



SERVICE BULLETIN

TO ALL DISTRIBUTORS AND DEALERS:

GENERAL

This bulletin provides the factory recommended procedure for correcting water leaks in the bodies of the Henry J models when such leaks occur.

Correction of water leaks can be accomplished easily in accordance with the instructions described herein if they are followed systematically. This procedure has been developed to fill the requirements of the average dealer and does not require the services of a specialized body shop.

The procedure is given in the sequence of operations found to be most effective for locating and sealing points of leakage in the front cowl, doors, floor pan, quarter panels and rear deck of the Henry J models.

MATERIALS REQUIRED

Throughout the sealing procedure, the use of common types of sealer, tape and cement is required. Most of this material, or its equivalent, must be obtained from automotive supply stores. The following material is required to perform the sealing operations described herein:

Sealer. Any one of the sealing materials listed below are recommended for use in the sealing procedure to follow:

- a. Rubber Seal Products --RS-11 Body Sealer.
- b. Dum-dum.
- c. Prestite cord. This material is available in 80 foot lengths through your Parts Distributor under Part No. 100117.
- d. Minnesota Mining (3M) Body Caulking.

Mystik (waterproof) Tape (4" width). Available in 60 yard rolls from your Parts Distributor under Part No. 213017.

Weatherstrip Cement -- Minnesota Mining (3M) "Weatherstrip Adhesive", Rubber Seal Products "Mastic", or equivalent.

Door Inner Panel Weatherseal (Polyethylene sheet) Part No. 212251 available through your Parts Distributor.

INSPECTION

In order to correct efficiently and in minimum of time the leaks which may exist, it is essential that a careful inspection of the vehicle be made to determine the actual points of water leakage, by making a water test which will simulate actual wet weather conditions. Remove cowl and door trim pads, floor mats, rear deck trim pads (where used) and spare tire.

Door and Window Frame Alignment

Before the water test and inspection is started, align the doors as required and if the door window frames require adjustment, the window frame may be adjusted "In" or "Out" in relation to the door reveal in the following manner:

1. With the trim pad and door inner panel weatherseal removed from the door, determine whether the top of the window frame has to be moved "In" towards the vehicle or "Out" away from the vehicle.
2. After it has been determined which way and how much the window frame has to be moved, loosen screws (1) and (2) shown in Fig. 1. Then loosen screws (3) sufficiently to provide free movement of the lower ends of the frame inside the door.
3. Loosen stud lock nut (4). Then, using a screwdriver, turn the stud clockwise to move the top of the window frame away from the door reveal or counter-clockwise to move the frame

