



Saving Money the Wrong Way

STEEL, iron, aluminum and other metals can be united by the process of welding. This is a true statement but there are places where neither welded nor straightened parts should ever be used in making repairs on a Packard automobile.

By all means do not try to save the customer money by welding any parts which are subject to hard strains. Parts upon which the safe operation of a car depends should never be repaired by this process. Such parts are heat treated to build the strength up to the required standard and the heat used in the welding process changes the structure of the metal near the repair and reduces its strength.

The best test for determining the advisability of making such repairs is to place yourself in the other fellow's position and ask if you would want to use a car with such repairs when driving with your wife and children.

By heat treating, steel can be made soft to stand a strain of 20,000 pounds per square inch, or hard so it will stand 200,000 pounds. This is a very expensive process but it is felt necessary for the safe operation of certain parts.

The cold straightening of such parts which are badly bent often results in strains of the metal and even in cracks, although too small to be seen. Straightening while the piece is hot is dangerous, too. The heat required is sufficient to destroy the treatment.

The Packard front axle, for instance, is heat treated to a tensile strength of about 100,000 pounds per square inch.

When a strain of 100,000 pounds per square inch is referred to, what is meant is such a strain as is applied by hydraulic presses in a test laboratory. They are not as severe as the quick sharp blow which would

be the result of an accident similar to striking a telephone pole or an obstruction in the road at high speed.

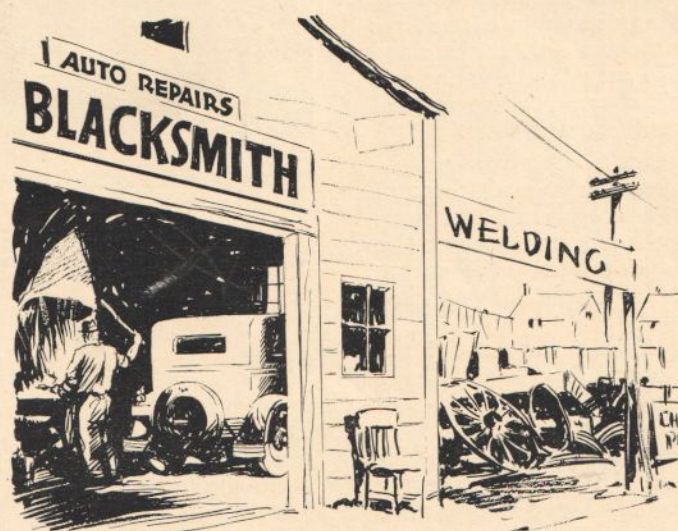
The heat used to treat the axle at the factory is a uniform heat of 1525 degrees Fahrenheit. It is then quenched and reheated to 1075. This is hardly a visible red by daylight. The hardness obtained by the first heating is such that if the axle were dropped on a concrete floor, it would break. The second heating is what gives the piece its shock resisting qualities.

It is the uniform tempering of the axle after the heating that gives the strength and qualities which make this piece suitable for the purpose for which it is made. Where a blow torch or forge heat is applied to that portion of the axle which is bent, the heat cannot be uniform either as to the length or the thickness of the axle. The usual method is to obtain a visible red clearly seen in daylight. Such a heat will run as high as 1600 degrees to 1800 degrees Fahrenheit, which will ruin the part.

The result is that even though you have corrected the length of the axle by straightening, you have greatly weakened that portion which has been heated and you have reduced the strength 30 to 40 per cent.

Welding and straightening have their rightful and highly useful place in the modern garage, but that use should not include the repairing of badly bent front axles, steering arms, steering knuckles, tie rods or drag links, all of which are heat treated parts.

As a service salesman, do not try to save your customer any money by having parts repaired which in their weakened condition endanger his life. Tell him the truth about attempting to repair heat-treated parts and by all means suggest the replacement of any such damaged parts.



UNSAFE

"Better Service Means More Car Sales"

Check Spring Clips

One important item of inspection after the car has had some initial mileage is to make sure the spring clip nuts are tight.

Loose spring clips not only increase the hazard of spring breakage but affect the steering result and the brake action.

If the spring clip nuts are properly tightened after the car has had one thousand miles or more of service, they will seldom require any further attention.

What Chance Have You?

You poor, downtrodden, overworked brothers who never get a fair break and haven't had a change of jobs in the last five years—do you want to know what the trouble is? You can blame it on the boss if you like—you can blame it on your lack of education if you choose—you can blame it on the town, the climate or what ever you please—but you never will hit the right spot until you blame it on yourself.

The next question is what is wrong with yourself? It may be that you don't "mix well." It may be that your voice is all wrong, or it may be just the expression of your face. Have you checked up lately on your clothes, your shoes and your shave?

