

# PACKARD

# Service Counselor

PARTS ★ ACCESSORIES ★ PRODUCT ★ PROFITS

INSTITUTIONAL



PROMOTIONAL

VOL. 18, NO. 3

MARCH, 1944

MAR 20 1944

## Service Promotion

No. 1  
this issue

The new spring direct mail piece is designed to tell your customers of the importance of war-time car care. It contains a brief message about the company's war work and points out the advantages of new processes and methods that mean finer Packard cars after the war. Specific war-time services are mentioned and in an unusual way your customers are reminded of the conditions under which you are operating your shop.

The last page may be tailored to your particular requirements. You may select one of the Spring Conditioning Specials with your prices or choose the general copy. If you prefer, you can write your own copy as long as it fits the space allowed. In this case an extra charge is made to cover the cost of setting the type.

Packard is absorbing one-half the cost of producing this direct mail so, the piece, the envelope (imprinted) and imprinting your firm name and choice of one of the three options on the back page is only \$2.00 per 100. See sample and order blank with general letter, Feb. 18, 1944.

Even if you do not need your customers' service business now, you cannot afford to let them forget you. This piece offers a friendly message with some helpful information and suggestions to your customers at an extremely low cost. Conditions change fast these days—get your order in promptly.

\*\*\* WAR PRODUCTION AND *Your* PACKARD OF TOMORROW \*\*\*

Today, Packard is at work on war production, building an ever rising volume of Packard engines and Buick Buick aircraft engines for the fighting craft of the world.

In keeping with the traditions of precision and power, these engines are produced with the same standards of quality and skill that have made Packard a name known the world over. These 2000 and 2400 cubic inch V-8 engines, built in the factory assembly lines in all the cities in these matters of 40 and 60 in the world of the world.

Automotive experts are doing this building, most of them

men and women who Packard has. These skills, now reflected in significant war engines, will be applied to car construction. Shorter the nature of these engines. Much of today's war production knowledge and experience can be turned to building an even finer Packard of tomorrow.

Many new processes and new methods learned in modern war production will be the product of better, more economical cars. The new design, careful metal compression, new design, these and other technical advances will make the next Packard will be far stronger, safer and longer lasting.

**PRECISION-BUILT POWER**

What has to do with you and your Packard?

**for War-time Driving**

**COOLING SYSTEM**

**BRAKES**

**TIRE PROTECTION**

Packard Motor Car Co. of Chicago, Evanston, Illinois  
 1735 E. Hubbard Avenue  
 EVANSTON, ILLINOIS  
 Telephone-Madison 2120-Architect 7100; Wire 2100





## MOTOR PERIODS

The most noticeable motor period is in the neighborhood of twenty miles an hour, varying slightly with the engine model and gear ratio. Like all torsional periods it develops when the motor is under load, so that it is most apt to be noticed when accelerating through this critical speed.

The torsional period is controlled partially by the damper and partially by the friction hub in the clutch plate, but even when the damper and clutch plate are in perfect condition some of the disturbance will reach the transmission.

As you know, gears and splines cannot operate without clearances, and when these clearances "pick up" the drive line disturbance the result will be the so-called clutch or transmission jazz. Actually, the condition originates in the motor, but it is sometimes called clutch jazz because it is partially controlled by the clutch plate, and it may be called transmission jazz because this is where the noise really comes from.

A car with an overdrive is more apt to have a noticeable disturbance, simply because there are additional parts which must have clearance fits. In this case the noise may come partly from the transmission and partly from the overdrive.

It can also come from the front universal joint if the joint is worn or has seized. Sometimes a thorough lubrication will help, but badly worn parts must, of course, be replaced.

As far as the transmission and overdrive are concerned, it seldom pays to replace any parts because of this noise condition. The noise usually remains. It is better to explain to the owner that the disturbance is simply the result of motor period and is not doing any harm.

