

VACUUM CHAMBER EASY TO KEEP IN NORMAL CONDITION

Internal Repairs Seldom Needed; Float Valve Leakage, Causing Gas Overflow, Is Simple Case.

It is very unlikely that internal repairs will ever have to be made to the vacuum chamber of the vacuum tank, as it is a very simple construction and there are not many parts that could interfere with its functioning, says Motor. Before any attempt is made to take the tank apart the owner should be positive that it is the cause of the trouble. It is always possible to test the tank by opening the pet cock at the bottom and if more than one-sixth of a quart of gasoline flows out, it is certain that the system is performing its function properly.

Running the engine at slow speeds with an open throttle for a long time, such as in ascending a long, gradual hill, may reduce the vacuum to a sufficient extent that the tank will empty itself, or this condition might result from dirt or foreign matter getting in and clogging the gasoline feed tube; that is, the lead from the tank to the vacuum tank.

SUCTION EASY TO GET
If it is a case of insufficient suction, this can always be cured by letting the engine run with the throttle closed for a few moments, after which sufficient suction will be created to fill the tank almost instantly.

In case the float valve leaks for any reason, which would cause an overflow of gasoline from the tank either through the vent pipe or some other portion, the inner shell can be taken out by removing eight screws at the top of the tank. The tank may then be filled with gasoline and will act as an ordinary gravity system, enabling the owner to drive to the nearest garage, where the float may be repaired.

In taking off the head of the tank, after removing the eight screws, care must be used so as not to damage the gasket, as in replacing the head it is necessary that the joints be kept air tight. This gasket is shellacked.

TANK CAN BE FILLED
Should the tank ever become entirely empty, it may be filled by closing the engine throttle and turning the engine over a few revolutions. This will create a sufficient vacuum in the tank to fill it. If the tank has been allowed to stand empty for a considerable time and does not readily fill when the engine is turned over, either sediment or dirt has accumulated under the flapper valve, or the valves are dry.

To overcome this difficulty, remove the plug at the top and squirt a little gasoline into the tank. This will wash the dirt from the valve and also wet the valves and cause the tank to work immediately. The flapper valve sometimes accumulates a black deposit, which may tend to hold it from being kept tight to its seat. In this case the valve should be cleaned with a knife. This trouble can be detected also by overflowing of the tank, as if the flapper valve is not tight on its seat, gasoline will come out from the upper chamber to the lower.

Hertzian Wave Will Direct Torpedoes in Next Big Conflict

Flying torpedoes directed by Hertzian waves are to be a feature of the next war, according to Le Petit Journal. It is said that the latest experiments of the French aviation service have proved that five or six small and inexpensive bombing planes, without a pilot or mechanic, can successfully be guided by a "shepherd," in a larger plane by means of the Hertzian wave.

It will be recalled that, according to reports, Herr Fokker had, during the last year of the war, received from the German war office an order for a similar device. At that time, however, such an apparatus had not been developed to a practical point, but in the winter following the armistice the Volzin company began a series of experiments at the aerodrome at Crotay.

At that time the flying torpedo employed was too light to be controlled by its shepherd. While it maneuvered satisfactorily during the first half hour, it soon got too far away for control, and fell into the sea.

The present achievement of a flock of little planes under perfect control points to the supposition that within a year or two it will be possible accurately to direct the former from a land base at a distance of 100 miles or more.

In this connection, La Conquête de L'Air for April 15 quoted from a recent number of L'Auto with reference to the Tele-Avion, as follows:

Lieutenant George experimented in 1916 with a machine whose control was furnished from stations on the ground; so that he might observe, but did not touch, the controls. Along this line it may be useful to recall that in 1913 the inventor, Detable, constructed a flying machine, which by means of stabilizing cones maintained perfect automatic equilibrium. This invention, left so long in oblivion, has been brought to mind recently by several articles in which the aviator, Leprieu, recalled the result of these past efforts.

At present the study of controlling machines from the earth is being carried on at Villacoublay. It may be noted, however, that working for a long time in the neighborhood of the electric currents seems to have an ill effect, and several officers and men have been made sick by it. The effect produced is said not to be destructive to the flesh as is the X-ray, but rather attacks the nervous system. Means will be found, however, to overcome this difficulty, and it is predicted that the war of the future may count upon one more effective arm.

