PACKARD SERVICE LETTER

VOL. 7 No. 9 MAY 1, 1933

Get Him Started Right and Keep Him Coming!

THE customer who has purchased his first Packard should be shown through your service department, and your conversation should run something like this:

"In purchasing your new Packard, you have undoubtedly given some thought to its future care, and you will, therefore, be interested to notice that almost four-fifths of our entire building is devoted to space and equipment to help you take care of your Packard.

Here, for instance, is our parts department. We have on record here, not only any possible part which may be required for the servicing of your car, but records which make available to us parts that might be required for cars as old as ten and fifteen years. We, of course, do not attempt to carry in stock every single detail part that goes to make up all of the different Packards manufactured during these years, but this department is on a scientific basis for ordering parts.

When each new Packard is brought out, we receive a shipment of parts from the factory sufficient to care for all ordinary needs, until we have had an opportunity of determining what demands are going to be made upon the parts department for this particular series car. From orders received, we then determine what parts we shall carry in stock. The factory parts department arranges its schedules, so that each order is actually in the hands of the forwarding agency within an hour or two from its receipt. For the older model cars complete manufacturing facilities are maintained by the parts department in an organization which is entirely separate from the main manufacturing plant. They are in a position to manufacture immediately any part for any Packard car.

This is our accessory department. We carry here an assortment of accessories which have been purchased from the Packard factory. Every single item has been approved by their engineering department. This may not seem so important on some items, but take a heater, for instance. This approved heater can be placed in your car in very little time, because provision has been made for its attachment, and all the holes necessary for its installation have been drilled. Any heater you might buy on the outside could not be so easily and neatly installed, and might affect the operation of the cooling system. This one has been tested and approved, not only as a heater, but in actual operation before it was added to the approved line of accessories. Likewise complete provision has been made for the installation of the Packard radio, and many other items are similarly treated.

Even car polishes and cleaning materials are very carefully analyzed to determine whether or not they not only properly clean, but whether there is any harmful substance which will affect any of the material used in the manufacture of the car. Accessories which come under the heading of appearance items are not simply purchased and tacked on to the car; they are actually designed and engineered into the general lines so that they add to the appearance as a whole.

You will find here a complete selection of special tools. These again are not items purchased from the corner hardware store, but are especially designed to enable our shop to do difficult jobs in a shorter time, and in some cases it is impossible to do certain types of work efficiently without the use of these special tools. They assure you of quicker and more accurate work.

In our shop you will find men who have been with us for many years. They are master craftsmen who take delight in keeping your car in that condition which they know it is possible to maintain. Any mechanical work which may be necessary on your car can safely be left with these men. Can you imagine any group of mechanics in this vicinity who know more about how to adjust the brakes on your new car, or who can keep your motor operating more efficiently than these men, who are not only interested in each particular job as it comes in, but who are actually interested in assisting us to retain you as a Packard owner for years to come?

These men we entrust with keeping you in the Packard family. To do this we have built and maintain our large clean service facilities, and in addition to this the

Packard factory assists us in keeping these men informed concerning any change or improvement which might be made in the car which you have purchased. They supply us with technical information in the form of letters, regular bi-monthly bulletins, a slide film service for holding shop meetings, and at regular intervals a factory service supervisor goes over with us any problems which we may wish to discuss. We feel that we have gone a long way to make the service home of your Packard a place which you will be glad to bring it for any attention it may require.

Over here is our lubrication equipment. It is modern, and aside from being in a position to simply "grease" your car, we feel that you will be particularly interested in our lubrication service which has been designed for the protection of your car.

First of all your car is a piece of machinery, the most perfect piece of machinery that Packard knows how to build. It requires proper lubrication, and being a highly developed piece of machinery it demands more care and thought in this matter than does the ordinary machine. Our men naturally have been specially trained for this very important work. There are many places at which you can have your car "greased." The care of a Packard, however, does not warrant this hit and miss type of care, in connection with this most important part of its maintenance. You will want it properly lubricated, and we naturally feel we know more about the lubrication of a Packard than any one else in this vicinity.