No. 312

DECEMBER 12, 1951

BODY

WATER LEAKS

HENRY J
MODELS

K-513 K-514

DECEMBER 12, 1951

BODY

WATER LEAKS

HENRY J
MODELS

K-513 K-514

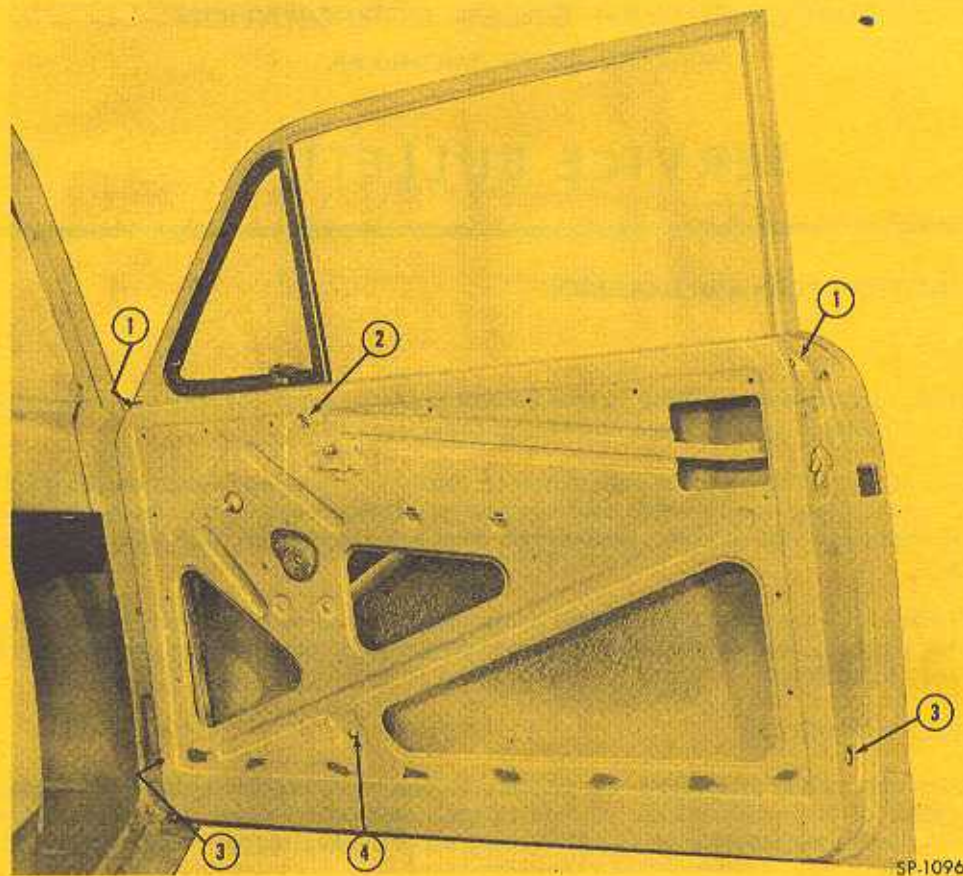


Fig. 1 - Window Frame Installation in the Door

inward toward the door reveal as required to align the window frame properly and obtain a water tight seal. Then tighten all screws and the lock nut on the stud.

The time required for this operation after door trim is removed is .3 of an hour for both doors.

Water Test

The wet weather conditions may be duplicated by directing a water spray of reasonable force on various parts of the vehicle until the inspection is completed. The inspection must be made from the inside of the vehicle. During the water test, it must be borne in mind that water penetration into the body requires close examination to trace the water back to the actual point of leakage. Observe and carefully mark or note points of leakage from inside the vehicle. To properly inspect the floor pan seams at the rear wheel housings and at the rear crossmember, a strong light must be placed beneath the vehicle to determine if all the floor pan to wheel house seams are properly sealed.

The time required to remove the trim, floor mats and spare tire is .3 of an hour.

SEALING PROCEDURE

Front Cowl

Based on the points of leakage determined during the water test, the following procedure may be applied as required to seal points of the front cowl.

a. Windshield Wiper Pivot Body. Usually leakage results from an improperly installed body gasket or a loose pivot body. Position the gasket properly and tighten the attaching screw securely. If necessary, apply a clear plastic sealer around pivot body at the cowl.

The time required for this operation is .4 of an hour per car.

b. Body Code and Serial Plate. Plug the attaching rivet holes of the body code and serial

plate with sealer. Then apply clear sealer around the edges of the plates.

The time required for this operation is .1 of an hour.

c. Hood Hinge to Cowl Bracket. Apply sealer around the hinge bracket to form a seal with the cowl and prevent water penetrating into the body at the mounting holes and studs.

The time required to perform this operation is .1 of an hour per car.

d. Dash Panel. Seal the openings in the dash panel (firewall) such as clip attaching holes, around the windshield wiper hose, etc.

The time required to perform this operation is .1 of an hour.

e. Cowl Seams. Closely inspect the upper cowl seams and seal any points which might permit water leakage into the body. Also reseal any seams where the factory applied sealer is not effective.

The time required to perform this operation is .2 of an hour.

f. Front Pillar and "A" Post. The "A" post and roof rail joint on the door reveal face should be sealed to prevent water entering and running down inside the post. Check the weatherstrip contact surface of the "A" post and pillar to assure a good seal when the door is closed. Spotweld pits, etc., should be filled with body filler material to provide a smooth flat contact surface for the weatherstrip. The hinge recesses in the pillar posts should be filled flush with the face of the pillar post using dum-dum and covered with Mystic tape to provide a flat smooth surface for weatherstrip contact.