Auto Owners Don't Worry

If we repair your car you'll save unnecessary trouble and expense.

WE QUOTE PRICES AND STICK TO 'EM

Gill Automotive Service Co.

"We shall merit your confidence."

NORTH 10TH AND HOYT ST.

Broadway 3782

OLD KING COLE IS OUT IN ALL HIS GLORY



Eight Cole aero eights, which took part in the Northwest Auto company parade last week. There were three closed and five open models in the exhibition, which attracted the favorable comment of hundreds along the line of parade.

ASHLAND'S AUTO CAMP TO GROW

City Purchases New Tract to Take Care of Large Crowds of Tourists.

Ashland, Aug. 20.—Never have the tourists spilled over the entire automobile park clear down to the last camping place until this season. It has gotten so crowded, so much so that the city has purchased a tract of land 300 feet on the west side of Ashland creek from the original camp grounds and opened it to the campers.

This tract, which is 300x200, will be fitted up with gas plates next season. There are at this time 25 gas plates in the camp park.

It is conservatively estimated that 1000 persons are camped in the grounds several nights of each week, and always from 300 to 500 spend the night there and have done so for the past two months.

Arrangements are being made by a private party to build a two-story concrete and wood building at the park entrance, which will carry a full line of campers' goods from "eats" to gas and tires. This, however, may not be completed for this season.

This section has become so popular for camping that a rancher has built a large dance pavilion and a room for serving meals, together with a private camp grounds out seven miles on his ranch, which fronts the highway.

And up on the very summit of the Siskiyou meals are being served, with chicken and ice cream as features. The cows browse about on the mountain and the traveler is enticed to draw up, and many to spend several days in this high altitude.

Out on the other side of town, at a

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TIRE COVER GIVES EXPOSITION BOOST

"World's Fair—Portland 1925" Emblazoned in White Letters Approved by Committee.

The latest automobile accessory to be adopted for advertising Portland's fair of 1925, made its appearance last week, and consists of a tire cover for automobiles with the words emblazoned in neat, white letters—"World's Fair—Portland 1925."

This world's fair advertising idea, which appears to be the most easily observed and yet the most inexpensive for automobiles, was originated by J. S. Lebb, a prominent automobile accessory man of this city, who has formed the Original Tire Cover company with offices at 620 Morgan building, to handle the wholesale and retail sales for the Northwest. This concern plans to carry on an exclusive tire cover business and, according to Lebb, will soon announce sub-dealers who will handle the sale throughout Oregon and Washington.

In order to care for the orders already received and those expected to result after the tire covers have made their appearance, Lebb's concern has placed an order for a solid carload of highest grade tire covers. By purchasing in large quantities the covers can be sold to the motorists of the state at a low and popular price, according to Lebb.

Members of the World's Fair publicity committee who have seen samples of the tire cover have expressed approval of the idea.

ROPES STEERS FROM AUTO
Roping steers from automobiles is now applied on ranches at Marfa, Texas. The car has taken the place of the spirited broncho.

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AUTO INDUSTRY TOOK LEAD IN PRICE REDUCTION

H. H. Brooks of Nordyke & Marmon Says American Business Owes Debt to Manufacturers.

That American business owes a big debt to the automobile manufacturers of the country for the lead they took in bringing down prices and thus hastening normal financial conditions, is the opinion of H. H. Brooks, sales manager for Nordyke & Marmon of Indianapolis, who concluded a one month coast trip here last week.

Mr. Brooks was interviewed at the Northwest Auto company, local distributors for the Marmon car, just before he left for a trip up the Columbia highway with S. W. Vogler, president of the Northwest company.

"Of course," said Mr. Brooks, "I don't mean to say that the action of the automobile manufacturers was wholly philanthropic. But there is not a question that they were the first to cut prices on a big scale and thus set an example for manufacturers in other lines which checked the business depression before it had reached the danger point."

EXPERIMENT WAS SUCCESS
"The situation in the spring was threatening. Everyone was loaded up on expensive materials and no one wanted to cut prices until they had been realized on. The Nordyke & Marmon company was no exception. We simply had to face the fact that we had \$12,000,000 worth of stock on hand which had depreciated in value at least \$2,000,000.

