C. R. Smith

PACKARD SERVICE LETTER

VOL. 13 No. 21 NOVEMBER 1, 1939

DO YOU KNOW THE ANSWERS?

Nearly 3,000 enrollment cards have already been received for the Packard Master Serviceman's Association! Is yours in? Instructions were given in the October 15th Service Letter. If your Service Manager hasn't enough enrollment cards he will be glad to send for some.

The plan is open to all service men connected with authorized Packard Service Stations. The cards are to be signed by the man enrolling, the Dealer Service Manager and the Distributer Service Manager. Nineteen forty Preliminary Shop Manuals and question sheets will be sent and you will be on your way toward earning a Packard Master Serviceman's Pin.

We are all interested in doing a good job and the more we know the more certain it is that our work will be easier and better. Let's all find out all we can about these Packard cars. Let's show our customers that we know how by the ease and speed with which we take care of their service requirements. In this way we build customer confidence. We sell more cars; we get more cars for service; we do our work with less effort and in less time; because we put some effort into becoming Master Servicemen. How about it? Have all the boys in your shop handed in their enrollment cards?

PACKARD MASTER SERVICEMAN'S

Enrollment Card

I hereby pledge myself to attend all Service Meetings, conscientiously study the Film Supplements, Service Letter, and Shop Manual and to answer all examinations to the best of my ability.

DEALER SERVICE MANAGER _____ SIGNED _____

DEALER FIRM NAME AND CITY _____

DISTRIBUTER SERVICE MANAGER _____ DATE _____

AWARDED WHEN COURSE IS COMPLETED

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PREVENTIVE SERVICE

For years automobile dealers and factories have been telling car owners of the importance of winter servicing. For the same number of years many owners have thought of this advice as just another selling effort and have paid little heed to it except to add anti-freeze. Now a national magazine is telling some two million families the same story as Preventive Service without any direct selling appeal.

Colliers, due out November 1, has an article on "How to Get Your Car Ready for Winter." It deals with comfort, economy and safety of motoring and starts a series of articles on Preventive Service. Get a copy and display this first article where your customers will see it. Use it in your selling of Winter Preparation.

REAR BEARING OIL SEAL

1803-4-5-6-7-8

An improved all composition crankshaft rear main bearing oil seal went into production, replacing the metal and composition oil seal, starting with engine 501484-A.

The new seal is interchangeable with the old and should be installed in engines previous to this number when trouble is experienced with oil leakage at the rear main bearing. Only the new oil seal piece 354629 will be supplied by the Service Stores Division. This piece number covers only one half of the seal and two will be required to make an installation.

An oil leak at the rear main bearing will let oil get into the clutch housing and will be indicated by oil dripping from the clutch housing drain. If the oil gets on the clutch-driven plate it will be indicated by a transmission jazz due to loss of friction in the clutch damper friction washers or clutch grab due to oil on the lining. In either case a new clutch plate should be installed and all the oil washed out of the clutch housing.

When the clutch and transmission have been removed for the installation of a clutch plate the new seals may be installed without removing the crankshaft, using the following procedure:

Remove the oil pan and all connecting rod caps. Then take off the center main bearing cap and push out the upper half of the bearing so that the thrust sides of the bearing will not bind and prevent lowering the shaft.

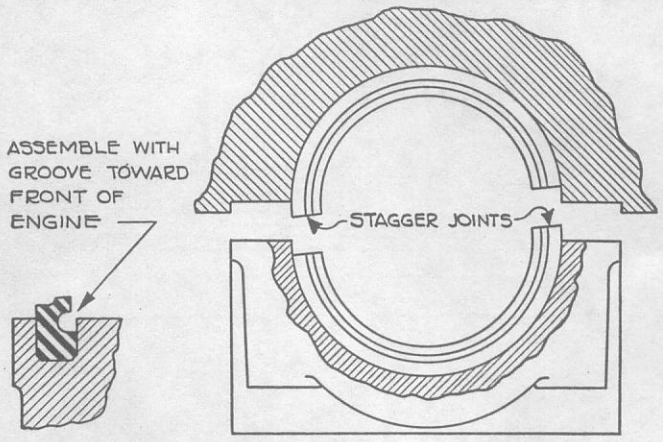
Now remove the other main bearing caps and lower the crankshaft to the point where it is supported by the timing chain at the front and by the flywheel cocking in the flywheel housing at the rear. In this position the oil seal may be pried out.

When installing the new oil seal place the grooved face toward the front of the engine and let one end of the upper half extend into the bearing cap about one-quarter inch so as to stagger the joints in the seal in relation to the joints in the bearing and cap. Be very careful to see that the stagger of the seal is exactly the same in the upper and lower half. If it is not it will cause the seal to bulge and bind the crankshaft.