Of course, the noise is more noticeable when the oil in the transmission is thin. It will, therefore, be more pronounced when the transmission is hot, and it will be more pronounced with a winter oil than a summer oil. Sometimes you can reduce the noise enough to satisfy the owner by the use of a highly refined straight mineral oil having a flat viscosity curve. (See Service Letter of May 1, 1943).

## DEE TEE VAPOR GEAR CLEANER

We have had several inquiries regarding the Dee Tee Vapor Gear Cleaner, which is supplied by the Circo Products Co., Cleveland, Ohio.

The attached folder describes its use. It effectively cleans the transmission and differential, is simple and easy to use and has excellent sales appeal. It combines well with your lubrication setup and does not require a priority.

Any orders or inquiries should be handled directly with the Circo Products Company.

## CARBURETOR CONTROL LINKAGE EQUIPMENT

It is necessary that the carburetor throttle linkage be free from excessive lost motion.

This is particularly the case when the car is equipped with an electromatic clutch. Excessive lost motion will prevent the proper operation of the carburetor choke, the starter switch and the electromatic clutch.

When cars have reached a considerable mileage it may be found that play has developed at a number of points, and we have had requests for an equipment which will cover the complete linkage from the accelerator pedal to the carburetor. Such equipments have been made up for 20th Series cars equipped with the electromatic clutch.

They may be ordered as follows:

Part No.	Name	Suggested List
AA-382774	Carburetor control linkage Models 2021-2001A.....	\$16.00
AA-382776	Carburetor control linkage Models 2003A-4-5-7-8.....	\$14.68
AA-382775	Carburetor control linkage Models 2003-6-2023.....	\$25.90
AA-382768	Carburetor control linkage Models 2020.....	\$13.60
AA-382767	Carburetor control linkage Models 2000.....	\$ 9.84
AA-382769	Carburetor control linkage Model 2001.....	\$12.26



## FAILURE TO GET INTO OVERDRIVE

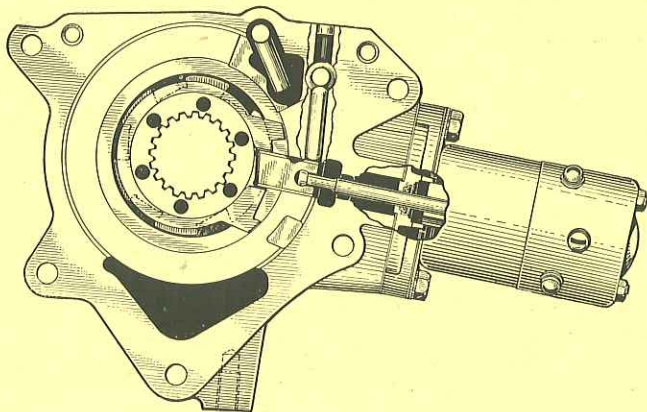
Some times you will find a case where the transmission will not go into overdrive.

If the condition occurs only in very cold weather and clears up in a minute or two, no attempt at a correction should be made. Of course, heavy summer oil will aggravate the situation, but even with winter oil the pawl may rattle for the first few blocks.

Suppose, however, that the trouble is not connected with cold weather. The first thing to do is to see whether the light comes on, and whether the click of the pawl shows that it is trying to engage. This can easily be checked on the service floor by running the car with the rear wheels jacked up.

You will probably find that nothing happens when the cut-in speed is reached. The difficulty is most likely to be in the governor circuit, which also includes the lockout switch, kick-down switch and the reversing switch on the transmission. (See the simplified diagram in the Service Letter of September 1, 1943.)

If you are not familiar with the circuit you will use the regular wiring diagram. In checking any circuit of this type pay particular attention to the cable connectors. (Service Letter, July 1, 1943). This governor circuit is completed when the governor points close, and if the circuit is broken at any point the overdrive naturally cannot engage. You may find that the governor is sticking, or that the governor points are dirty, or the overdrive lockout knob may not be pushed in all the way.