"Coupled with this, we had to admit—as did everyone else—that people were not spending their money. We concluded that they were waiting for lower prices, and we did the logical thing—cut the price of the Marmon from \$5900 to \$3985, or just 1015.

"The results justified the company's action. We made the cut May 1 and business picked up right off the reel. In June we had a production and sales which has been exceeded only once in the history of the company. That was in the month of July, 1920.

CHIEFLY IMAGINARY
"This record demonstrated to our satisfaction, at least, that the industrial depression existed chiefly in the imagination of manufacturers, wholesalers and retailers who were simply unwilling to recognize the changed economic conditions and to act accordingly. It proved to us that, far from being broke, the American people had plenty of money, but that they were determined to get value received for it.

"Other auto manufacturers who cut prices had the same experience. They had to take a loss, as we did, but they were repaid by the stimulus which their action gave the general business situation.

"Manufacturers in many other lines have already followed the example of the automobile makers, but I believe we deserve credit as the pioneers in the real readjustment process. Automobiles came down first; other things followed. If they continue to follow, no one need worry about any long drawn out financial depression. It merely remains for everyone—manufacturer, wholesaler and retailer—to take his loss, lower prices all he can and keep business going at full speed. Then readjustment will take care of itself as it has done with us."

Mr. Brooks said the Nordyke & Marmon company contemplates no further reduction.

"The original cut," he said, "was made not on the basis of business conditions but on the basis of May, but as they seemed apt to be during the next year. Anticipated declines in wages and material costs were taken into consideration. The price was set with all this in view and it will remain where it is. It must be remembered that the standard of Marmon value cannot be sacrificed to any expediency. We are now able to produce a better car at a better profit than we could at the old price. That is enough."

The sales manager spoke enthusiastically of Portland as a business and motoring center.

"This is my first trip to the coast," he said, "and I had no real conception of the wonderful motoring country you have here. Personally, I can't understand how anyone in this marvelous land of touring opportunities can afford to get along without an automobile."

'SCOOTAMOBILE' IS VERY ECONOMICAL

Test Showed It Carried Passengers for 10 Cents for Which Car Charge Would Be 56 Cts.

A novel experiment was made in Springfield, Mass., a few days ago to show the relative cost of passenger transportation by trolley and by "Scootamobile," as the new 150-pound aluminum motor car, designed by C. R. Martin of the Martin-Rocking Fifth Wheel company of Springfield, Mass., is called. The result showed that it cost at least five times as much by trolley as by motor car.

The "Scootamobile" is now undergoing severe endurance tests to find and correct the minor faults that always exist in any new design, and the testers tried a little stunt on their own account.

Having drawn off all the gasoline from the tank, they purchased for 5 cents, a pint and a half of gasoline and with this made a trip from the factory into the heart of the city, a distance of four miles and return, and had gasoline to spare.

The trolley car fare from the Martin factory to the center of Springfield is 14 cents (two 7-cent zones). Therefore, two passengers to Springfield and return would have to pay 56 cents in car fare.

With the "Scootamobile" the cost for two passengers was 5 cents for gasoline, and it is safe to estimate not more than an additional 5 cents for the tire wear and upkeep.

TAX ON CHAUFFEURS
In 14 states in the United States there are no tax fees for chauffeurs, while in the other 34 states the fees range from \$1 to \$5.

Continental Motors Parts Station
Distributors of other STANDARD UNITS, CLUTCHES, TRANSMISSIONS, UNIVERSAL JOINTS and AXLES. We can supply your dealer or repairman immediately with the GENUINE PARTS.

Colyear Motor Sales Company
561 Washington St. Bldg. 3331

TIRE INSOLES
Besides being NON-PUNCTURABLE, they add greatly to resiliency of tires and comfort of riding. Call or write for our folder. Free Road Map.

HARPER & HALL
Retreading and Vulcanizing Works, 464 Burnside St., Portland, Or.

MANY "HUBBERNECKS"
In New York city there are 184 sight-seeing buses plying the streets of the greater city. They average 40 passengers at \$1 each trip, over three routes, an excursion around the avenues and drives of Manhattan and trips to Chinatown and Coney Island. The buses draw upon from 200,000 to 300,000 strangers in the city every day.

