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WE HAVE ALL THE WORK WE CAN HANDLE!

Are you one of those Service Managers who doesn't need an owner follow-up system because he has more work than he can handle? Maybe you are just fooling yourself. Anyway, what makes you think this condition will continue, and should you be thinking only of the present?

How many wideawake stores in your town stop advertising in the paper just because business is good today? The business of selling cameras and films is certainly much better in the summer than in the winter. Did you ever hear of Kodak or Ansco stopping their advertising during the summer months?

There are two points to this question. First, one of the principal reasons for advertising or any kind of follow-up work is to spread your work out, to level your load. You don't send out a winter special to try to get everybody in on the first cold day. What you are actually trying to do is to get most of them to come in earlier so you can spread the load out and do work on more cars. Your direct mail campaign should be primarily used to get a steady load of business.

The second consideration is—are you actually loaded to capacity or is it that just because of poor arrangement, lack of adequate facilities or lack of manpower you are unable to get the work through your place in time to handle more of it? Do you actually know what your operating capacity is in each department? Did you ever make a study to find out what it is? The possible operating capacity depends upon two things—one, the worth per hour of equipment, and, two, the worth per hour of mechanics employed.

Let's see how this works out:

Wash Rack—2 jobs per hour, $1.00 each	$ 2.00
Lubrication Dept.—2 jobs per hour, 75c ea.	1.50
Shop—5 Mechanics—Labor Rate $2.00 hour	10.00
Operating capacity income 1 hour	$13.50

The operating capacity for an 8-hour day would be 8 x $13.50=$108.00, or the operating capacity for one week would be 40 hours x $13.50=$540.00.

Any increase or decrease in the number of mechanics employed or in the number of pieces or type of special equipment in use would change the operating capacity income.

By comparing the operating capacity in income with the actual labor sales, you can determine the effectiveness of each department.

In the example given, the operating capacity income for the week was $540.00. If the labor sales for the week were $300.00, you should determine why there is such a difference. The per cent of efficiency was 55.5. The ideal, of course, would be to have the actual labor sales 100% of the capacity, although this is not always possible. The objective should be to come as close to it as you can and make a check at least every week to see how close you are coming.

What would be some of the reasons why the percentage is low? One would be lost time because cars are not gotten into the shop promptly; two would be too high a percentage of internal

work and three would be the time allowances on repair operations are not being met by mechanics.

Now let's see what the maximum income capacity is. This is worked out the same way except that you use car capacity, and your equipment capacity would be figured the same way.

Wash Rack—2 jobs per hr., $1.00 each	$ 2.00
Lubrication Dept.—2 jobs per hr., 75c each	1.50
10-Car Capacity at one time, $2.00 hour	20.00
	$23.50

Once the income capacity has been established a comparison can be made against the operating capacity as well as the labor sales for the same period. You will find quite a variation in the figures. You may surprise yourself to find that for some reason you are operating only up to 75% efficiency or possibly as low as 50%. Anyway, such comparisons show the percentage of maximum capacity on which each department is being operated and will be of great value to the service manager in any consideration of labor, sales quotas or the amount in dollars his department is expected to produce.

Most service managers want quotas set. There isn't much use setting a quota without first establishing your capacity. If you establish a labor sales quota of $2,000 and you find your labor sales income capacity is $1,500, it is obvious the quota is beyond the physical capacity of your shop. On the other hand, if you set a quota of $1,000 and the actual capacity of your shop and equipment will permit an income of $1,500, it then becomes a matter of follow-up and merchandising.

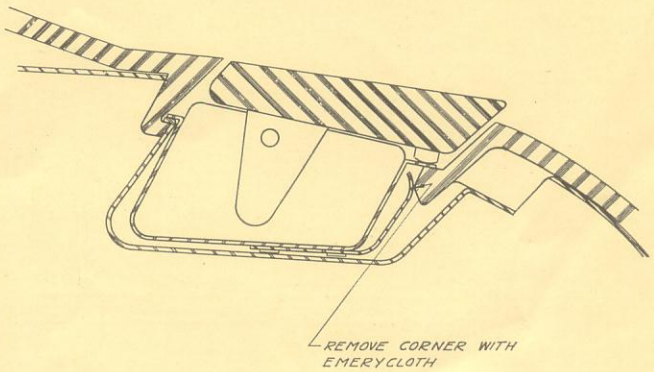
Before you say you don't need more business, how about finding out just how efficient you and your department is compared with its actual capacity?

CUSTOMERS COMMENTS

"It is only fair that I write to tell you that *after* reporting the stalling condition to you, it was corrected by my dealer. You will recall I had taken the car to the dealer five times within two months for the same trouble. Will you please tell me why the dealer would not correct it *before* I had to write the factory?"

"I am writing you because *my dealer said he could not help me and told me to write the factory.* Here is a list of the troubles. . . . Personally, I think it's pretty silly for a dealer to tell me to write you. I know you can't fix my car by correspondence—that's the dealer's responsibility. If his mechanics aren't competent, why doesn't he ask his distributer for assistance, instead of causing you trouble and me delay by telling me to write the factory?"