If the light comes on you know that the governor circuit is complete, and the trouble may be in the solenoid itself. See that the

points are clean, because bad points may weaken the solenoid coils so that they can neither pull nor hold the pawl in engagement. We find that in some cases solenoid units are being replaced where nothing more than a cleaning and dressing of the points is necessary.

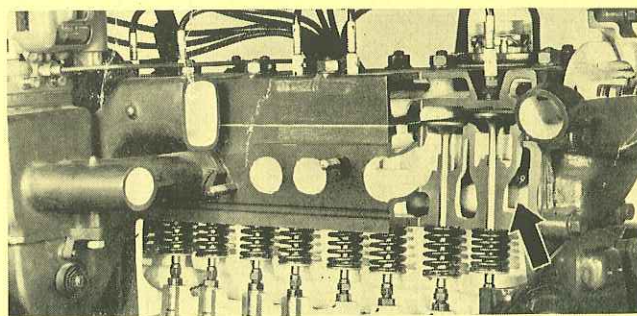
Occasionally you will find a case where the transmission stays in overdrive, or the overdrive cuts in below the governed speed. This means that the governor circuit is not breaking. It may be that the circuit is grounded at some point or that the governor points are not separating.

When you find that the transmission will not go into reverse readily it probably means that the overdrive is not disengaging. Try pulling out the lockout knob. If the reverse then engages easily it shows that the circuit was formerly complete and a check should be made to determine why it was not opening as it should.

## WATER DISTRIBUTING TUBE

You may find that an obstinate case of overheating is due to the condition of the water distributing tube.

This tube delivers a portion of the pump output directly to the valve seats and the cylinder walls. By graduating the size of the holes the distribution of water is controlled so that the cylinders and valves are cooled uniformly.



When a motor is rebuilt, or when a water pump is removed for any reason, the tube should be inspected. If it is found to be badly corroded it should be replaced. If the tube fails, the front cylinders and valves—which are nearest the water pump—may be too cool, while the rear of the motor may be too hot.

In extreme cases you may find that the rear cylinders will run so hot as to develop excessive detonation, and at the same time the front spark plugs will be so cool that they show evidences of gas fouling.



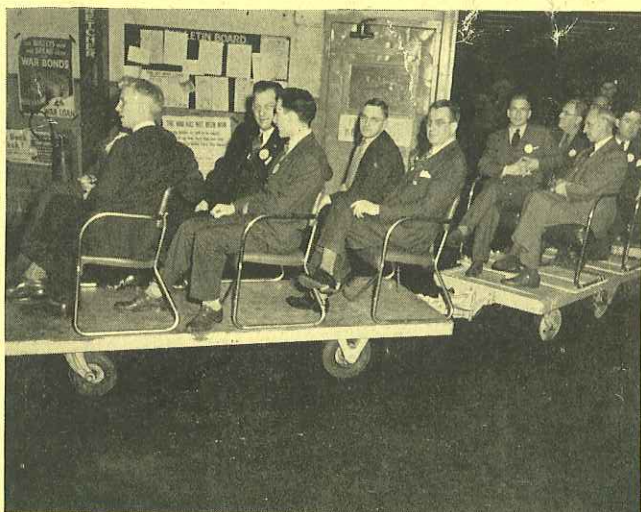
## *- at the Factory*

Recently some 2500 distributors and dealers from all over the country attended the annual meeting of the N.A.D.A. L. W. Slack, Sales Manager, was host at a dinner for attending Packard dealers, President Geo. T. Christopher spoke and later Mr. Slack announced that special arrangements with the Air Corps had been made for a trip through Packard war plants.

In the factory tour the group saw the volume production of Packard-built Rolls-Royce engines powering the fast fighter planes and bombers. The building and testing of Packard Marine engines used by U. S. and Allied Navies for PT boats was also seen with much interest.

