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Ethyl Gasoline

THE increased use of high altitude heads, requiring a fuel of a higher anti-knock value than regular gasoline, has brought many inquiries regarding Ethyl gasoline. Many owners have no clear conception of the purpose of this fuel, confusing it with the "high test" gasolines, which have been developed to provide easier starting in cold weather. The explanation which follows was written for the Service Letter by Mr. W. H. Graves, our Chief Chemist and Metallurgist:

Ethyl gasoline is a mixture of regular gasoline and a few drops per gallon of a material called "Tetra-ethyl Lead Fluid." This material added to gasoline gives it a higher anti-knock value, but otherwise does not change the properties of the gasoline.

If a certain amount of gasoline is divided into two parts and to one part is added tetra-ethyl fluid and nothing added to the other, it will be found that a car will operate the same on either gasoline, providing the car does not knock with the regular gasoline.

The car will not start easier, will not idle better, will not pick up faster, will not give any more power and will not go faster with the Ethyl gasoline than with the regular gasoline, providing of course the engine does not knock with regular gasoline.

Most everyone has seen the demonstration in which is shown the additional power obtained with Ethyl gasoline. This is true, but it is important to note that the engine is always knocking badly when regular gasoline is used, and that the knock is eliminated when the Ethyl gasoline is used. The difference in power obtained is due to the elimination of the knock and not to more power in the gasoline. Run an engine without knocking with regular gasoline, then run it with Ethyl gasoline and no more power will be obtained.

This is not intended to infer that Ethyl gasoline should not be used, however, it is not advisable to spend the extra money necessary for Ethyl gasoline unless the car has sufficient carbon to cause a knock with regular gasoline or unless the car is designed to use it.

Standard Packard cars do not need Ethyl gasoline, unless there is considerable carbon, and usually it is just as cheap to clean carbon as to buy Ethyl gasoline.

There is a great difference in the anti-knock value of regular gasolines, some gasolines (usually cheaper, but not necessarily) will knock even in a clean engine, if so, these gasolines should be avoided. Until just recently, one of the largest oil companies in the Middle West

has been selling a regular gasoline with low anti-knock value, however, most of the large reputable oil companies sell fairly high anti-knock value gasolines that are satisfactory in Packard cars.

Ethyl gasolines, on the other hand, have some real advantages in addition to their high anti-knock value. This is because the Ethyl Gasoline Corporation test every batch of gasoline sold for other properties in addition to anti-knock value. They will not allow gasoline to be sold under their name that is not satisfactory in every way.

The important points watched in Ethyl gasoline are:

Starting:

Cold weather starting of an automobile is dependent to a large extent on the gasoline. The more volatile the gasoline in cold weather, the easier the starting. Ethyl gasolines must have a certain volatility in cold weather to make for easy starting. This is why you sometimes hear that Ethyl gasolines start easy in cold weather.

Vapor Lock:

If a gasoline is too volatile during hot weather, it will boil in the vacuum tank, gascolator or carburetor and make the engine miss or stop. Ethyl gasolines sold in warm climates must be sufficiently non-volatile to prevent this trouble. Ethyl gasolines sold in the winter are different than those sold in the summer. This is also true of some regular gasolines, but many are not changed, and it is these gasolines which give people the wrong impression of regular gasoline.

Gum:

Many gasolines form gum on a carburetor. This is easily told from the varnish or shellac like looking material seen on the outside of the carburetor. This sometimes gets so bad that the throttle or choke will not operate. Ethyl gasolines must not have over a certain amount of gum or gum-forming materials.

Sulphur:

Ethyl gasoline must not have over a certain amount of sulphur. This is important to prevent corrosion of motor parts.

All of these properties are obtainable in good regular gasolines; however, there are so many inferior gasolines on the market that the impression is readily obtained that Ethyl gasolines are the best. Ethyl gasolines are always good, as are also most of the regular gasolines, and with Packard cars, it is usually cheaper to find a good regular gasoline and use it.