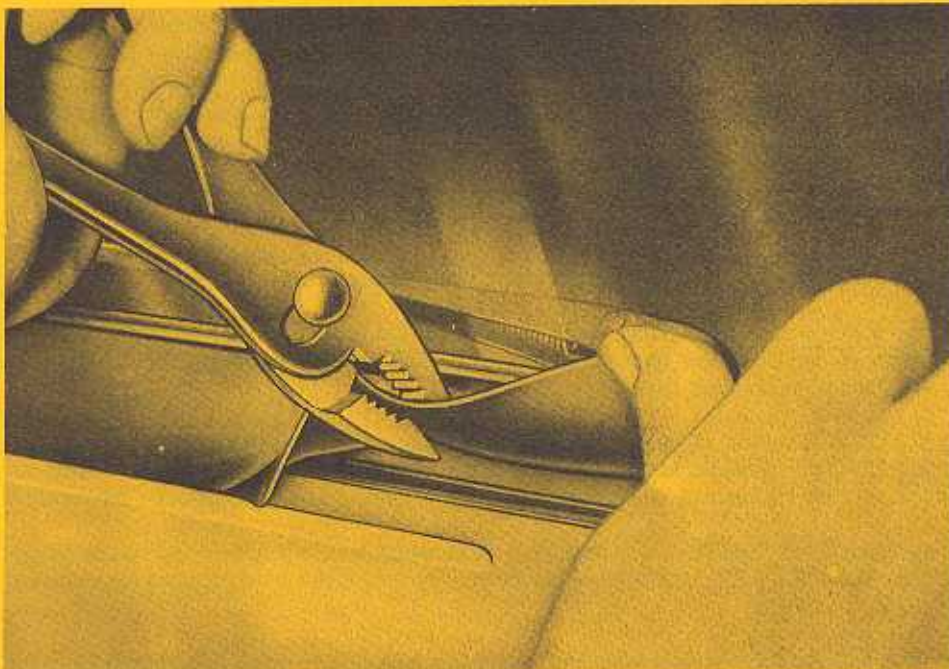
The time required to perform this operation is .2 of an hour per door.

g. Toe Floor Pan - Carefully inspect and seal as required the toe floor pan and cowl seams where there is evidence of leakage or ineffective sealing of seams at the factory.

h. Clutch and Brake Pedal Floor Plates - When the plates leak, correct the condition in the following manner:

1. With the floor mat out of the vehicle, remove the plate cover and felt seals from the pedal arms. Remove both lower and upper floor plates from the toe pan.

2. Clean the floor plate mating face of the toe pan. Then apply a length of Prestite cord on the mating face so that it will form an effective seal between the toe-pan and the plates after the floor plates are in place. Install the upper plate first and then install the lower plate.



SP-1097

Fig. 2 - Method of Inspecting Windshield Weatherstrip Installation

DECEMBER 12, 1951

BODY

WATER LEAKS

HENRY J
MODELS

K-513 K-514



SP-1098

Fig. 3 - Weatherstrip Installation
at Front of Door

so that a continuous bond is formed between the weatherstrip and the body opening. Further, apply sealer between glass and the weatherstrip. The best results may be obtained by applying sealer with a Plew or pump type oil can equipped with a flattened nozzle which can easily be inserted between the glass and weatherstrip and body opening and weatherstrip. Remove excess sealer from body, glass and face of the weatherstrip.

The time required to perform this operation is .4 of an hour.

Movable Vent Windows. Leaks at vent windows may be due to misalignment of the vent window in relation to the division bar resulting in the glass overlapping the division bar. This condition may be corrected as follows:

1. With the vent window in open position, remove the two upper pivot attaching screws. Carefully pull the vent weatherseal adjacent to the pivot away from the door frame and, at the same time, work the top end of the pivot away from the attaching holes in the window frame.