Justly proud of its contributions to date in terms of quantity, quality and performance of its war engines, Packard has no intention of losing sight of its obligation to Packard dealers and Packard owners. It recognizes, however, that many battles are still to be fought. From now until victory is won, Packard has but one purpose—the shipment of war engines.

In carrying out its war-time job as makers of precision powerplants, Packard is constantly adding to its automotive and engine-building experience and knowledge. These new methods and processes will eventually be translated into the best peace-time cars that can be built.

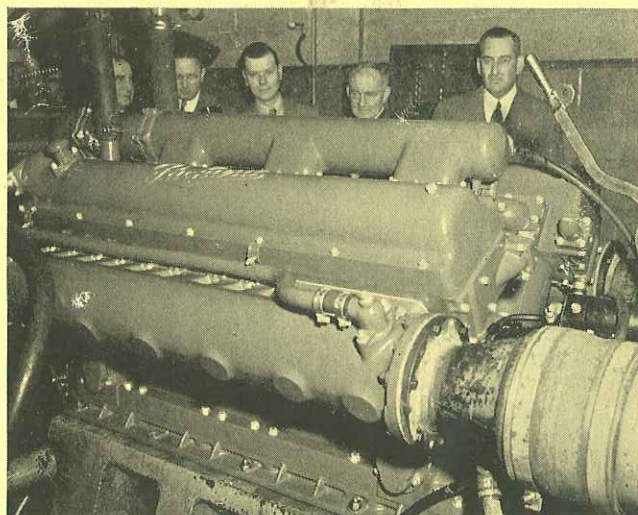


Boarding the Packard "Toonerville Trolley" the trip is started through parts of the war-time Packard plant. In 1940 only 5% of the total production was on war materials. In 1941 this

increased to 30%. In 1942 it was 96% and according to the latest figure Packard's Victory program includes 99% of its production.



The crankshaft where fits and finish are extremely important—bearing surfaces are held to 4 micro-inches. A micro inch is equal to one millionth of an inch. W. L. Greer—Philadelphia, J. C. Crosby—Buffalo, W. C. Hayes—New Haven, L. J. Vinings—Toledo and Ray Thrall—Williamsport, are interested spectators.



The Marine engine on the dynamometer is inspected by D. C. Cooper—Dayton, R. G. Miller—West Chester and W. L. Greer—Philadelphia. Even the roar verifies the statement that the horsepower of each cylinder is greater than that developed by the 110 car engine.

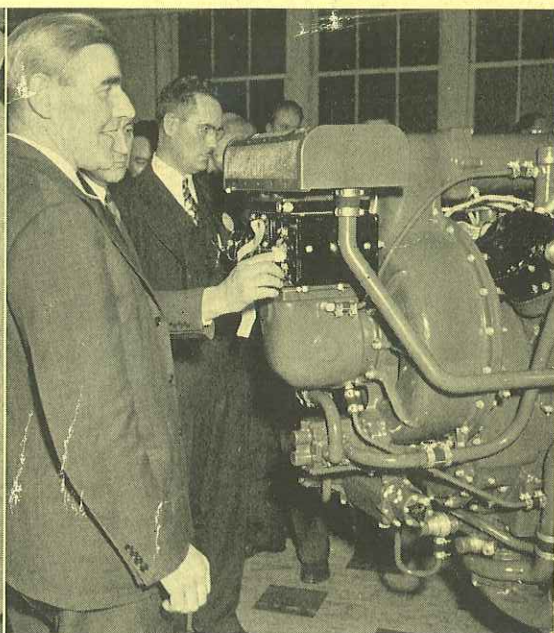
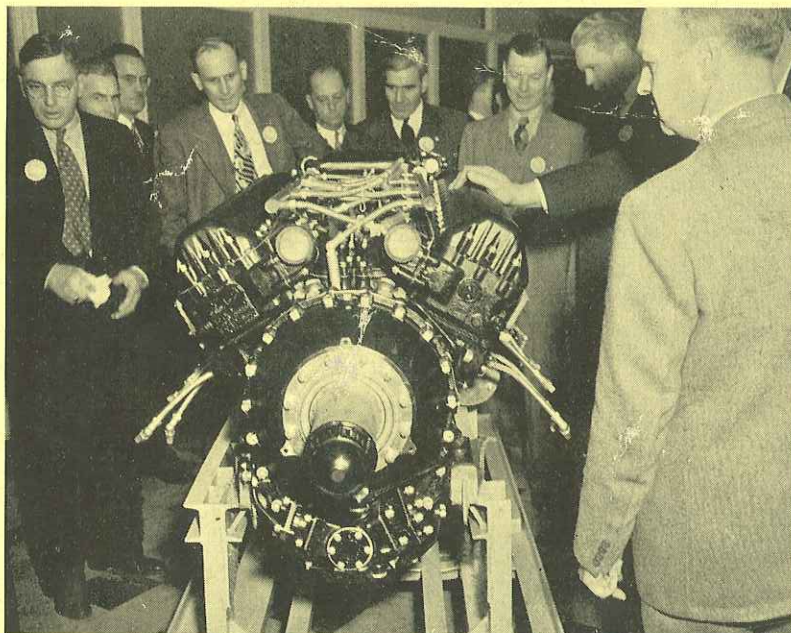




