

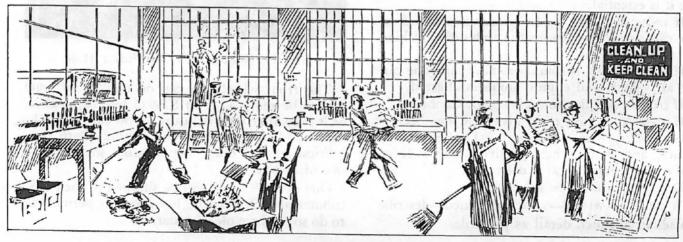
## PACKARD WORKMANSHIP

Now is the time of the year when a great deal is heard about cleaning up and painting up. The whole shop is gone over and takes on the appearance of having been presented with its new spring suit. This is an annual habit and it's a mighty good one, but it does not, by any means, finish the job of getting ready for the spring and summer business—it is simply a good start. It goes without saying that a Service Station of today needs to cater to the lady customer. Our places must be neat and clean.

The big job is to get ourselves ready—we also must be neat and clean, you may think we mean this to apply to appearance only, this is not the case—what we are driving at is Packard Workmanship. This implies neat, clean, efficient work. After seeing that our clothes and our smiles are on right, let's take a look at our work. Follow yourself around today and make notes of those things you do which can be improved upon.

If you write orders—take a look at a few of them—can you read them? Do they mean exactly what you intended them to mean? If you meet customers, are you always as obliging as you should be—if you were the customer would you be entirely satisfied? If you work in the stock room, take a few moments and stand outside the shop, or the customer's window and see what kind of service is being given. If you are a mechanic, are you trying to "just get by" the inspector or foreman, or are you really trying to please the owner of the car by doing every single job you get so that his idea of Packard Workmanship is that it can't be beat.

After all, the main thing a Service Station is for is to fix cars—make certain you do this and the other things referred to will follow. Don't overlook the fact that Packard Service means having the right kind of a place in the right kind of order operated by the right kind of people who do the right kind of work.



"SPRINGTIME"

## WHEEL CARRIER CLAMP BOLTS—HARDENED

We have had reports on the damaging of the threads of the spare wheel carrier clamp bolts when these bolts have been used several times.

We are now using a hardened bolt in production and are carrying this same bolt in service. It will be supplied on all future orders.

We suggest that if you are carrying in stock any of these bolts, Pc. No. 326442, they be returned to the factory for credit and replacement material ordered.

The new bolts are carried under the same Pc. No. and if you have any difficulty telling the old cold rolled bolt from the new hardened bolt, check shank with a file.

### PACKARD PRODUCT REPORT

FORM VT-1014

Recently a supply of Product Report Forms was sent each Dealer and additional pads of this form may be obtained by writing your Distributer or the Service Promotion Department at the factory.

The information you can give us on this form is particularly valuable to the factory and the forms should be used throughout the year as difficulties are encountered. This form represents the Dealer's contribution to the improvement of Packard cars and Packard Service.

### HOW FORM IS USED

Make Product Report in duplicate.

Send pink copy to Distributer the day trouble is encountered.

Distributer checks report for completeness and mails to factory Service Department.

### HOW FORM IS FILLED OUT

Accuracy in diagnosing trouble and in reporting it is essential.

If more than one kind of trouble is found on one car use separate forms for each different kind of trouble.

If same trouble is found on more than one car, list all vehicle and engine numbers affected.

If trouble is with paint, give paint number.

If trouble is with trim, give trim number.

Give date, name, address of Dealer, model, vehicle, and motor number, delivery date, mileage and owner's name if car is delivered.

Describe trouble—be specific.

What was wrong—what happened—describe noises in as much detail as possible.

Describe what you did to fix trouble and what results you got after the repairs were made.

#### ADDITIONAL USES

Report trouble with design or use of Packard Special Tools or additional tools needed.

Report damaged or improperly finished parts received from Distributer or factory, giving part order number and date of order.

If you repaired or refinished and used the part, report the condition and what you did to make the part usable.

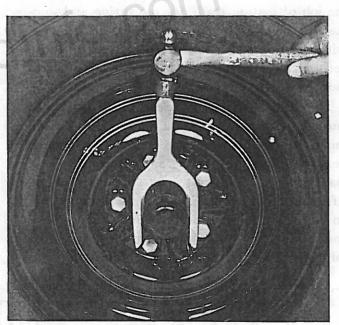
Report suggested changes in Flat Rate Times.

Report any condition which you feel should be corrected, thus enabling the factory to improve its product or Packard Service. This in turn will help sell more Packard cars.

List only one kind of fault or criticism on each form as this makes it possible for us to immediately send it to the proper department for necessary action.

## WHEEL HUB CAP PULLER

1800



ST-5191 Wheel Hub Cap Puller \$1.40

The front wheel hub cap on the Model 1800 cannot be removed with ST-976 hub cap puller, as it is smaller than the caps on previous models. Check and see how many you require. Both your lubrication and brake departments should have one of these tools.

One of these tools will be shipped to each Distributer and Dealer who has given us permission to do so. Others please order.

# DIRECT-ACTING SHOCK ABSORBER NOISE—18th SERIES

It will seldom be found necessary to replace the direct-acting shock absorbers. Corrections can be made by the proper servicing of the original units.

Loss of resistance is usually caused either by lack of oil or by dirt, and a thorough cleaning

and filling will be found sufficient.