There are no disadvantages to Ethyl gasoline that we know of. It does not harm valves or have anything to do with sticky valves, warped valves, pitted valves or other trouble that might be experienced. It does not affect spark plugs, pistons, carbon deposits or other parts of the engine. It is not dangerous to use from a health standpoint, providing it is used in the car in the regular way and is not used for cleaning the car or other parts.

Winnipeg Service



Mr. J. F. Spence, Service Manager of Winnipeg, sent in the photograph of the Service Personnel of his organization in front of their new building, which is the largest and most completely equipped garage in Western Canada, according to their claim, and covers over 70,000 square feet of floor space, being completely equipped for all types of work. Mr. Spence states that while twenty-six of their employees have been with the company ten years or more, the average for the entire staff is five years per employee.

This Ought To Help

Can you possibly lose by sending your owners a Spring Letter on accessories? Alright then, why not plan it now? We suggest that you design it to get your owners in, so you can use the ability you have to sell accessories—maybe the following will be of some assistance:

Dear Mr. Packard Owner:

Have you ever stopped to analyze the features which make up the popular, attractive and different effect some Packard cars have? Usually you will find it comes from some item of equipment that adds to appearance, comfort, convenience or safety. Newer motoring accessories are constantly being developed to increase your pleasure along these lines.

A review of the enclosed pamphlets will give you some descriptions and illustrations of such equipment. These and many others are in our stock, and prices have been reduced on several of them.

During the coming months, you probably will realize more pleasure from driving your Packard than at any other time of the year, so won't you drop in and allow us the pleasure of helping you make your selection?

Very truly yours,

Who Is The Most Important Man In A Service Station?

The Door-man because, by his pleasant, friendly, respectful greeting of the incoming customer, he symbolizes the attitude of the entire organization.

The Tester because, by properly diagnosing the trouble the owner complains of, he paves the way for a correct order to the shop.

The Service Salesman because he is the real contact between the Company and the Owner. By his patient, sympathetic, interested attitude he gains the owner's confidence and goodwill and makes for the strongest kind of assurance of more new car sales.

The Shop Mechanic who does the work called for and takes a real interest in getting the job done right and delivered back to the owner clean and satisfactory, and when promised.

The Bill Clerk who makes sure the invoice is correct in every detail and ready when the owner asks for it at the time of delivery of his car.

The Service Manager who takes a "Sales View" of Service, insisting that every owner be satisfied and the Packard cars in his locality be performing in a way to back up the slogan, "Ask The Man Who Owns One."

The General Manager whose fair and friendly policies toward his customers keeps them boosting for him and Packard, and whose treatment of his employees keeps them interested and alert and working for the Company's success as well as their own.

Springfield, Ohio Service Car



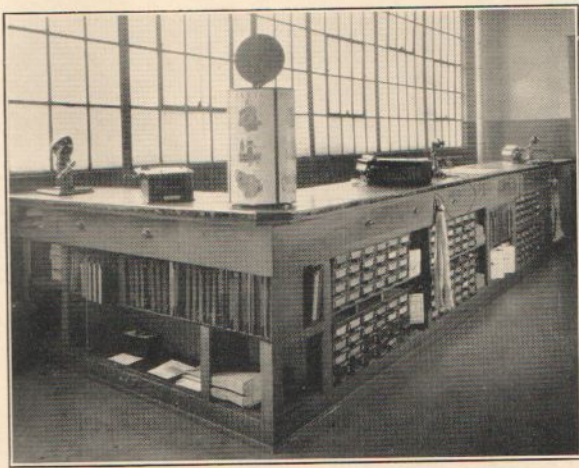
We were very glad to receive a picture of the Service car used by the Pioneer Automobile Company of Springfield, Ohio. The impression you get of their Service Department from this equipment is most favorable. Your Service car should in all cases reflect the quality of the service you render.

Parts Room Suggestions

"Bill" Bernitt, Parts and Accessory Manager at the Detroit Branch, uses a couple of ideas that are well worth passing along. The pictures tell the story. In the first one, you have the Parts Counter from the customer's viewpoint. The items of interest are; first, the convenience of the bins to the counter, and second, the display of those accessories often called for by chauffeurs as well as a few other items displayed.