When the seal is seated the groove in the forward face is partially covered as shown in the illustration at the top. The upper half seal may be seated by placing a jack under the crankshaft and forcing it up into place.

Before finally putting the crankshaft up in place the inner surfaces of the seal that contact the crankshaft should be thoroughly coated with Lubriplate.

Before reinstalling the oil pan, check the flange to be sure that it is horizontal and will be parallel with the crankcase when installed. If it is necessary to bend the flange put a flat plate above and



below it so that it will keep a straight line both cross and lengthwise and will have no local distortion.

When installing the pan, omit the lock washers at the rear, where the pan comes inside the clutch housing, and substitute a soft copper or lead washer between the plain washer and the pan. The soft metal will act as a gasket and prevent oil leakage through the screw hole.

CLUTCH — 18th Series

Owing to our inability to secure the clutch assemblies we have been using in the 1940 cars, it has been necessary for us to change our source of supply.

We are now using Borg & Beck clutches in all models. These units will, we know, give a result fully comparable with the original design, and the only difference which will be noted in the operation of the car will be a slightly higher pedal pressure in the 110 and the 120. The difference in the Super 8 is not noticeable.

In the 110 we started to use the Borg & Beck driven member only with motor No. 13380 and indicated the change with the suffix letter "A."

In the 110 beginning with motor No. 17622 a full Borg & Beck clutch was used, and is indicated by the suffix "B." In the 120 the full Borg & Beck clutch started with motor No. 307399 and with the suffix "A"; in the Super 8 the change started with motor No. 501610 and the suffix "B."

STANDARD SIZES CORRECTION

The wheel base for the 1808 is listed as 139⅜". This is incorrect. Please change it to read 148".

NEW ACCESSORIES

The fender grilles on the 1940 model cars admit an appreciable percentage of the cooling air to the radiator. In some parts of the country it will be desirable to cover these fender grilles in extremely cold weather in order to improve the motor and car heater performance. For this reason we have brought out as an approved accessory a new fender grille cover, which will be available in addition to the regular radiator cover. Please order by part number through your distributer:

PA-354468 Fender Grille Cover—all 1800 models.

Suggested Dealer Net 65c Pr.	Suggested List Attached $1.00 Pr.

Chrome wheel discs are now available for the Packard 1800 models, starting with motor 9200. These discs are carried under PA-348553 (set of 5) and will be priced the same as the discs for model 1801.

To improve radio reception in mountainous country and where radio performance is difficult, we are adding an eighty-inch antenna to the accessory line. This antenna is twenty inches longer than the regular cowl antenna; however, it is a four-section shaft, which will permit the owner to adjust it as occasion demands. When retracted to its shortest position, it is no longer than the present antenna—fully extended, it adds miles to the radio's reception. The part number is PA-354688, and the cost is the same as that of the other cowl antennae.

MANIFOLD GASKET LEAKAGE

18th Series

If you encounter manifold gasket leakage it is not enough simply to replace the damaged gaskets. The cause of the difficulty should be determined.

After the manifold has been removed, the intake and exhaust faces should be checked with a straight edge to make sure that they are in the same plane. If this is not the case the failure of the gasket is explained.

In order to line up these surfaces the cylinder block itself can be used as a face plate. The manifold assembly should be mounted without any gaskets and with the three nuts holding the two manifold sections loosened enough to permit movement. The manifold assembly should then be drawn up against the cylinder block in the usual way. This will bring all of the faces into line and the nuts holding the intake and exhaust sections together can then be retightened.

After this has been done the manifold should be removed and the proper gaskets installed.

CLOCKS—REPLACING

18th Series

Although clocks are shipped by the Service Stores Division complete with the attaching wires, it is not necessary to use these wires when replacing a clock. The following instructions will simplify the operation:

1. First disconnect the fuse retainer.
2. Remove the compartment light bulb from the shield.
3. Remove the clock light bulb and socket assembly.
4. Remove both back plate and compartment light shield assembly screws. Then remove the plate assembly.
5. Disconnect red wire from battery terminal.
6. Remove the four attaching clock nuts and washers.

The wires received with the replacement clock should be attached to the clock which has been removed when it is returned to The George W. Borg Corporation.

Service

To receive prompt attention and avoid unnecessary delays when service is required, both distributers and dealers will please pack the clock carefully and ship it, transportation prepaid, direct to the clock manufacturer, The George W. Borg Corporation, 469 East Ohio Street, Chicago, Illinois. They will repair or replace it no charge during the warranty period of twelve months and return it to you within forty-eight hours.

SHOCK ABSORBER NOISE

1800 - 1801

You may have encountered a squeaking or grunting noise in some of the direct acting shock absorbers in the 1940 cars.

The noise can be identified very easily by moving the rear bumper up and down slightly. The sound can be heard distinctly, and it can be felt and identified by holding the shock absorber while the bumper is being rocked.

