gold RM-PS-868	Autumn Gold RM-10819	Red RM-10514	Autumn Gold RM-PS-868	Black RM-10402
47	Catalina Gray RM-020182	Catalina Gray RM-10118	Red RM-10514	Catalina Gray RM-020182	Black RM-10402
48	Lorado Gray RM-PS-120	Lorado Gray RM-10117	Vermilion RM-10504	Lorado Gray RM-PS-120	Black RM-10402
49	Shirvan Green RM-023379	Shirvan Green RM-10330	Green RM-10326	Shirvan Green RM-023379	Black RM-10402
48-A Model 90 Only	Lorado Gray—Lower RM-PS-120 Sierra Gray—Upper RM-PS-1125	Lorado Gray* RM-10117	No Stripe on Model 90	Lorado Gray RM-PS-120	Black RM-10402

\*Model 90 Radiator Grille—Chrome and Aluminum Spray.



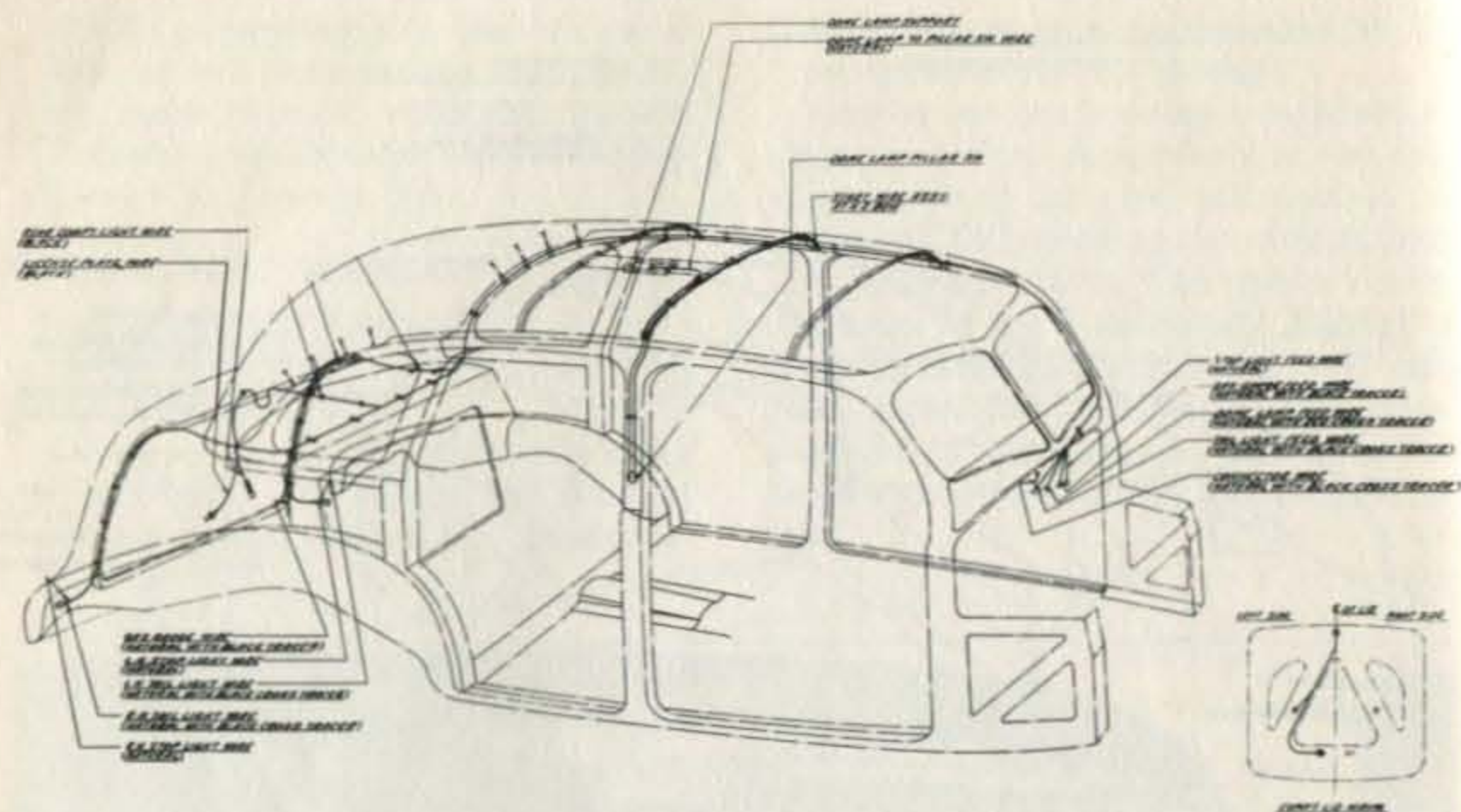


Fig. 46. "G" Body Wiring Diagram

**PAINT SPECIFICATIONS FOR CALIFORNIA AND LINDEN PLANTS—(DUPONT)**

COMB. No.	BODY AND SHEET METAL	*RAD. GRILLE "F"-"G" WHEEL SPOKES	WHEEL STRIPE MODELS "F"-"G"	STONE SHIELD	FELLOE
40	Black 253-2122	Black 96-3978	Vermilion 94-21328-R	Black 253-2122	Black 96-3978
41	Titian Maroon 253-33031-M	Titian Maroon 94-20910-M	Vermilion 94-21328-R	Titian Maroon 253-33031-M	Black 96-3978
42	Prospero Red 253-53635	Prospero Red 94-21321	Vermilion 94-21328	Prospero Red 253-53635	Black 96-3978
43	Egyptian Ivory 253-53633	Egyptian Ivory 94-21322	Orange 94-21329	Egyptian Ivory 253-53633	Black 96-3978
44	Cherbourg Blue 214-53694	Cherbourg Blue 182-21367	Cream 94-21366	Cherbourg Blue 214-53694	Black 96-3978
45	Vagabond Blue 213-53624	Vagabond Blue 182-21323	Blue 94-21330	Vagabond Blue 213-53624	Black 96-3978
46	Autumn Gold 214-53626	Autumn Gold 182-21324	Red 94-21331-R	Autumn Gold 214-53626	Black 96-3978
47	Catalina Gray 253-53631	Catalina Gray 94-21325	Red 94-21331-R	Catalina Gray 253-53631	Black 96-3978
48	Lorado Gray 214-53628	Lorado Gray 182-21326	Vermilion 94-21328-R	Lorado Gray 214-53628	Black 96-3978
49	Shirvan Green 253-53638	Shirvan Green 94-21327	Green 94-21332	Shirvan Green 253-53638	Black 96-3978
48-A Model "L" Only	Lorado Gray—Lower 214-53628 Sierra Gray—Upper 214-53639	Lorado Gray* 182-21326	No Stripe on Model "L"	Lorado Gray 214-53628	Black 96-3978

\*Model "L" Radiator Grille—Chrome and Aluminum Spray.