A good mechanic who is also a clean mechanic sticks out above the bunch so that the boss can't help but notice him. A clean, neat stock man very seldom runs a dirty, messed up parts department. No customer enjoys doing business with a service salesman who looks as though he would soil every part of the car he touched.

Now all of this is important but we haven't gotten to the real point yet because a lot of us just naturally keep clean and neat and still don't seem to "ring the bell" very hard. There still is something lacking and I'll tell you what it is. You either haven't any or you don't use your *imagination*. By this we don't mean day dreaming—we mean just what the word says.

Imagination in its original form means the act of imitating in your mind and that is just what we are talking about. Now you will agree that practice makes perfect. Combine these two thoughts and use them and you have just what is needed to get you out of the rut. Imagine yourself in the boss's shoes, practice it hard enough and you will find yourself "getting there."

You mechanics who spend most of your time grumbling—do you think you are imitating a good foreman? Some of you stock men don't even look like a prospect for an assistant service manager's job let alone act like one. And some of you service salesmen may be imitating something but it's a mighty poor imitation of a high class service manager.

Just try this idea out. It doesn't cost you a cent in the long run, and it's absolutely painless. Practice imagining yourself in the boss's job. Practice it hard every day and results will come.

Just to prove this point we list a partial record of accomplishments which should be an inspiration to every man in the service department. The list of course is not complete and we may have overlooked some particularly applicable cases, but our idea is simply to show you that there are possibilities and that as our number of owners increase and our sales and service facilities grow in proportion, there will continue to develop opportunities for advancement all along the line.

These men came up through the Service Department—

| | | |
|-----------------|-------------|-------------------|
| J. M. Krog | Portland | Wholesale Manager |
| Roland Sauer | Albuquerque | President |
| G. M. Keith | Shreveport | Sales Manager |
| E. G. Ricks | Houston | Vice-President |
| F. L. Butler | Youngstown | Vice-President |
| H. W. Ward | Kansas City | Vice-President |
| F. E. Bishop | Pittsburgh | General Manager |
| J. H. Sickinger | Syracuse | Vice-President |
| W. P. Naylor | Boston | Vice-President |
| H. C. Berg | Portland | President |
| F. O. Wever | Seattle | Treasurer |
| T. Plimley | Victoria | President |
| F. F. Crowley | Atlanta | President |
| E. J. Mott | Rochester | Vice-President |

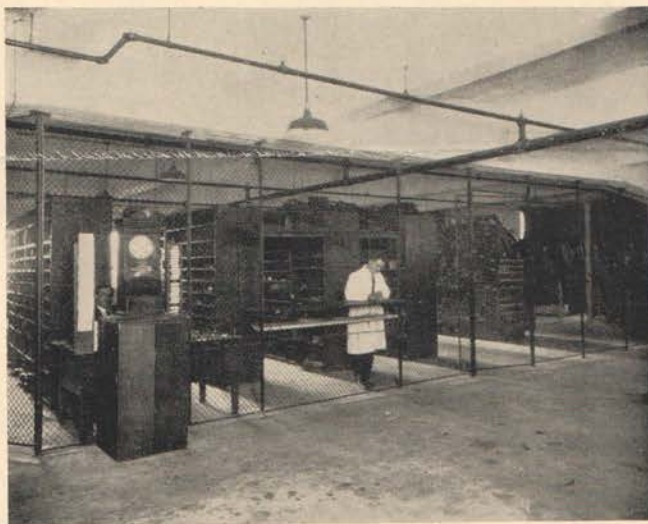
—and others

Also it might not be out of order to mention the fact that three of the seven District Managers graduated from the service ranks—think it over fellows.

Correct Stock Room Layout

SUGGESTION NO. 1

Take advantage of all natural light by proper placing of bins. Sections should run at right angles to windows. The Montreal stock room is a good example of this. You will notice the flood of light between each section—it means quicker parts service and a neater layout.



Additional suggestions will be given in each issue and should you desire any assistance in the rearrangement or organization of your stock room, send your request to the Editor stating your problem briefly.

Family News

First class Mechanical Supervisors are dog-gone hard to find but one of the unassuming ones sure did his darndest. Well any way we have a prospect for a secretary's job and Roy Eveland gets half the credit. He says his wife is doing well and the little lady's name is Ruth Helen.

Former Mechanical Supervisor and Special Export Globe Trotter, Walter Pait, has assumed his new duties as Service Manager at Memphis. Walter is going to prove again that he not only can tell the boys how it should be done, but show them that he can do it. Go to it, Walter, and here's wishing you luck!

Does Dirt Pay?