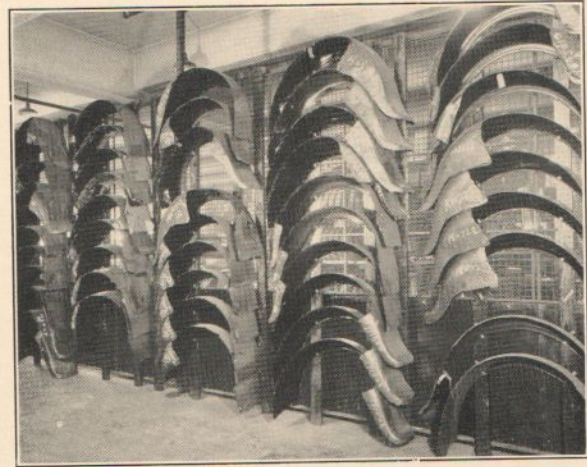


The second view shows the inside of the counter from the Parts Man's viewpoint. Here again, convenience enters the picture; parts books are easily available, small fast-moving parts are grouped in the steel drawers, and the cloths mean clean Parts Invoices, which are written up on the counter register.



View number three shows a portion of the fender stock, in this case located against the wall on very inexpensive hook racks, which make each fender easy to locate and easy to handle without marring the one next to it.

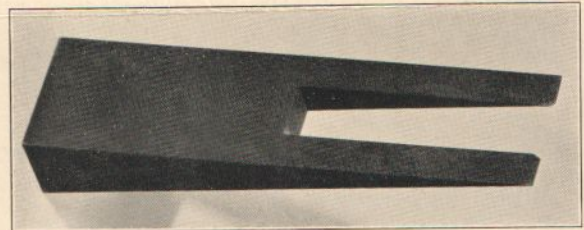
In laying out a new stockroom or in rearranging the old one, sketch out a floor plan taking into consideration all openings, obstructions such as posts, pipes, radiators, and irregularities in the wall. Send the sketch to the factory service department. We will be very glad to assist in the selection of equipment and layout. This gives you the advantage of collective information obtained from actual experience.



During your Spring housecleaning, why not see if ideas such as these, or others that we have shown you in previous issues, cannot be put into effect in your Stock Room? Invariably neatness and convenience in a Stock Room means "more parts profit."

Special Tools

A wedge has been added to the Special Tool list for removing the shock absorber connecting link. This is for use on frames after number 326143 to number 331126 on 826 cars and on frames after number 189597 to number 191126 on 840 and 845 cars.



ST 811 Net \$3.00

The wedge will remove the upper and lower ball joint connecting link on 826 and 840 shock absorbers. The wedge is carried under ST-811, net price \$3.00.

Missing Cars

Packard cars which have been reported missing are listed. If any of these cars are located in your territory, please notify the factory immediately:

Vehicle	Motor	Type
117780	U-117988-E	426 5-passenger sedan
125022	U-125294	526 5-passenger phaeton
136083	136221	526 5-passenger sedan
144559	U-144538-B	526 2-4 passenger roadster
210267	210429	236 4-passenger sport
230729	231035	443 5-passenger phaeton
241570	241770	626 5-passenger sedan
274404	275896	626 5-passenger sedan
291541	290701	726 5-passenger sedan
300847	302566	726 5-passenger sedan

Why Is A Service Station?

That sounds easy—"To fix automobiles"—you say, but your second thought will tell you that this is only a by product. Your next thought might be—"To keep the owner satisfied"—but that too is more or less of a by product. Your next guess very likely would be—"To make a profit."

While we won't argue with you on this point, we will say that when good goods are well sold, a profit should result, but the question has not yet been satisfactorily answered, the real answer to "Why is a Service Station?" is "To sell automobiles."