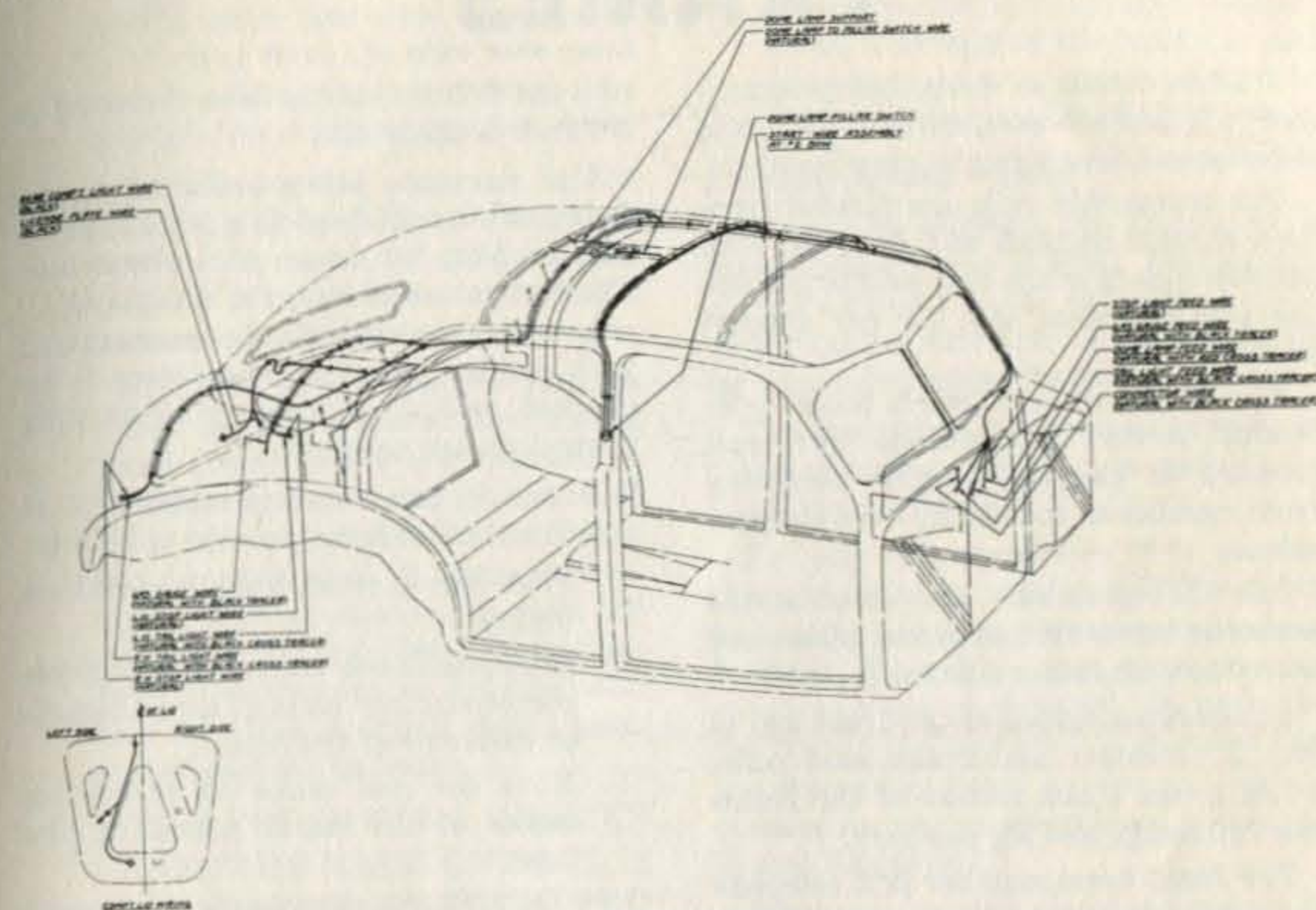


Fig. 47. "L" Body Wiring Diagram

