

PACKARD SERVICE



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“Suggestions to Improve Service”

I BELIEVE that we can do more to improve service by improving ourselves than any other way. No system yet invented will take the place of courtesy, honesty and “horse-sense.”

A service man must be a combination detective — mind reader and diplomat. He must also be big enough to realize the importance of little details. It is almost always some small mistake that could have been avoided that gets us into most of the trouble. Listen to the customer — he has something on his mind that is important to him. Too often we think the customer does not know what he is talking about and then afterwards find he was right.

Good service does not mean giving things away, but it does mean doing what you promise to. We

all have customers that we have held for years. Why? Because they have confidence in us.

A great many new customers are coming in to the Service Station and one of the worst things we can do is to slight them because we do not know them or because they may not look good to us. It is up to the service man to make a good impression under trying conditions.

If we could learn to treat the men we work with as well as we do our customers, it would make all of our jobs easier.

I consider this a criticism of myself, but if I can avoid some of the faults I have mentioned, it will be a help for better service.

Walter Brown—Manager of Service Sales at Boston, requested his men to make suggestions for the improvement of service. This article is the result. After all is said and done, the greatest improvement to be made is in ourselves.

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Packard-Boston

Diagnosis

THE owner was utterly disgusted. Once, twice, three times he had taken his car to the Service Station to have an annoying trouble corrected. Three times he was assured that it would be fixed and three times was the car returned to him with the trouble still very much in evidence. "The fourth time?" you ask. That's the sad part of it; there was no fourth time. The owner, so thoroughly embittered against his car and the Service Station, disposed of the car by turning it in on one of another make.

Future business with this man has been lost, but more serious than this is the harmful effect of his answers to the many queries of his friends, as to the reason he got rid of the car. This man, not in any sense a crank and one who is respected in his community, is now a distinct liability to the dealer who sold him the car and to the manufacturer who built it.

Come-back work not only is expensive to the Service Department *but it hurts sales*. Three things are important to the making of a repair job that is to be satisfactory to the owner: intelligent diagnosis, proper workmanship, careful final inspection.

Let us look into this matter of diagnosis, or if you prefer it by another name, "trouble shooting." Here are a few samples found by factory mechanical road men:

Case No. 1. A number of adjustments were made to a differential in the endeavor to quiet it—trouble finally corrected by tightening front end chain.

Case No. 2. Cylinder block and pistons changed to stop piston slap—trouble finally found due to loose vibration damper.

Case No. 3. Bearings taken up twice on 226—trouble cured by tightening down cylinder base nuts.

Case No. 4. Piston pins replaced—trouble was in oil pump line.

Case No. 5. Three differentials changed—trouble was due to tires.

Case No. 6. Four water pumps replaced—trouble due to fan belt noise.

Case No. 7. Steering overhauled—trouble due to loose lock on eccentric bushing.

Case No. 8. Five oil pumps changed—trouble found to be due to dry clutch shifter bearing.

Imagine a patient afflicted with hives being treated for St. Vitus dance or treating him for colic when the real trouble was appendicitis. What a world this would be (for undertakers) if the average doctor prescribed treatment after a

snap judgment diagnosis. When you are feeling off color and consult a doctor, what happens? He listens, while you tell him how you feel—he asks you a lot of pertinent questions—he then most probably makes an examination—looks at your tongue—feels your pulse—takes your temperature—does a bit of listening through a stethoscope—takes your blood pressure and so on until he is well satisfied as to what the trouble is.

Now the Service Salesman has got to be just as good a diagnostician as the doctor—in fact better, for the patient in this case cannot talk. It cannot say, "Doc, that noise you hear is not a loose rear main bearing but is due to my cylinder block being loose at the base." The only outside help you can get is by listening carefully to the owner's description of the car's action—the rest is up to you.

Don't risk your reputation by hazarding a half-baked guess. When you prescribe the remedy be sure you know what you are trying to cure. By the old reliable process of elimination, work to the source of the trouble. Don't skip from one thing to another. If the motor won't start be sure that the trouble is not in the ignition system before condemning the carburetor.

False pride, a stumbling block in the path of progress, is too often the cause of wrong diagnosis. A doctor strikes a case that is new to him and he doesn't know the answer so he goes into consultation with other doctors; by the same token, when you find some trouble that has you puzzled, don't be too proud to get the other fellow's opinion—call in the whole shop if necessary, but above all things *don't take a chance on guesswork*.

No one will ever be genius enough to invariably lay his finger on the trouble merely by standing at the side of an idling motor and listening to it. More trouble shooting could be done correctly if cars were road tested more frequently—more squeaks, thumps, taps and knocks will be heard from a car moving at thirty miles an hour than one moving at zero. You say this takes time—sure, it takes time but it also takes more time when a job has to be done all over again because somebody made a poor guess in the first place—*it also takes time to repair the damage done by a dissatisfied and talkative owner*.

As before stated, a satisfactory repair job depends on—intelligent diagnosis—proper workmanship—careful final inspection. The last named is the insurance against a disgruntled owner, due to failure in correcting specific trouble.

Do not think that because you courteously offer to do the work over again at no charge to him that he is going to be pleased. It is, no doubt, a sacrifice on his part to spare the car in the first place—he is busy and needs transportation.