We know, for instance, exactly what lubricants the Packard engineers who designed your car wish to have used in every wearing part. We know what lubricants will best serve each different type of bearing. There are eight different types of lubricants recommended by the Packard engineers, and it is not enough simply to know what these lubricants are. It is likewise extremely important to know exactly how much of each should be used, and at what mileage intervals. It is just about as serious to over-lubricate as to under-lubricate. We urge you, therefore, not to allow any one to guess regarding the lubrication of your Packard.

You will undoubtedly be interested in the way in which many other Packard owners take care of lubrication. They use a lubrication agreement which we have drawn up. Under this agreement they bring their car to the service station once a month, at approximately 1,000-mile intervals. We not only completely and correctly lubricate the car at each visit, but change the oil in the motor, and at the proper time change the lubrication in the transmission and differential. We take care of the entire lubrication of the car, and upon each visit give it a general exterior inspection, calling to your attention the results of that inspection, because we feel you will want to know at all times the condition of your car. You are in this way prepared to have any needed work taken care of at your convenience, rather than letting things go until something happens. This prevents depriving you of the use of your car, always at the most inconvenient time.

Under this plan, you will have a definite time each month when you will leave the car with us. At that time you can have any additional work, aside from the lubrication, taken care of, because, you will plan ahead to have your car here at a certain time.

Another feature of this plan is that it may be paid for in advance, either completely or semi-annually which means that this expense may be budgeted, and you will not be bothered with invoices each time the car is sent to the service station. In other words, it is a plan by which you, as the owner, and we, as the service station, jointly agree to take care of the one most important service item in connection with your car. We assume responsibility for its lubrication, and we keep you posted as to its condition. It is a plan which we feel sure you will wish to use in operating your car."

In going through such a story as this, it is possible for you to convince him that there is only one place where he can obtain the type of service which will assure him of continued satisfactory operation. It will convince him that there is only one place to obtain his lubrication, and if you are successful in selling him a lubrication contract, you have automatically established twelve regular contacts with this customer, aside from assuring your department of all of his lubrication business for the year.

You have made it easy for him to come to your service station once a month, to keep him posted as to what additional work he may require, and have sold him the complete facilities of your service department, before he leaves your place.

You Asked for It!

And we sent it to you—but it won't do any good unless you use it—read it through, it's full of plans that will work if you give them a chance—you want more business, but have you done your part?

A Good Letter

We are passing on for your consideration a letter used by Harold Parker of Boston. It has not been out long enough for them to determine the results but we believe they will be surprisingly satisfactory. It should help in reducing their parts inventory and it should bring in some of the older cars. Why not try a similar letter on your list? This type of mailing is not expensive and the results are sure to much more than offset the cost.

April 7, 1933.

The inventory in our Packard Parts Department is a great deal larger than the times warrant and it is necessary for us to take very drastic action in the way of reducing that stock. Rather than liquidate to miscellaneous shops who might install these genuine parts incorrectly with the possibility of giving serious trouble, it is our desire to offer them to the owners of 1927, 1928, and 1929 model Packard cars at a small part of their original price, in conjunction with drastically reduced labor cost for installation.

We will be pleased to inspect your car--without charge--and quote you prices on the work necessary which in some cases will represent reductions of as much as 50%. If you are considering running your present car this year an investment of this nature cannot help but be wise.

When you bring your car in I would like very much to see you and talk with you personally or, if you should come in when I am away from the building, ask for Mr. Wright, my assistant.

Very truly yours,
PACKARD MOTOR CAR COMPANY OF BOSTON

HPP-H General Service Manager

Power Brakes

We have had a number of inquiries regarding the application of the Tenth Series brake "booster" to the earlier cars.

When such an installation is desired by one of your customers we suggest that the matter be handled through the nearest Bendix service station equipped to make the power brake installation. The Bendix stations are prepared to do a very satisfactory job at a moderate cost, and a suitable discount will be extended on jobs which you turn over to them. We suggest that you undertake for the customer the responsibility of having the installation made, not only because of the profit involved, but also because it will help to retain his contact with you.

