

# 1946 SPRING SERVICE MAILING PIECE

The Service Spring Mailing Piece is now available. Samples have been mailed showing the colorful design, the novel treatment of the message and the attractive style of the piece. Imprinting space for Dealer firm name is provided on the back and envelopes are included.

Order blanks and additional samples have been sent to Zone Offices and Zones will arrange to obtain Dealer orders in sufficient quantities to permit mailing to all Packard owners. The mailing pieces with imprint and the envelope are \$3.50 per 100.

Parts stocks should be checked on items pertaining to Spring conditioning. This applies also to Packard Rust Preventive and Packard Blue Coral and Sealer. Orders should be placed for full requirements.

Since new car deliveries in quantity will be delayed, it is important to maintain and increase the Service volume existing in each area. The highest possible absorption of fixed expense by service gross profit is a matter requiring your prompt attention. Seasonal mailing pieces are most effective in building volume.



## FLOOR SIDE SILL PANELS

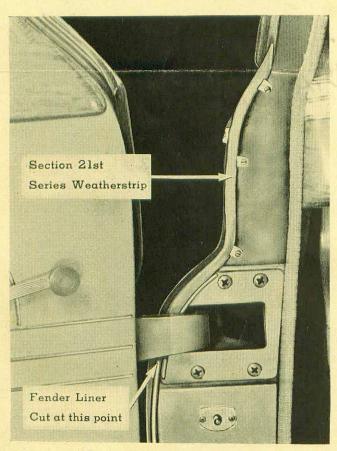
1951 and 20th Series Clipper

Rust conditions have been encountered at the floor side sill panels. When this condition exists to the extent that side sill repairs are necessary, all possible precautions should be taken to prevent a recurrence of this condition.

The side sills are continuously subjected to moisture and the source of the water and the suggested corrective measures are as follows:

1. Water is admitted at the rear side of the front door body pillar at the belt moulding, runs down the face of the pillar and travels back along the scuff plate. It then runs outward under the scuff plate and between the side sill and rubber mat.

To prevent water from entering at the front body pillar a section of the front fender to body liner is removed. This is replaced by a section of the 21st Series weatherstrip, piece number 385082—right, and piece number 385083—left.



Section of 21st Series weatherstrip cemented to door hinge pillar on 20th Series car.

Approximately ½ inch of the fender liner extends beyond the rear edge of the

fender. Cut the liner along the edge of the fender down to a point opposite the lower edge of the door upper hinge. The upper section of the new weatherstrip is then cut off and should be cut so that, when installed, the lower end will meet the fender liner at the point opposite the door hinge and the upper end should extend approximately 1 inch above the end of the drain gutter.

The section of the weatherstrip which is normally between the fender and body is also cut off along the step or shoulder on the back of the weatherstrip. The curved section is then cemented to the pillar and the three tabs are secured to the face of the pillar with metal screws, piece number 8077.

The water, from melted snow, etc., which
collects on the front floor mat runs outward to the scuff plate, under the scuff
plate and between the side sill and rubber
mat.

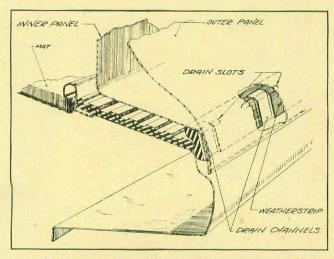
There is no practical method of disposing of the casual water which collects on the front floor mat. However, if the scuff plate and the side sill rubber mat are thoroughly bedded down into the sealer the sills will be protected and the water will do no serious harm. Before installing the scuff plate and rubber mat the upper surface of the side sill should be covered with a thick coat of sealer. A suitable sealer is 3M sealer produced by the Minnesota Mining and Manufacturing Company.

3. Water is also transferred to the floor side sill by the door sponge rubber weather-strip. This is due to the fact that the weatherstrip closes the door panel drain holes located above and behind the weatherstrip. Consequently, any water in the door is absorbed and retained by the weatherstrip.

To insure proper water drainage at the door panel drain holes, the 21st Series Clipper models are equipped with aluminum drain channels. These channels are installed between the weatherstrip and door panel below the drain slots. As the channels can also be installed on the 1951 and 20th Series Clippers, it is advisable to install them whenever possible, especially if rust conditions exist or weatherstrips require repair or replacement. The drain

holes can easily be located as the indentations in the back of the weatherstrip mark the location of each drain hole.