Here the group inspects the aircraft engines being prepared for shipment. Pliofilm bags from which moisture is removed is one of many precautions taken to insure safe shipment of this powerful engine. It is then ready for its trip to aircraft assembly plants.



Right on schedule the group arrives at the end of one of the assembly lines. Some 28,000 aircraft and marine engines have already been produced. As car dealers they are interested in the fact that Packard war-time production is applied automotive manufacturing practices.



After the trip the group convened in the Packard restaurant where refreshments were served and an opportunity was given to study closely both the Marine and Aircraft engines.

Some interesting figures of comparison were given, such as, 82 hours to assemble either a Marine engine or an Aircraft engine against 5 hours for a Super Eight car engine. There are about 14,000 parts in an Aircraft engine and around 10,000 in a Marine engine against 7140 in an entire 1942 Clipper. There are 110 hours work required on an Aircraft cylinder block against 5 on a car block. From the left are: H. W. Hitchcock, L. W. Slack of the factory with C. C. Freed of Salt Lake City, F. King of Wauwatosa, Wis., and T. N. Brown of Reno.



## Shop Talk

### LOST MOTION IN THROTTLE LINKAGE

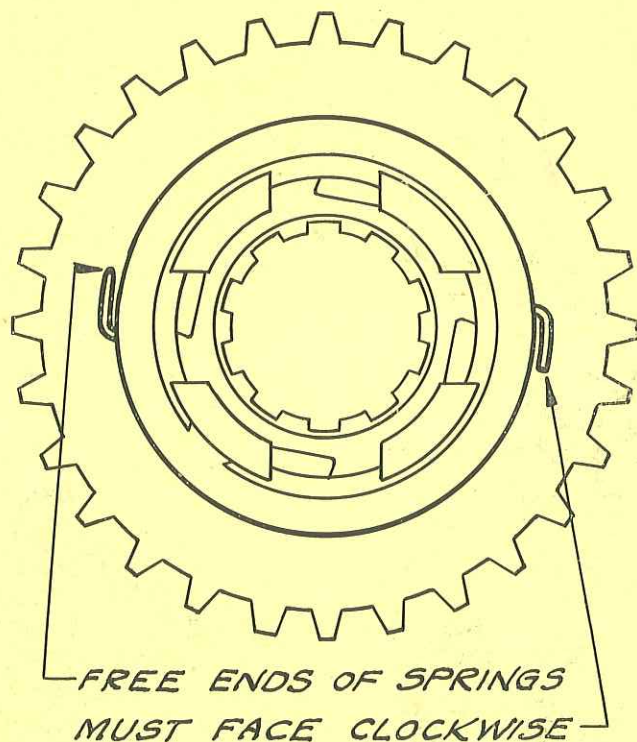
When a car starts with difficulty, or will not start at all, you should check for possible lost motion in the throttle linkage.