A current issue of one of the leading automobile publications contains an article that will produce a sigh of relief and the exclamation of "I told you so" from many an old timer. The writer of the article takes the stand that too much has been said about courtesy and cleanliness. He says that the factory men who travel around the country trying to help the dealer in his shop layout, his routine or his stock problem, stress these items of courtesy and cleanliness to an impractical standpoint.

He cites instances of going into clean respectable looking places and of finding no cars in the shop. He can go right down the street and pick out a garage where the tools are all battered, bent and greasy, where it is treacherous to walk on the floor, and where politeness is unknown. In this place he finds a large number of cars—it's so busy that he has to go and hunt a mechanic to look at his car. The treatment is insolent, the place is dirty and the appearance is careless. He doesn't get a smile with his service. He expects grease on his car and gets it. He pays cash for the job and if he wants the car all in one piece he waits for it. This is a good place to go for service according to his idea and he feels that often a factory's recommendation for a clean service station is not justified on the grounds of varying conditions which he says are never taken into consideration and because it adds to an already overburdened overhead.

This writer failed to take into consideration two very important facts. Number One—the ever increasing number of lady drivers. Don't fool yourself on this point. From actual figures the men who pay for Packard cars admit that the choice was influenced in well over 60 per cent of last year's sales, and between you and me, we know that this figure truthfully given would be higher.

Ask your wife which type of place she prefers for handling service when she takes the car to the station for you. And again, would you want her to go near such a place as has been described?

Fact Number Two—the cost of cleanliness. It is greatly over estimated. The average man would much prefer to work in a clean place and will do his share to keep his part of the shop in that condition. The general campaigns throughout the country, especially in factories, during the past few years have not been based upon the idea of spending money without a definite return. Most work requires light. Cleanliness means more light and therefore more returns.

This is not a sentimental subject at all but a sound business producing idea. We don't claim that it alone will diagnose trouble nor repair automobiles, but we do know that clean courteous service sells more cars. You cannot find dealers or distributors who are above their selling quota on new cars running anything but the type of service station which *politely* sells *efficient* service from a *clean* station, and where this is done you will find plenty of customers, a crowded shop and a fair profit.

A Good Recipe for a Service Salesman

The chief ingredient for an interesting conversation is truth, to which should be added a grain of common sense, a pinch of good humor, a dash of wit, well seasoned with a smile.—*Author unknown.*

Associate Editors

This Associate Editor idea seems to work out in fine shape, as we are getting some mighty fine ideas. However, don't wait for your name to appear on this list. If you have an idea, even though it's only half worked out in your own mind, send it in—maybe we can finish it, possibly you are using some short cut methods in your routine or some service advertising stunt that is working well—send these in too. The more you put into this Service Letter the more you can get out of it.

We are appointing the following as Associate Editors and will ask that you send in something on the subject suggested as contributions for February. Address your articles care of the Editor, Packard Service Letter.

C. L. BUTT—Philadelphia—*Handling the Adjustment*
H. P. PARKER—Boston—*What is a Service Salesman?*
C. P. McLAIN—*What the Tourist Likes and Should Get*
S. H. BRIDGMAN—New York—*Assisting the Dealer*
A. L. MERRIL—Portland—*Service System Short Cuts*

The Right Spark Plugs

It is not possible to select a spark plug which will be ideal for all operating conditions.

A plug which is suitable for sustained high speeds or hard pulling must be of a different design than one which is best for city operation in cold weather.

The high speed plug must be capable of radiating a great deal of heat, because otherwise it will break down on a hard fast run either through the failure of the porcelain or the melting of the electrodes. On the other hand the plug which is most suitable for slow driving in cold weather must be of a design which will permit the porcelain to become hot, because a cold porcelain will "gas foul" very quickly and cause a missing motor.

Our standard spark plug is the Champion No. 3. It is satisfactory for winter driving and is also satisfactory for normal summer operation. On the other hand a car which is driven at high sustained speeds, or on long severe pulls, should be equipped with the Champion No. 2 while it is doing work of this character, particularly if trouble is encountered with the standard plugs.

The Champion No. 4 is a compromise between the No. 3 and the No. 2. It is "colder" than the former and hotter than the latter. It can sometimes be used for hard driving where the conditions are not exceptionally severe, and will be better for city driving than the No. 2.

The two factors governing the choice of a plug are climate and driving conditions. The warmer the climate the colder the plug which can be used without fear of gas fouling.

Setting Spark Plugs

In setting the spark plug gap care should be taken not to exert side pressure on the center electrode. A common way of closing the gap is to pull the wires together with a pair of pliers and when this is done the strain set up in the porcelain may be sufficient to cause trouble at a later date.

It is best to change the gap by moving the outside electrode without putting any pressure on the porcelain.