Prevent occurrences of this nature by inspecting these completed jobs—do it yourself if you took the order—if this is impossible have some competent person do it for you. *Don't let the*

owner take the car until you know it is right.

Once again—intelligent diagnosis plus proper workmanship plus careful final inspection equals first grade repair work, which coupled with courtesy and fair prices equals SATISFACTORY SERVICE.

Service that keeps your owners happy is the cheapest and most effective advertising in the world.

Ideas Wanted

IT IS our desire to make this paper as interesting and helpful as possible.

There are many good service features being employed by various distributors and dealers which would be of great benefit to others if they only knew about them.

There are two classes of people: those who keep to themselves anything that is of benefit to them; and

those who generously pass on any ideas that will help the other fellow. Which class are you in?

This paper will serve as a clearing house for any ideas that will help the whole family. New ideas on tools—quicker and better methods of handling service—new ways and short cuts in performing operations. *Come on, fellows, let's hear from you!*

That Stock Room

HERE of late the newspapers have given a lot of space to the miraculous growth of the Ford Motor Company, which has assets mounting well over a billion dollars. One of the factors responsible for this mighty growth was the incessant warfare against waste—the constant study of accomplishing things at less cost.

It's a far cry from this billion dollar company to your stock room, but principles applicable to waste prevention used by Ford can also be of service to you.

How many of the stock room managers around the country have gone to the trouble of re-arranging the stock of parts so that the most active parts are located nearest to the counter where parts are disbursed? A small

percentage of the different parts represent the lion's share of your total parts business. To save thousands of useless footsteps, doesn't it seem worth while to place those fast moving parts where they are readily accessible? It is easy to determine the parts that are most active by consulting the stock records. Sort out those active members of the parts family and move them up to the front line trenches and relegate the slow movers to the rear.

In an average sized stock room it is surprising what an effect the arrangement of parts has on the number of employees necessary for efficient operation.

Think it over—then act.

Pin Fits in Alloy Pistons

- Q. Why can't the alloy pistons be bought from the factory parts department less the piston pins?
- A. Because it is impracticable to attempt interchangeability of parts where the working fit is less than .0005. The piston pins must be selected for a .0001 (one ten thousandth of an inch) fit.
- Q. What precaution should be taken when removing the piston pin from piston?
- A. Important that the piston should be dipped into boiling water before attempting to remove the pin. This procedure should also be followed when assembling the connecting rod and pin to the piston. Never attempt to drive the pin out of a cold piston as this is sure to distort the piston. The average hot water available in the shop is not hot enough. Supply your shop with an electric hot plate—satisfactory electric hot plates can be procured at any of the well known \$.25 to \$1.00 stores—a two or three quart pan costs not more than \$.30, making a total cost of the outfit less than \$1.50—*Get these items in the shop today.*
- Q. What precaution should be taken in fitting the piston pin to the connecting rod bushing?
- A. The connecting rod piston pin bushing should be reamed with extreme care, otherwise the pin may freeze and score the piston. Do not allow the reamer to remove more than .002 stock at one time. Heavier cuts do not save time as chatter of the reamer cannot be avoided when taking a heavy cut. Always protect the cutting edge of the reamer when not in use with the leather boot which the factory supplies with these reamers.
- ST-614 Piston pin bushing reamer, $\frac{3}{4}$ ", Price, \$6.20.
ST-616 Piston pin bushing reamer, $\frac{7}{8}$ ", Price, \$7.00.
ST-615 Piston reamer, $\frac{3}{4}$ ", Price, \$11.80.
ST-617 Piston reamer, $\frac{7}{8}$ ", Price, \$13.20.
- Q. What check should be made after the piston has been fitted to the connecting rod?

- A. The assembly should be carefully checked in a connecting rod aligning jig and perfect alignment secured—mis-alignment causes knocks and vibration. Be sure the piston pin fits in both rod and piston. Check the piston for any distortion and round them up if necessary. (See S. T.-87 connecting rod aligning jig). Reread technical letter No. 1804.
- Q. What should be done after assembling the connecting rod on the crankshaft?
- A. After assembling the connecting rod and piston assembly on the crankshaft, check carefully to see that it is absolutely square with the proper clearance between the piston pin bosses and the end of the connecting rod. Do not take it for granted, because the connecting rods were straight before they were removed that they will be so when reassembled. There are many reasons why they may have become twisted or out of square.
- Q. What clearance should be given between cylinders and pistons?
- A. A clearance of .003, to be determined by using a feeler gauge $\frac{1}{2}$ " wide and approximately 10" long. With this proper clearance, the feeler gauge should be extracted with an easy pull, holding the gauge between thumb and forefinger.
- Q. Should pistons be selected for proper fit to the cylinder bore?
- A. Yes, pistons as they leave the factory vary in size from .0015 undersize to .0005 oversize.
- Q. Is it possible to obtain an oversize piston pin bushing to replace a bushing that has become loose in the upper end of the connecting rod?
- A. Yes, a bushing has been provided which has an outside diameter .002 larger than standard. This bushing can be used in any Packard Six or Eight motor having the $\frac{7}{8}$ " piston pin. The piece number is 145326. This bushing should be a press fit in the rod and should be reamed to fit the pin after pressing in the rod.