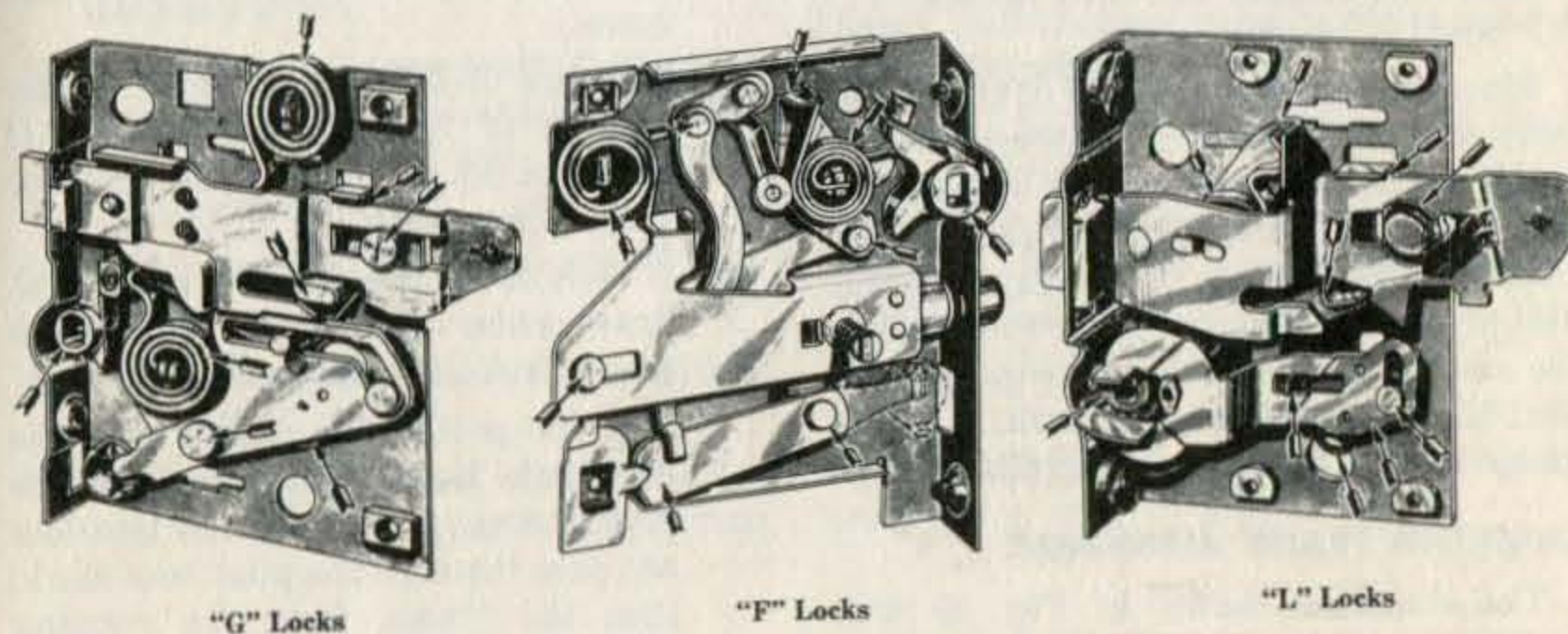


Fig. 48. Inside View of Door Locks