2. Using a small rat tail file, elongate the vent window pivot attaching holes in the window frame towards the "A" post sufficiently to properly align the vent window in relation to division bar.

3. After the holes have been elongated, position the pivot in the window frame and secure

3. Temporarily install the felt seals with slot toward the front of the vehicle. Position the cover on top of the felt seals and note the amount of clearance between the cover, felt seals, and floor plates. If excessive clearance is evident, flatten the cover in the area immediately above the felt seals as required to provide just enough clearance for the felt seals to float back and forth as the pedals are actuated. After the cover adjustments have been made, remove the cover and felt seals.

4. Apply a strip of Mystic Tape over the upper and lower floor plate joint at each side of and in-between the brake and clutch pedals. Apply a liberal coat of lubriplate on the top and bottom side of each felt seal. Position the felt seals around the pedal arms with the slot in the seal toward the front of the vehicle.

5. Place the cover on top of the felt seals and secure it in place with the attaching screws. Actuate the pedals and make certain no bind is evident and that the felt seals "float" easily. Then cement one Pedal Opening Seal Part No. 212824 around each pedal arm with the slot in the seal toward the rear of the vehicle. Make certain that these rubber seals are aligned and installed so that distortion of the seal by the pedal arm is reduced to the minimum.

The time required to perform operations "g" and "h" above is .3 of an hour.

Windshield

a. **Inspection and Installation.** Inspect the windshield to assure that it is properly installed and positioned in the body opening. The inner groove of the weatherstrip must be fully seated on the pinch weld flange of the body opening. This may be checked by carefully raising the large reveal lip of the weatherstrip from inside the vehicle and examining the installation (Fig. 2). If the inner lip is not seated on the pinch weld flange, it may usually be worked into place with a screwdriver or pulled into place using broad nose pliers.

b. **Sealing.** After ascertaining that the windshield is properly installed and positioned, apply sealer under the outer lip of the weatherstrip (outside of vehicle)

it in place. Push the weatherseal back into the window frame. Close the vent window and inspect the alignment at the division bar. Then tighten pivot screws solidly.

The time required to perform this operation is .2 of an hour for each vent window.

Door Weatherstrip

Water leakage around and in the doors is usually the result of improperly routed or cemented weatherstrip, torn or improperly cemented weatherseal on the door inner panel, door trim pad clips channeling water inside the body or openings in floor sill. Inspect the condition of the weatherstrip and if it is deteriorated or mutilated it should be replaced.

a. New Front Door Weatherstrip Routing and Installation. (Figs. 3 and 4) Cut a piece 18-3/4 inches long from Part No. 212884, Door Opening Weatherstrip, and install it as shown at point "A" in Fig. 3 after the existing weatherstrip has been re-routed to provide for the new weatherstrip. Vehicles being manufactured at present have this new weatherstrip installed in production. Apply body sealer onto the joint where the window frame fits into the door.

Make certain that weatherstrip is properly shimmed at hinge recesses as required to obtain good contact. Loose or hanging weatherstrip must be cemented into place. Always follow the manufacturer's directions when applying weatherstrip cement.

The time required to perform this operation is .2 of an hour for each front door.

b. Routing of Weatherstrip at Top of Door. (Fig. 4) Particular attention should be directed to the weatherstrip at the top of the door. If it is loose or requires replacement, it is essential that the installation of the weatherstrip be started by fitting the mitered cut in the new weatherstrip to the upper rear corner of the door window frame. The weatherstrip should be cemented on both surfaces that fit against the door, fitting the weatherstrip against the door flange along the top and down the rear edge of the door as shown in Fig. 4.