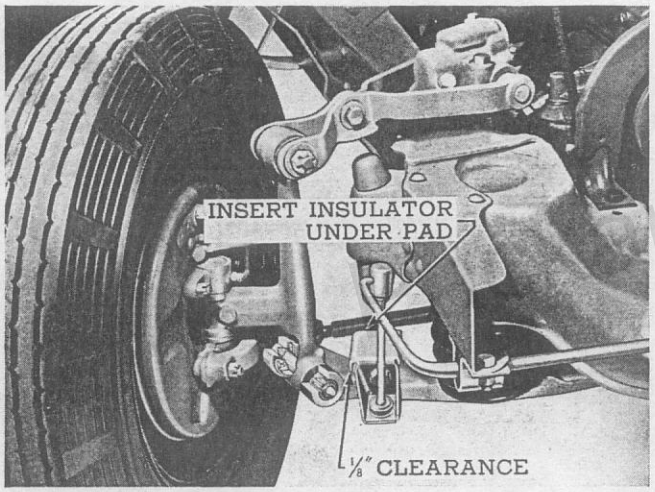
The simplest correction is to add about 5 c.c.'s or ¾ teaspoonful of special Neetsfoot oil to the shock absorber. This fluid is called Delco A-N oil and can be obtained from United Motors service stations.

In replacing the shock absorbers, make sure that the two studs to which the units are mounted are parallel. If they are not parallel the shock absorber may bind enough to cause the noise. In addition to this the binding will also increase the friction lag in the rear end and affect the ride.

FRONT SPRINGS STRIKING THROUGH — 1800-1-3-6

You may find cars upon which the front springs strike through with what may best be described as a crash. In most such cases it will be found that the compression bumper pad, which is formed as part of the roll control bar attaching bracket, gives under the impact of the bumper enough so that it strikes against the torque arm. The procedure in such cases is to place a pad of woven brake lining $\frac{3}{16}$ inch thick by 2 inches square under the pad to support it and act as an insulator.

This may be done by disconnecting the roll control bar, loosening the bolts holding the bracket and inserting the insulator under the pad. The bolt holes in the bracket are elongated so it will not be necessary to remove the bolts to raise the bracket. The bolts should then be tightened just enough to hold the bracket and prevent its bouncing back while the bracket is being tapped down to compress and hold the pad.



Before finally tightening the bolts check to see that there is at least $\frac{1}{8}$ inch clearance between the outer side of the bracket and the wheel support arm. Grind off the bracket if necessary to provide clearances.

VALVE LIFTER MECHANISM
Super 8

The oil supply for the automatic valve lifter mechanism in the Super 8 motor passes through the oil filter on its way to the lifters. This insures clean oil which will not cause trouble in the lifter mechanism.

The oil filter itself meters the oil pressure to the lifters and for this reason it is very important that only the standard oil filter be used. Other types of filters, although they may be excellent in themselves, may cause so great a variation in oil pressure in the lifters as to produce serious trouble.

Please make sure that this is understood by everyone in your organization, and if an owner decides, on his own responsibility, to use a filter of another type, he must understand that it is at his own risk.

ECONO-DRIVE GOVERNOR SWITCH—18th Series

If any 1940 car equipped with an Econo-Drive suddenly develops difficulty in getting into reverse, a careful examination should promptly be made.

The difficulty may be due to an inoperative governor switch. If the car is operating in overdrive and if the governor switch points fail to separate when the car is stopped, the gears still will be in the overdrive position. If this occurs it will be found difficult or impossible to get into reverse, and if the operator persists in the attempt the Econo-Drive mechanism may be seriously damaged, because this has the effect of attempting to engage two gear ratios at the same time.

If this difficulty in the engagement of the reverse should develop, the first step to take is to pull out the Econo-Drive lockout knob on the dash. Pulling out the knob disconnects the overdrive mechanism and if the gears then engage readily in reverse, the difficulty will undoubtedly be found in the governor switch, which should be renewed.

ELECTRIC WINDSHIELD WIPERS
1800 - 1801

Some difficulty may be encountered in the electric windshield wipers of the early 1940 models. This may be a failure to start, a failure to stop, or a blowing of the fuse on the dynamic breaker which is mounted on the wiper assembly.

In almost all cases the difficulty is in the dynamic breaker itself. It can be removed with a short screw driver simply by removing the two screws which hold the breaker to the main assembly. It is not necessary to remove the entire wiper assembly from the car.

Replacement parts for the windshield wiper may be obtained from Stewart-Warner service stations. If you are unable to obtain the necessary parts or service, we suggest that you communicate with the Stewart-Warner Corporation, Chicago, Illinois.

We believe that the later wipers will provide excellent service, and we have every confidence in their successful performance.

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