If you are in any doubt as to the location of the Bendix station best qualified to handle the work, we suggest that you communicate with the Bendix Products Corporation at South Bend, Indiana.

Batteries in New Cars

When a car is shipped from the factory the battery is in every case a new unit which has just been received from the manufacturer, and is subject to the full battery guarantee.

We know that in most cases care is taken by our Distributers and Dealers to make sure that cars are equipped with fresh batteries when delivered to our customers. Usually this is done by rotating the batteries in stock so that in case a car is in storage for some time, it will not be delivered with the battery which originally came with the car.

In some instances, however, this has not been done, and cars have been in storage for a long period with their original batteries. The customer should not be made to suffer through the carelessness of the Distributer or Dealer, and he should not receive a car with a battery whose guarantee is largely exhausted.

Arrangements can be made with the Prest-O-Lite Storage Battery Corporation to salvage batteries which have been in storage so long that the guarantee has been terminated and the life of the battery itself very largely exhausted. These batteries are worth nothing more than their scrap value, but the Prest-O-Lite Co. has offered to allow an exchange credit of $6.00 a battery on units returned to them to be replaced with new batteries of the same type.

If you have any batteries on hand which should not be delivered with new cars, we suggest that the matter be handled direct with Prest-O-Lite.

Ignition---Tenth Series

The SERVICE LETTER dated March 1, 1933 describes the application of Tenth Series ignition to earlier model cars.

There is a difference between the distributor bracket used in the Ninth Series car and that used on the previous models. For this reason it will be necessary for you to specify on your mail order the model for which the equipment is intended.

If this is done we will see that the proper bracket is supplied.

Connecting Rod Bleed Holes

Prior to the Ninth Series motors the connecting rod oil bleed holes were on the "leading" side of the rods, that is to say, on the same side as the oil filler.

The bleed holes in the Ninth and Tenth Series rods are on the "trailing" side, facing the valves. It was found that the new location delivered oil to the cylinder walls more effectively and in greater quantity, so that the size of the bleed hole was reduced from No. 30 drill size to No. 56 drill size.

This change must be considered in the installation of the new type rods in the earlier motors. In making the installation in these motors, it is, of course, necessary that the bleed holes face the same way as in the rods which were removed, because otherwise the crankshaft holes would not register with the bleed holes at the proper time.

If one of the early motors is rebuilt, and is fitted with late type rods, it will be advisable to drill out the bleed holes to No. 30 drill size in order that the throw-off from the rods may be as great as it was before. Unless this is done the cylinder bores are apt to suffer from under-lubrication.

There may be some cases in which new rods will be installed in an old motor without the replacement of the pistons and rings. In such cases it would not be necessary to drill out the bleed holes, because it is probable that the cylinders were already receiving excess lubrication, and the reduction caused by the smaller bleed holes would do no harm.

In most instances where the rods are replaced, the work will include new pistons, and then as stated above the size of the bleeds should be increased.

Tire Tread Wear

Tire mileage on a given make and model of car varies considerably in different parts of the country due to differences in road surfaces, differences in average temperatures, presence or absence of hills, proportion of open road and city driving, etc. From a recent survey which involved actual measurements of tire mileage on 1075 cars of a single make and model in ten widely separated districts, the following figures were obtained.

Variation of Tire Mileage in Different Districts

District	*No. Cars*	*Average Mileage (All Tires)*
Detroit	107	18,794
Chicago	97	17,240
Dallas	108	16,911
New York	124	15,687
St. Louis	103	14,887
Boston	112	14,132
New Orleans	102	13,169
San Francisco	110	12,471
Philadelphia	92	12,334
Pittsburgh	121	11,272
Average	1,075	14,683

The differences are quite large, the average mileage in Detroit being 67% greater than in Pittsburgh.

There are even greater differences in the records of individual cars, due to the driving habits of their operators. The driver who starts and stops with moderation and who seldom exceeds forty miles per hour will get at least twice the tire mileage obtained by the slam-bang operator.

This shows the variation in tire mileage obtained in the Boston District which is nearest the average. Remember, that all these 30 drivers had the same make and model of car, and all were using the same make of tires.