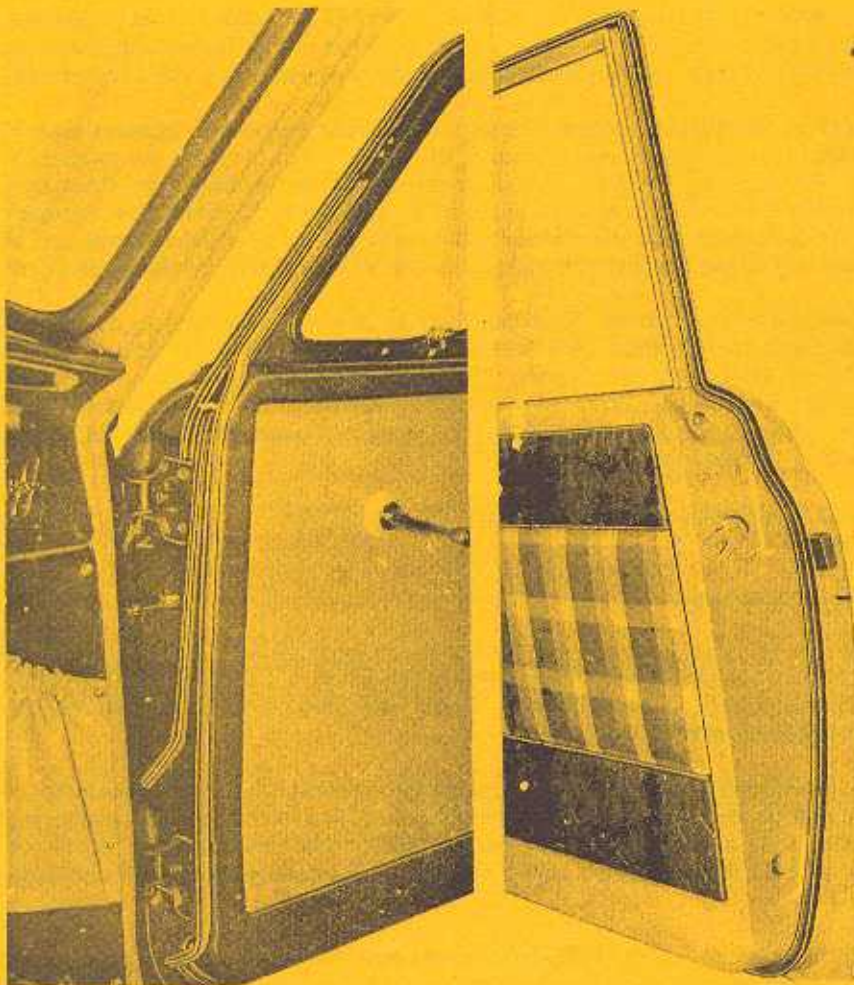


Fig. 4 - Door Weatherstrip Installation

Page 5

No. 312

DECEMBER 12, 1951

BODY

WATER LEAKS

HENRY J
MODELS

K-513 K-514

SP 1099

DECEMBER 12, 1951

BODY

WATER LEAKS

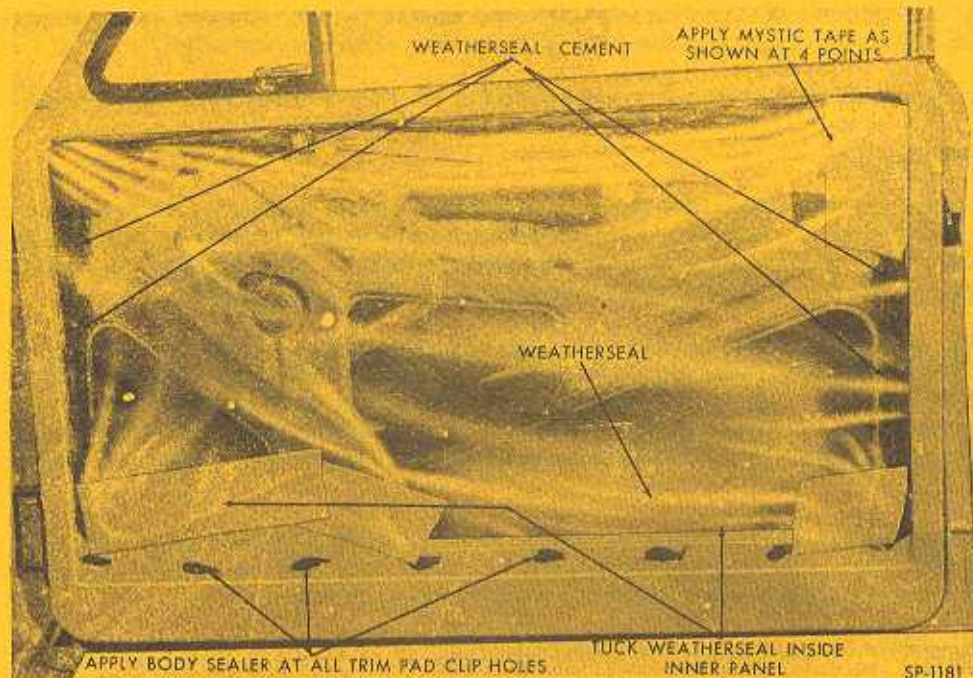


Fig. 5 - Door Inner Panel Weatherseal Installation

c. Routing at Bottom of Door. Inspect weatherstrip installation at bottom of the door and note if it provides an effective seal with the rocker panel reveal (door sill). Inspect weatherstrip installation down the front of the door (Figs. 3 and 4) and make certain that weatherstrip "B" shown in Fig. 3 crosses over to form a joint just below the lower window frame attaching screw access hole. Make certain that all butted ends of weatherstrip are solidly cemented.

If the weatherseal at the bottom of door does not provide sufficient contact with the rocker panel reveal to form an effective seal, remove the weatherstrip from the bottom of the door and clean off the old cement. Then cement a length of sponge rubber 1/4" thick by 1/2" wide along the bottom of the door to serve as a shim to drop the weatherstrip low enough to provide proper weatherstrip contact with the rocker panel reveal. Follow the cement manufacturer's instructions when installing the rubber shim and the weatherstrip to the bottom of the door.

Next check the weatherstrip contact when the door is in the closed position. Place a strip of paper approximately 2 inches wide by 8 inches long between the door and the body opening, close the door and carefully pull the paper. The paper should have a firm drag as it is pulled. Repeat this operation around the entire door to determine the effectiveness of the weatherstrip. If the paper pulls with slight or no drag, adjustment to increase compression of the weatherstrip against the door reveal is required.

The time required to perform weatherstripping operations "b" and "c" above is .5 of an hour for each door.

Door Inner Panel Weatherseal