ASH-TRAY
CLIPPER



Difficulty may be experienced in removing the front compartment ash tray on these cars because of the sharp edge on the plastic panel at the point of spring contact. The sharp edge of the plastic should be rounded slightly with emery cloth to permit the spring sliding over it when the ash tray is removed.

NOISY TAPPETS
18th and 19th Series Super-8

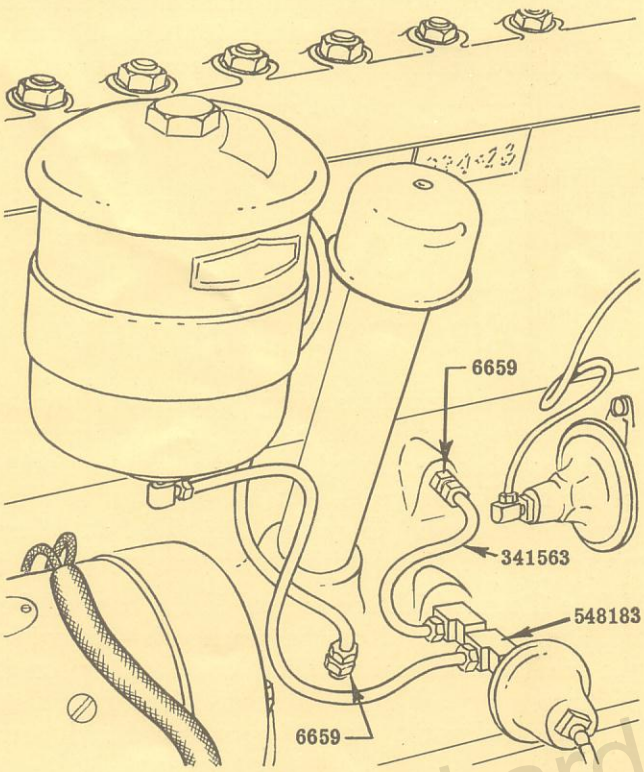
Noisy tappets at idle speed, due to failure of the tappet plungers to stay up, are usually caused by low oil pressure at the tappets. Oil from the pump is delivered to the tappets through the oil filter, which is restricted at the entrance elbow to limit the pressure delivered at high speed. At idle speed, particularly with a warm engine and light oil, this restriction may reduce the pressure so much that the oil pressure at the tappets will be insufficient to keep them in contact with the ends of the valve stems.

On the 20th series cars, oil will be delivered directly to the tappets without passing through the filter, to insure sufficient oil pressure at all times. A similar piping arrangement may be used on the 18th and 19th Series cars where trouble is experienced with lack of oil pressure at idle speeds.

To make the installation, remove the oil pressure gauge sending unit and the oil filter inlet tube from the tee in the crankcase, and install a second tee, part number 548183, where the sending unit was removed. Connect the filter inlet tube and the oil gauge sending unit to the new tee.

Disconnect the filter outlet tube from the elbow where it enters the crankcase. Remove the elbow, and install a straight nipple, part number 6659. Use the standard Junior car by-pass tube, piece number 341563, to connect from the nipple just installed to the fitting in the tee from which the filter inlet tube was removed.

Drill ($21/64$") and tap ($1/8$" pipe) a hole in the crankcase just below and on the center line of the oil filler tube. *CAUTION: Coat the drill and tap thoroughly with grease to collect the metal chips and prevent them from falling into the crankcase.*



Install a straight nipple, piece number 6659 at this point. Reform and shorten the filter outlet tube and connect it to the nipple just installed.

All necessary pipes and fittings may be ordered as a kit under the following part number:

378858, Oil Filter Kit

EQUIPMENT AND SPECIAL TOOLS AVAILABLE NOW

Each day it is getting more difficult to obtain Packard Service Equipment and Special Tools from the manufacturers due to the government curtailing production for use in national defense.

For example, the Motor Ekonomist, shown on Page 82 of our Tool Catalog, can no longer be obtained due to the shortage of instruments used in this piece of equipment. We are substituting the Allen and Sun equipment shown on Pages 78 and 79.