In the Service Letter of November first, we explained the use of neetsfoot oil to correct the squeaking condition which sometimes developed in the early units due to a dry joint between the piston rod and its packing. This noise is not found in later shipments.

With the advent of cold weather there has been an increase in shock absorber noise. This noise can best be described as a "chuckle" which is most noticeable when the units are cold, and is most distinct when driving at moderate speeds over

slight road inequalities.

A chuckle which works itself out in a short time is not serious. A small pocket of air collects in the top of the working chamber and is pumped out by the operation of the piston. No corrective measures are in order. If, however, the fluid level in the unit is low, the air pocket will remain. A low level is, perhaps, the most frequent cause of noise. If noise persists take the following steps:

#### MONROE

Make sure that the units are clean. Dirt in either the base valve or the intake valve on the piston will cause noise.

Check the base valve for a weak spring on the flapper. If shaking the valve assembly develops a clicking noise, the base valve assembly should be replaced.

See that the rod guide assembly is screwed home securely so that the pressure tube will seat firmly

at each end.

See that the air bleeds in the rod guide are clear. These are the four fine grooves which are machined on the outer face of the portion of the rod guide which enters the top end of the tube, parallel with the tube. They should be cleaned out with a pointed tool such as a scratch awl so that they can bleed the air from the tube.

When the rod guide assembly is tightened in place, one of these four bleeds must be in such a position that when the shock is mounted in the car the bleed will be exactly on top. This will enable it to completely vent any air in the pres-

sure tube.

This is done by tightening the rod guide so that it has a definite relation to the lower eye. If the four equally spaced bleeds are located across and

in line with the center line of the eye, one of them will be exactly on top. When the rod guide is mounted in the tube the bleeds are not visible, so the position of the bleeds should be marked on the head of the guide before it is installed.

#### **DELCO**

The preliminary steps are the same, making sure that the shocks are filled to the proper level, that the brackets, etc., are tight, and that the mounting

studs are parallel.

If the noise is still present the compression valve at the lower end of the unit should be replaced. When the shock absorber is reassembled the piston rod guide must be installed, as is the case with Monroe, so that one of the bleeds will be upright when the unit is in the car.

In the Delco unit the two notches in the top of the guide which engage with the wrench are in line with the bleeds, so that one of the four bleeds will be uppermost if the notches are either lined up with, or at right angles to the lower eye.

## SPRING AND SHOCK ABSORBER CHARTS—18th SERIES

Around the first of November, 1939 a change was made in all 18th Series cars, which consisted of reducing the load capacity of the springs, specifying new spring insert combinations, and changing the shock absorber valving on some models.

This change reduced the riding height of the cars, and for identification, the springs used prior to the change will be referred to as high springs,

and the present springs as low springs.

Two sets of charts have been printed in the Parts Book showing the spring piece numbers, shock absorber valving, rear spring inserts, and riding heights. One set for cars equipped with high springs, and one set for the low spring jobs.

When a ride complaint is encountered, and it has been determined that the friction lag is correct, the next move would be to identify the car as a high or low spring job, by checking the rear spring piece numbers against those given on the charts for that particular model and body type.

After this is done, the spring inserts should be checked for type and position as shown on that particular chart, and the shock absorber valves inspected in accordance with the codes specified.

It is very important to have these items conform to the specifications given in order to pro-

vide a satisfactory ride.

If, however, a further improvement is necessary on a high spring job, it can be obtained by incorporating the spring inserts and shock absorber valves specified for a similar low spring model.

### SERVICE MAILING FOR SPRING

The Service Spring Letterhead is carried in an  $8\frac{1}{2} \times 11''$  size as shown at 45c per 100 and also in an 11 x 17'' size, blank on the inside and back for local printing. These are supplied on heavier paper and cost \$1.15 a hundred if purchased blank with only the art work at the top and bottom.

On the No. 2 prices listed on the order blank you would deduct the 45c price from the \$1.15, which gives you 70c and you would have to add 70c for each hundred in this group. In other words the price for the first hundred would be \$2.21. For two hundred the price would be \$3.79, etc.

### CORRECTION

In Service Letter Vol. 14, No. 4 dated February 15, 1940 on page three under "License Data and Capacity Information" the figures given in column eleven, the last three lines, show the cooling system capacity on the 1800, 1801 and 1803-4-5-6-7-8 to be 17, 18 and 20 gallons. This should read 17, 18 and 20 quarts. Please change this in your file of Service Letters.

## SUPER 8 OIL FILTER 18TH SERIES

The oil filter in the Super 8 delivers the oil to the hydraulic valve lifters, and in the Service Letter of December 1, 1939, we pointed out that an obstruction in the filter cartridge may cause a noisy lifter mechanism.

In order to insure the proper delivery of oil to the lifter mechanism a special filter has been specified for the Super 8. The blow-off valve releases at a lower pressure so that if the filter cartridge is partially clogged the oil will reach the lifter mechanism. The new filter carries the stamp "Hydraulic Tappets" on the side of the body, and should be used whenever a Super 8 filter is replaced.

The piece number of the new assembly is 341764.

Service Letters are available for everyone connected with Packard Service Stations. If service managers are not receiving a sufficient number of copies, they should write the Editor and give the extra number needed.



|   | 1940 SERVICE SPRING LET  | TERHEAD - CROER BLANK   |
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| Ио. 2   | _ Supplied with letter, including name imprinted ready for pers                              | ing your prices, multigraphed and firm<br>sonal hand written signature.                                   |
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