Leakage in the doors is usually evidenced by water running down under the lower edge of the trim pad. To prevent water entering through the inner panel, a weatherseal (Polyethylene sheet) is cemented to the panel behind the trim pad. To be effective, the weatherseal must be in good condition and properly cemented in place.

a. Inner Panel Weatherseal Installation. To properly seal the door, carefully cement the weatherseal in place on the inner panel. If the weatherseal is torn or otherwise mutilated, it should be replaced with a new part. (Part No. 212251). The lower edges of the weatherseal must be tucked in the access openings at the bottom of the door inner panel and taped in place as illustrated in Fig. 5.

Before installing the trim pad, after the weatherseal has been cemented in place, apply a small amount of sealer, such as dum-dum around and over each trim pad attaching clip hole in the

door inner panel. In this manner, the clip holes will be sealed when the pad is installed on the inner panel.

The time required to perform this operation is .2 of an hour for each door.

Page 7

Quarter Panels

Leakage at the quarter panels is usually traceable to the quarter window weatherstrip, fender attaching bolts or the drip trough. A water test will easily determine the actual points of leakage.

No. 312

a. Quarter Window. Water leaks around the weatherstrip can be corrected by applying liquid type sealer under the lip of the weatherstrip from the outside of the vehicle in the same manner as described for the windshield, earlier in this bulletin.

DECEMBER 12, 1951

The time required to perform this operation is .1 of an hour for each quarter window.

BODY

b. Fender Attaching Bolts. Apply sealer around the bolt heads from inside the vehicle.

The time required to perform this operation is .1 of an hour for each fender.

WATER LEAKS

c. Drip Trough. Apply sealer along the full length of the drip trough seams. Rubber Seal Products, "Masticlear" is excellent material for this type of sealing.