In the first place, the accelerator may not open the throttle far enough to operate the carburetor switch. If this is the case, the starter will not operate and the engine will not turn over.

In the second place, lost motion may have developed to such an extent that the carburetor choke mechanism does not trip. When this occurs the choke remains in the open position and in cold weather the engine will turn over but will not start.

Unless a given movement of the accelerator pedal produces the proper movement of the throttle linkage, starting will always be uncertain because the operator cannot tell the amount of throttle opening.

### OVERDRIVE FREE WHEELING CLUTCH



This illustration shows the overdrive free wheeling clutch, piece No. 338645.

We find that some of these units have recently been shipped from the factory in which the two springs were installed in the reversed position. As a result, the cage was rotated counter-clockwise, and the rollers were held at the low end of their ramps.

When this condition exists the clutch simply does not operate, because the rollers never reach the driving position. If the clutch is installed in a car the car will not move except in reverse or when the overdrive is locked out.

If you have any of these clutches in stock, they should be checked. Make sure that the free ends of the spring face clockwise, in which case the cage will be rotated in the same direction.

If you find the springs improperly installed the snap ring and the cage should be removed so that the springs can be reversed.

### UNIVERSAL JOINT KIT

Packard Universal Joint Spider and Trunnion Bearing Assembly Repair Kits are packaged in sets. See sell more Bulletin No. 18-010.



You make no mistake in purchasing Packard Repair Kits. They are Precision Built to factory engineering specifications, assure a good job and save time in both the parts room and in the shop.



# Questions and ANSWERS

## Concerning PACKARD PARTS CONTROL PLAN

*Why is the Packard Parts Control Plan a good thing for every Packard dealer?*

It enables him to carry a balanced stock of the fastest selling parts, thereby assuring a good turnover and maximum profit.

*Does the plan save time for the dealer?*

It does, because his parts can be quickly found since they are arranged in a correlated sequence in plainly marked bins.

*Does the plan help the dealer order only parts which will move?*

Yes, because parts are ordered only on the basis of their sales.

*Does the plan increase parts turnover?*

Yes, because stock ordering is done on a monthly basis based on sales and parts on hand.

*Does the plan eliminate obsolescence?*

No, but by ordering only what is selling and in quantities to maintain a 60-day supply, you reduce the possibilities of obsolescence to a minimum.

*Does it take a lot of work to get the plan started?*

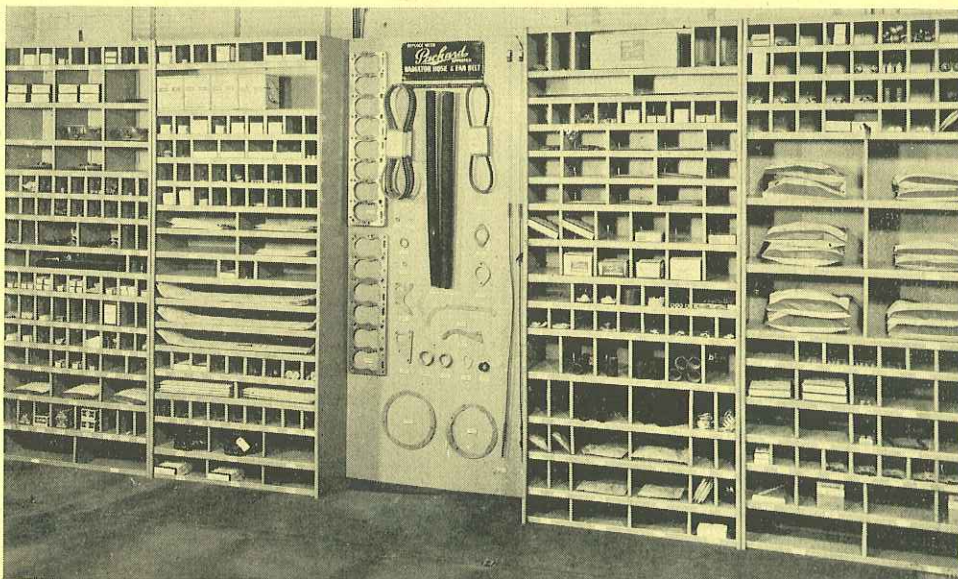
No. However, much depends on the present condition of your parts room and the bin equipment you have. It is not at all uncommon to make a complete 4-6 bin installation along with modernizing the entire department in one week.