SPEEDOMETERS and "BIG TEN NECESSITIES"
They're More Than Accessories
Official Service—Genuine Parts
Product Service Station, Broadway at Flanders

The Lark



Let Us Show You Next Year's Car Now!

Regardless of what you pay today, what will the car you buy now be worth next year?

Get next year's car now—The Lark!

It is not an unchanged model with a new price, but a new, improved, better motor car that sets next year's style vogue and leads in mechanical efficiency.

Far ahead in ability and performance, replete with advanced improvements, and notably original in attractive design, the Lark offers the finest investment today, and next year, and the year following! You will be driving a new-type car, while enjoying its new standard of performance and economy.

It is offered in a variety of unusually clever color schemes, with upholstery to harmonize.

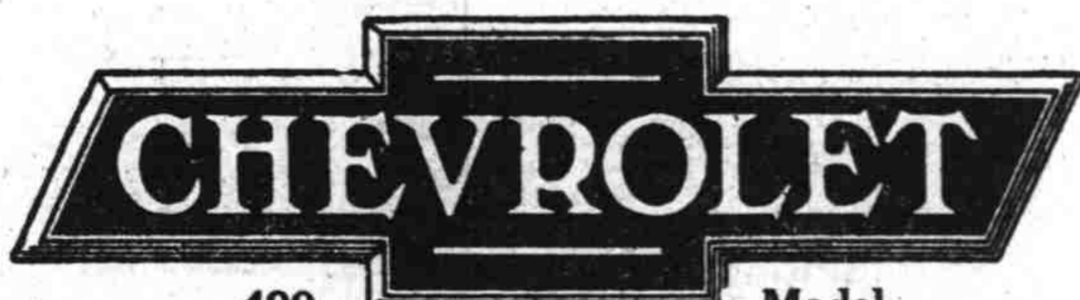
The Lark you buy looks like a custom built car—like it was made to your special order.

It comes to you complete with every accessory and convenience, from bumper in front to trunk at rear.

For the first time the famous Ansted Engine, formerly offered only in Lexington models ranging up to \$4250, is now available in a car of moderate cost. The reasons that this is possible are the reasons why you can get greater value for your investment in any Lexington!

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MINUTE MAN SIX,
A few openings available for live dealers—Write for particulars.
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See the NEW



490. Model

—with these added features of efficiency

Rear Axle—Entire reconstruction rear axle—spiral ring and pinion gears—new departure ball bearings and propeller shaft—rigid construction throughout.

Emergency Brake—Hand lever brake, eliminating service brake on clutch pedal.

Timken Bearings—In front wheels, eliminating ball and cup type.

Battery—Willard thread rubber batteries used in all models.

Steering Arms—Straight taper, eliminating shoulder.

Headlight—No-glare prism glass.

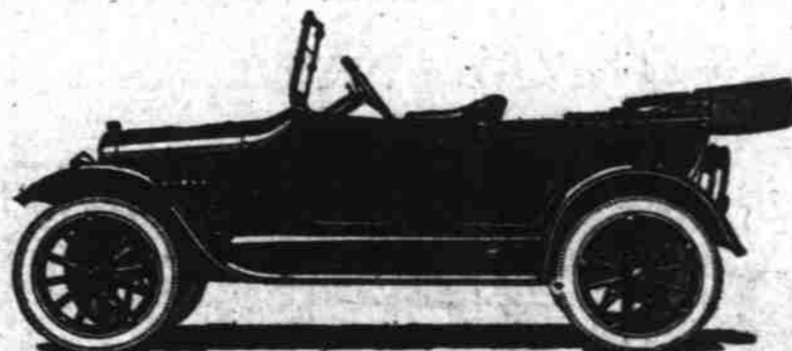
Carburetor—Improved Zenith, enabling great efficiency on high gear at slow speed—a great advantage in downtown traffic.

Clutch—Improved, with device that eliminates all grabbing or slipping.

\$625

F. O. B. FLINT, MICH.

The Product of Experience



Come in and Look Over the NEW 490 Models

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14th and Alder Streets Phone Broadway 240

BRANCHES: Grand Ave. at East Burnside St. Sub Dealer: P. H. DUNN MOTOR CAR CO. St. Johns Milwaukie and Bybee Aves. Gresham Sellwood