To install the channels, piece number 385906, insert a steel rule between the weatherstrip and door panel and up into the drain hole. Apply rubber cement to the back of the drain channel and, using the steel rule as a pilot, push the channel up into position. It should be pushed up



Drain channel installed between weatherstrip and door panel.

high enough so the flanged end is over the top of the weatherstrip. Close the door and allow the cement to set.

Sedans have three drain holes in each front door and two in each rear door and the Club Sedans have four in each door. The rubber cement, U. S. Rubber Co., or No. 5055, used to secure the weatherstrip to the door is also used to secure the drain channel to the weatherstrip.

#### CORRECTION

### LOW OIL PRESSURE

January Issue

The part No. 324579 given for the jiggle pin type valve tappet regulator used on 18th and 19th Series Super Eights is incorrect.

The correct numbers are: Part No. 324410—18th Series 362863—19th Series

The statement that oil pressure is built up in the space between the rear camshaft bearing and the rear bearing plug is incorrect. A hole is drilled through the camshaft rear journal to permit this oil to drain back into the crankcase.

# "QUIZ TEST" HOW MANY DO YOU KNOW— without looking at the answers?



1.	When excessive oil consumption develops in low mileage cars, it is almost always caused by:  (a) Worn piston rings.   (b) Clogged oil rings.   (c) Loose engine bearings.
2.	In the 20th Series Super Eight engines, the oil is delivered to the hydraulic valve tappets:  (a) After passing through the oil filter.   (b) After passing through the crankshaft bearings.   (c) Directly to the tappets.
3.	A "high" float level setting in a WAI Carter carburetor would result in:  (a) A lean mixture at high speed.   (b) A rich mixture, especially at low speeds.   (c) Flat spot on acceleration.   (d) Make no difference.
4.	A loose battery ground terminal, on a car equipped with a "shunt wound" generator and a separately mounted regulator would result in:  (a) Burned headlight bulbs.   (b) Overcharged battery.   (c) Low or undercharged battery.   (d) Hard starting.
5.	In a generator, excessive brush spring tension will cause:  (a) Excessive brush and commutator wear.   (b) Brush bounce.   (c) Arcing between the brushes and commutator.
	For Answers, See Back Page.

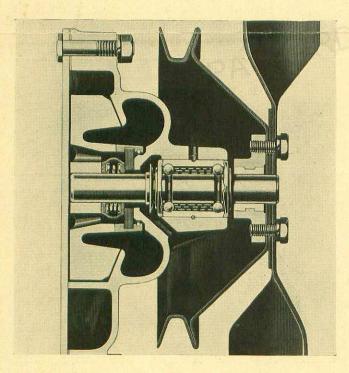
# THE NEW WATER PUMP SEAL ALL MODELS

The water pumps used on 21st Series cars have been improved by use of a newly designed seal shown in the accompanying illustration. This new seal is interchangeable with the old and is now being shipped on service orders for all previous models.

The rubber packing and spring guide assembly (356479) and the spring (351548) have been replaced by a seal assembly (384890). In this design the seal spring is inside the rubber seal and holds the seal in contact with the impeller at one end and the thrust washer at the other end. Note that the seal does not contact the shaft.

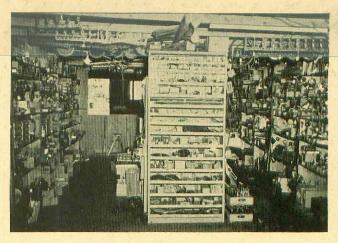
The impregnated fiber seal thrust washer (351549) formerly used has been replaced by a compounded graphite type, (384891).

When installing the new seal assembly, thoroughly clean any accumulation of rust and scale from the face of the impeller against which the seal rests to provide a smooth even seat.



The new seal spring has less effective length than the old and it is important when refacing the thrust face of the pump body not to remove any more metal than necessary. If too much stock is removed, the spring will not have enough pressure to seal securely and the entire housing will have to be replaced.

# PPCP - MUSKOGEE, OKLA.



BEFORE AND AFTER



## ANSWERS TO QUIZ

- 1. ANSWER: b. Clogged oil rings. Reference Service Letter 2-44.
- 2. ANSWER: c. Directly to the tappets. Reference Service Letter 8-15-43.
- 3. ANSWER: b. A rich mixture at low speed. A high fuel level would reduce the head (or the suction required to raise the fuel in the main discharge nozzle) and increase the fuel flow.
- 4. ANSWER: c. Low or undercharged battery and d. Hard starting. A loose connection in the charging circuit would cause high resistance, causing regulator to reduce the charging rate before battery is fully charged. A low battery, plus high resistance in the circuit would and could cause hard starting.
- 5. ANSWER: a. Excessive brush and commutator wear.