*Does the plan produce more parts profit?*

Yes, first by reducing obsolescence and second by increasing turnover.

*How do I get started on the Packard Parts Control Plan?*

Call or write your distributor or write us and just say "I would like to have more detailed information concerning the plan", or "I want more profit from Packard parts sales."



Part Control Plans produce set - ups that look like this—Parts are easy to find, time is saved and obsolescence is reduced to a minimum.



## *— in the Field*

### 25 YEARS

Twenty-five years is a long time and experience combined with practice over a period of years forms a valuable nucleus around which strong organizations are built. Packard has such a group—698—as large a group as any automobile company. We congratulate these new members.



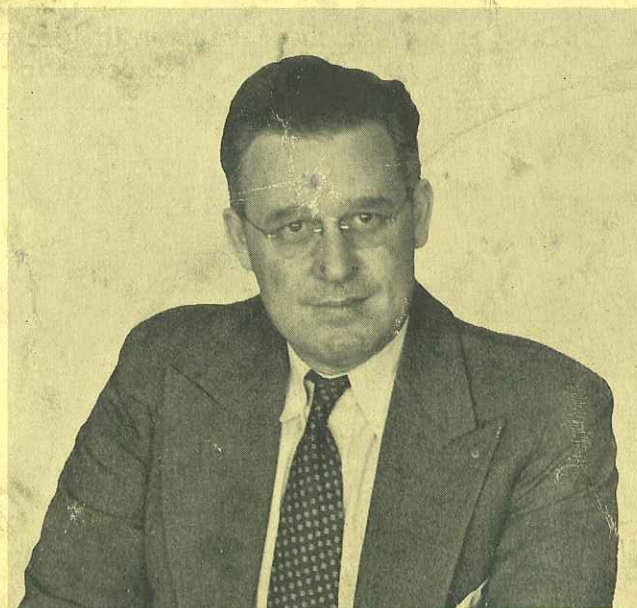
The Springfield, Mass. organization very properly recognized and commemorated the completion of 25 years of continuous fine loyal service to Packard by its service manager DeWitt C. Axtell. A party was given in his honor.

Rather an interesting side-light is the fact that 12 of the 15 men present have served Packard for a combined cumulative total of 168 years. That's an average of 14 years per man. It must be some kind of a record.

A. G. Medlicott, Mgr. says: "These 25 years that Mr. Axtell has given to us have been of the very finest. Nowhere do I know of a man who has served more loyally or more efficiently. He is not only a great service manager, both liked and respected by all the employees at this branch, but beyond that is a fine fellow."



Ray Cragin, Zone Manager at Washington, D. C., has also reached his 25th year with Packard. He started in the factory at Detroit and it was soon apparent that he was on the way up. One tough assignment after another was skillfully handled and now the Washington Zone, under his management, is out for records.



Another 25-year man, in a few days, is Jack Harrison. Many of you know him from the hundreds of service meetings he held in the field. Since the war, he has been on special assignment in England for the Marine Engine Division and now is shop supervisor of the Marine Engine School which to date has graduated some 1300 men from the navies of Canada, England, the Netherlands and the United States.