HENRY J
MODELS

The time required to perform this operation is .2 of an hour for each drip trough.

K-513 K-514

Rear Deck And Deck Lid

Water leaks in the rear deck may be the result of an improperly adjusted deck lid (if so equipped) or ineffective deck lid weatherstrip, rear window weatherstrip not sealing, or leakage around the attaching pins of the "Henry J" nameplate.

a. Deck Lid Alignment. Inspect the deck lid adjustment and alignment and make corrections as required. The lid may be adjusted by loosening the upper hinge attaching screws and shifting the lid as required. The lock striker plate may also be adjusted to obtain proper fit and locking action.

b. Weatherstrip. Deteriorated or otherwise mutilated weatherstrip around the lid opening should be replaced. Loose weatherstrip should be cemented in place. All weatherstrip butt joints should be water tight.

To check the effectiveness of the weatherstrip, insert a narrow strip of paper between the lid and weatherstrip. With the lid closed, pull the paper. If the weatherstrip is compressed enough to prevent leakage, the paper should have a firm drag as it is pulled. Repeat this operation around the entire lid.

The time required to perform operations "a" and "b" above is .7 of an hour.

c. Deck Nameplate. Apply sealer around the attaching pins of the "Henry J" nameplate on the rear deck from inside of the vehicle.

The normal time required to perform this operation is .1 of an hour.

Rear Window

a. Inspection and Installation. Inspect the rear window installation to assure that it is properly installed and positioned in the body opening. The inner groove of the weatherstrip must be fully seated on the pinch weld flange of the body opening. This may be checked by carefully raising the large reveal lip of the weatherstrip from inside the vehicle and examining the installation. If the inner lip is not seated on the pinch weld flange, it may usually be worked into place with a screwdriver or pulled into place with broad nose pliers.

b. Sealing. After the rear window is properly positioned from the outside of the vehicle, apply sealer under the outer lip so that a bond is formed between the weatherstrip and the body opening. Also, apply sealer between glass and the weatherstrip. For best results in applying sealer use a Plew or pump type oil can with a flattened spout that can be easily inserted under the lip of the weatherstrip. Remove surplus sealer from glass, body and weatherstrip.

The time required to perform this operation is .4 of an hour.

Floor Pan and Rear Pillar Posts

Page 8

Inspect all floor pan to body seams as previously described under INSPECTION in this bulletin. Closely examine the floor pan to wheelhouse and floor to quarter panel seams. Carefully inspect the seam along the extreme rear end of the floor pan. On vehicles equipped with a rear deck lid, the inspection can be easily made after opening the deck lid. Seal all seams and body mounting bolts with body sealer as required.

No. 312

Seal the rear pillar posts at the base near the door sill with body sealer by first removing old sealer and then packing fresh body sealer between the flared base and the floor pan. Remove surplus body sealer.

DECEMBER 12, 1951

The time required to perform this operation is .3 of an hour.

BODY

After all sealing operations are completed, make a water test on the vehicle to determine the effectiveness of the sealing operations.

WATER LEAKS

POLICY: It should be understood that all conditions as enumerated herein are not prevalent on every automobile and in many cases, sealing operations, replacement of weatherstrip, etc., beyond the warranty period, may cover work of a maintenance nature which should be paid for by the owner. Distributors and Dealers must obtain prior approval on a Request for Credit Authorization Form before performing any corrective work which is considered factory responsibility. Credit will only be allowed in the amount shown for each operation performed. When submitting the M.R.P. for credit, a copy of the Shop Repair Order must be attached to the back of the M.R.P.

HENRY J
MODELS

K-513 K-514

The sealing of water and dust leaks must be considered as regular owner maintenance after the car has been operated for a reasonable period. Distributors and Dealers can successfully perform and make available to owners, this type of body service work in their own shops, through the use of a qualified "Body Serviceman". This type of work does not require the use of special tools or equipment. The only requirement is the use of the proper materials on the right job.



J. W. ALEXANDER
General Service Manager