Riding Quality 640-645

The cross country riding qualities of the 640 and 645 have attracted a great deal of favorable comment, and recently several changes have been made to secure a pavement ride which is equally good.

The adjustable metering valves in the shock absorbers make it possible to control the resistance of these units, and the method of making the adjustment is outlined in Technical Letter No. 1857. If a softer ride than that obtained with the standard adjustment is desired, it can easily be secured.

A change has also been made in the seat cushion springs. It has been found that a softer ride can be secured by the use of the cushion springs which are already in the 633, and these springs will be used in the future in the seat cushions of all Packard built closed bodies. The coils of the new springs are enclosed in individual fabric covers, while the old spring coils are exposed and were not separated in this manner. An inspection can be made through the air vent at the back of the cushion.

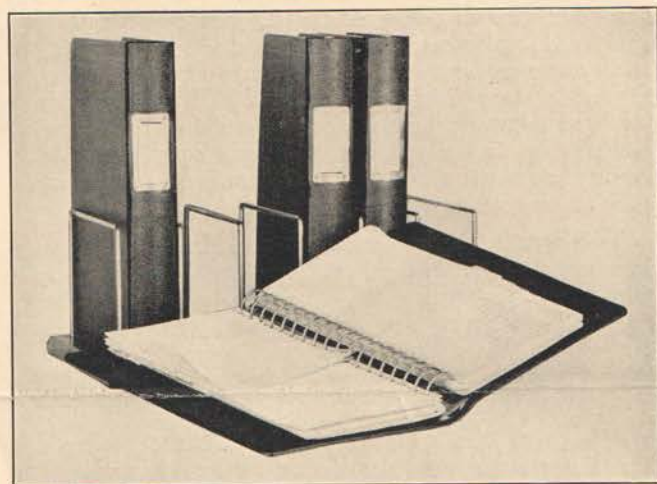
The axle springs are also changed. The new units are of a special steel which has made it possible to produce a more flexible spring without sacrificing the strength which is so necessary. The change in the front springs is particularly important in its effect on the ride, and the new units can be distinguished by the fact that the leaves are tapered at the ends and that the front spring does not employ the auxiliary main leaf which formerly extended from the center of the spring backward over the rear eye. In the new design the rear end of the second leaf curls around the spring eye from underneath.

You have already been advised that the shock absorber metering valve will be supplied for any cars not already so equipped, and we will also be glad to furnish new cushion springs and new front axle springs if the change is desired.

No matter how busy he may be, if he wants to give good profitable service and prevent loss from junking obsolete parts, he must keep a set of stock record cards.

There are several safe short cuts in the routine as outlined in the service manual but there is no safe way to run even the smallest parts room without stock records.

It may save time to enter the parts used on a repair job on the back of the repair order rather than on separate requisitions. In certain cases, a combination cash sale slip and requisition is advisable. This can be printed in book form with perforations so that one copy remains in the book. Entries on the cards can be made from the book as time presents itself and, because the requisitions are in a book form, they will not get lost nor do they require filing. We know that entering orders or disbursements can not be handled at any given time, but must be made as spare moments can be found. Therefore a set of stock cards which will lend itself best to this condition is the one to use.



Stockkeeping for the Dealer

Practically everything that has been written on this subject has covered it in such a way that it was not at all practical for that class of stock room operated by the dealer whose repair business does not warrant a separate stock room organization. We are thinking now of the one-man stock room. Sometimes this man has duties as bookkeeper or he may write repair orders. He may be shop foreman or as it sometimes happens, he may be just about everything but the owner of the business.

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Of course a visible record would be the answer but such equipment is generally too expensive to consider for a small department where every item of expense must be watched. We have therefore worked up an equipment which is low enough in cost yet flexible enough to care for expansion. This type of record adapts itself to the use of signals for ordering stock. When a part has fallen below its assigned danger limit, a signal should be placed on the lower edge of the card in the position marked "A" and when stock has been ordered the signal should be moved to position "B" and left until the stock has been received. A glance at each page will tell you what items require ordering and what items have been ordered.

The cut shows a set of ring binders arranged to handle stock records as described. The binders hold 500 separate records, and are carried complete with index tabs. The stock cards are made to agree with our form No. D-21. If the books are bought separately they are \$11.50 each—in lots of 8 to 12 they are \$10.50 each, above 12 they are \$9.75 each.

We cannot stress too strongly the importance of keeping an up to date stock record and we are anxious to place in your hands any and all of the information we can find which will help you to do this. We will handle directly any orders for this equipment. Address your order to the Editor and specify the number of binders you will need.

*We Welcome Suggestions and Inquiries from Packard Service Men. Address All Communications Care
Editor, Packard Service Letter.*