Now, let's go back a little—Too many Service Stations are operated with the sole aim in view, to fix automobiles. Such stations may have well-trained, expert mechanics and they may do almost perfect work on repairing cars, but the real test is "Does their service sell cars?" Often the answer is "No." To do a good carbon and valve job does not, in itself, sell that owner another car. To adhere strictly to the guarantee and to take care of every single item of defective material, or workmanship does not, in itself, sell that owner another car. He paid for just such treatment when he bought his car and you are, in this case, doing only what the owner expects and, in a sense, has paid for. He might refrain from buying another car should you fail to properly carry out your part of the guarantee terms. But don't be fooled into thinking that simply because you do what you promised him you would do at the time of the sale, that he will feel obligated to hand some salesman a repeat order.

Well, then, what kind of service does sell more cars? First, it's the kind that takes for granted the fact that you will have trained expert mechanics; courteous and efficient Service Salesmen, adequate stock of parts; modern tools and equipment, and a clean, accessible, well-lighted Service building.

Second, Service that sells, takes for granted that you will render guaranteed service gladly and expertly; that you will handle such work on a clean-cut, business-like basis; that you will supply him with that service to which he is justly entitled, without additional charge.

Third, Service that sells, pre-supposes a profit—I sell a suit and I am entitled to a fair profit; you sell a gasket or a piston and you are entitled to a profit; I sell my ability to write a letter and it helps the company and makes a fair wage for me. You sell your shop's ability to clean carbon and tune a motor, and it helps your boss make a fair wage along with you and your mechanic. All of which is very fine, but so far we haven't sold another car, all we have done is to *maintain* his car, we haven't necessarily rendered a *service* that *sells*.

To render service that sells cars, we must have these three things and we must have them in the highest state that it is possible for us to develop them. But, we must add two things to them, we must make our service *personal*; it must fit the individual owner's personal requirements. We must make our service *sincere*; it must produce in the owner the feeling that his desires concerning his car are our direct responsibility.

What An Opportunity

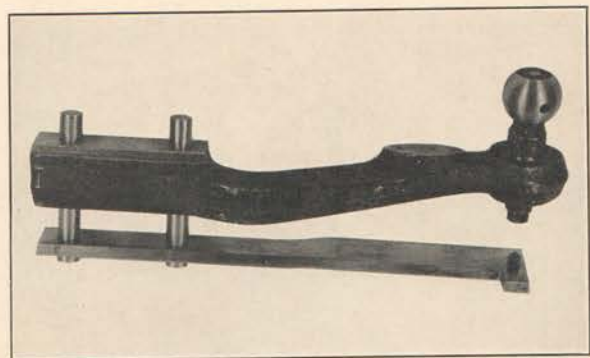
Decoration Day is the signal for the touring season to begin and it's pretty close at hand. Jack Wilson says, "Never before have we had such a complete, attractive and varied line of trunks for Packard owners. Besides the old standbys, the PA-1980 and 1928, we have the new trunk with a wardrobe suitcase combination, the 'Sportsman's model' and, of course, running board and fender trunks."

We admit Jack has some fine-looking trunks, and the quality has been proven, so we'd like to see you fellows make him work overtime, particularly when we think of the possible profits and commissions. How about it?

Improved Top Cylinder Oil

Improvement has been made in the oil sold through the Accessory Department for Motop Oilers—its heat resisting, lubricating, penetrative and gum solvent qualities are high. It has a Pennsylvania paraffin base—it leaves a negligible residue and has a relatively light body for valve lubrication. Its color is green—its odor that of bitter almond. We believe results of dynamometer, laboratory and road tests show Jay Motop Oil superior to the former Jay lubricant. Have your customers use it!

Steering Knuckle Lever Gauge



ST 804 \$2.00 Net

The steering knuckle arm is usually thrown out of position through bumping a high curb, or other obstacles, thus forcing the front wheels out of line. The steering should be checked with a steering knuckle arm gauge by removing bolts and nuts and inserting the two pins of the gauge into the arm holes. The cone point of the set screw at the end should be pointing to the center of the steering arm ball joint, plus or minus $\frac{1}{8}$ ". If bent more than $\frac{1}{8}$ ", arm should be replaced as this causes poor steering geometry and tire wear.

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