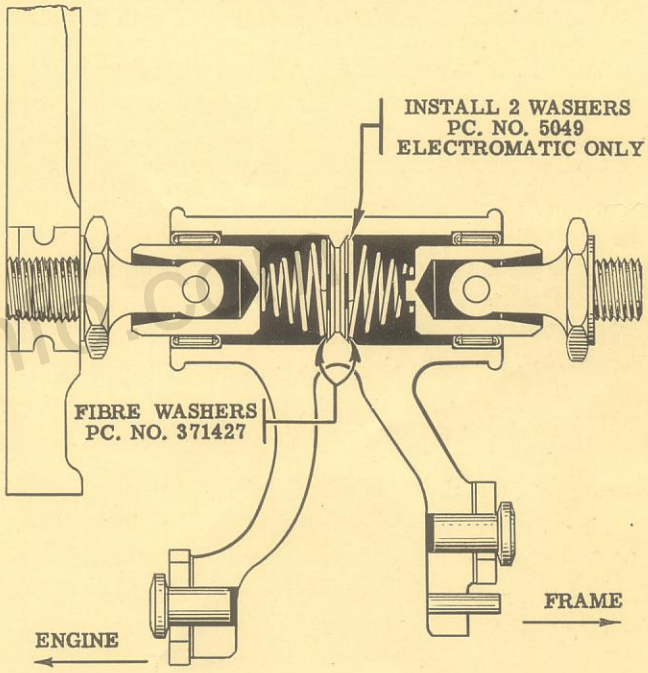
We are particularly fortunate in having a quantity of Special Tools available for immediate delivery to our Packard Service Stations. We suggest that you take advantage of this situation and order the Equipment and Special Tools needed in your service station before the time comes when it may be impossible to obtain these.

Make it a point today to check your latest Tool Catalog together with the three Service Tool and Shop Equipment Bulletins issued since the Tool Catalog was printed, and get the proper Equipment and Special Tools to do your service work while they are available.

CLUTCH RELAY LEVER

17th, 18th, and 19th Series Super-8

The clutch relay lever on these cars is mounted on universal joints carried in roller bearings. The lever is centralized on the joints by means of two conical springs which rest against a shoulder in the center of the bore in the relay lever.



If the springs are installed in a reverse position, or if the inner ends should slip past the shoulder, the lever will not centralize. During current production, fibre washers, piece number 371427, have been used between the base of the spring and the shoulder to prevent the spring slipping through.

In reassembling one of these units, care should be used to install these washers as shown. On the electromatic cars, two flat washers, piece number 5049, are placed between the fibre washer and the shoulder on the frame side to shift the lever over toward the engine, to prevent interference between the electromatic operating lever and the frame.

371427—Clutch Shifter Relay Lever Spring Washer

5049—Washer

ELECTROMATIC CLUTCH

You may have had complaints on electromatic cars being hard to shift out of gear on deceleration in high gear. In some cases you may find that the clutch does not disengage until the car has almost come to a stop, and in order to make a smooth stop, it is necessary to disengage the clutch with the foot pedal.

In such cases, it will usually be found that the cut-out speed of the governor switch is less than standard. Adjusting the governor cut-in and cut-out speed is a delicate operation requiring a special test fixture, and should not be attempted in the field. Correction should be made by installing a new governor switch.

RADIO WARRANTY SERVICE

Any Authorized Philco Warranty Service Station will handle all warranty and service work necessary for the 1941 Packard Custom Radios. Take your radios to the nearest Philco Service Station for this work.

A new official directory of the Philco Authorized Warranty Service Stations has been mailed to each Packard dealer. Watch for your copy and keep it handy.

TWENTY-FIVE YEARS

Roy Eveland, Service Representative, has been talking to distributers about service problems for twenty-five years. He has covered a lot of miles in that time and is well known to a large number of service men. We all like him, respect his ability and hope he will be with us for a long time.

AIR CONDITIONING INSTRUCTIONS

The Air Conditioning Service Instruction booklet, which was included as an insert in the Service Managers' copy of the April 15, 1941, Service Letter, has an error in Figure 6. We have corrected the illustration in the reprint of the entire page, which is included with this issue of the Service Letter.

We suggest that you paste or staple this new page in the booklet over corresponding page (8).

AIR CONDITIONING

In order to put the cooling system out of operation during the winter season, the compressor belts have been removed from the great majority of air conditioned cars. The following should be done, in addition to reinstalling the belt when preparing the air conditioner for use again.

The filters which are located in the base of the cooling cabinet and can be reached by removing the rear seat, should be taken out and inspected. If there is a considerable accumulation of dust, or if they are dry, they should be replaced with new filters.

The Freon (refrigerant) level in the receiver tank should be checked after the belt has been installed and the unit run long enough to become thoroughly warm. The level is checked, with the compressor running, by opening slightly the test cock on the side of the receiver tank. If the refrigerant is up to the proper level, it will come out in a milky-white spray. If only an invisible gas blows out, it indicates an insufficient quantity of refrigerant, and enough should be added to bring it up to level.

If the Freon level is found to be low, it indicates a leak somewhere in the system, which should be located and repaired before additional Freon is added. The most common point of leakage is the packing nut around the compressor service valves. Be sure to tighten the packing nut each time the valve stem is turned.

Be careful not to overfill with refrigerant. 6½ lbs. is a complete charge when the receiver tank is empty, and more than this should not be installed. When bringing the refrigerant up to level, keep trying at the level cock, and as soon as the proper level is obtained, as indicated by a milky-white spray, immediately close the valve on the Freon drum and stop the engine.

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