Out of the 30 cars measured
5 obtained 7,200— 9,400 miles
7 obtained 11,800—13,700 miles
7 obtained 14,300—15,800 miles
6 obtained 16,100—18,700 miles
5 obtained 20,700—27,600 miles
The 10 hardest drivers averaged 10,773 miles
The 10 medium drivers averaged 14,958 miles
The 10 best drivers averaged 20,231 miles

The other sections of the country show similar variations in tire mileage due to difference in drivers.

A still more striking example of the effect of driving conditions on tire mileage can be found in the records for tire wear on the proving grounds of the various automobile companies. Here cars are given terrific punishment, with high speed driving over all types of roads, usually on circular tracks where side skidding is also a factor in rapid tread wear. Under these very severe conditions tires frequently wear smooth in three to five thousand miles, which is only one-third to one-fifth of the mileage obtained by the average driver.

Occasionally a car owner is inclined to blame the tires for rapid tread wear, usually taking the stand that something is wrong with the particular tires he happened to get. Actually, tires of the same make and size are very uniform in quality. Chemical and physical tests on tires which are claimed to have given poor tread wear almost invariably show them to be perfectly O. K. The rapid wear is due to causes other than a tire defect. The usual answer is "hard-driving," although underinflation, misalignment, dragging brakes, poor roads or overloading, may also be responsible.

Car speed has a very great effect on tread wear. Tires are called upon to do an amount of work which is altogether out of proportion to the apparent increase in speed. When a car is moving, the tires must overcome the resistance against movement. This resistance increases with great rapidity as the speed increases. With a medium sized car on a smooth, level road, the rear tires have to transmit the following horse-power:

Speed in Miles Per Hour	*Horse-power Exerted by Rear Tires Against the Road*
30	5.1
40	9.6
50	16.1
60	25.5
70	38.3
80	55.2

Increasing the speed from 40 to 50 miles per hour requires an increase of 68% in the power which the tires must transmit at the point of road contact. At 60 miles per hour the power needed is more than two and a half times that required at forty. Every bit of power transmitted by the tires tends to produce slippage of the tire against the road, and this slippage increases the rate of wear of the tire tread. At high speeds the temperature of the tires also increases, and since rubber is less resistant to wear at higher temperatures, this also increases the effect of high speed on tread wear.

Sudden application of brakes at high speeds is also extremely harmful to tires. Everyone has noticed the black streak left on roads by an emergency stop. These streaks contain small particles of rubber which have been scraped off the treads. Recently a test was made in which a popular light car with new tires was used. One wheel of this car was locked by a sudden brake application at 80 miles per hour. The wheel was kept locked until the car stopped. On inspecting the tire tread, it was found to be worn completely through to the breaker at the section which had been in contact with the road.

We have recently compared tire tread wear for city driving conditions and cross country driving. The same car and driver traveled 1,200 miles of cross country at an average speed of 48 miles per hour, and then traveled a similar distance of city driving, with frequent and quick starts and stops. The city driving proved to be decidedly more severe than the cross country driving, especially on rear wheels, which showed *three times as fast* a rate of wear for the city driving as for cross country. The front tires wore down 18% faster during the city driving than during the country driving. It is evident that severe city driving may cause faster wear than fairly high sustained speed.

It may be interesting to compare the average mileage obtained on front and rear wheels. This is subject to considerable variation depending on the service to which the car is put, and also on the relative braking effect on front and rear wheels. In general, the rear tires give from 45 to 60% of the mileage delivered by the front tires.

Many factors affect the rate of tread wear, and many of these factors are under the control of the driver of the car. The results which the motorist actually receives from his tires are largely dependent upon the care which he uses in driving. It is highly desirable that the motorist be familiar with the important factors affecting tire wear, after which, he can determine whether it is worth his while to handle his car in a manner which will insure good tire performance.

SUGGESTIONS OR QUESTIONS FROM READERS ARE ALWAYS WELCOME. HOW CAN WE MAKE THE SERVICE LETTER OF MORE VALUE TO YOU? ***ADDRESS LETTERS—NORM. LULL—EDITOR—PACKARD SERVICE LETTER.***

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