

Expert Advice For the Automobile Owner

Queries and Replies Covering Matters of Importance to the Man Who Runs a Car

How often should graphite be used as a lubricant for springs? Would the paste or stick stove polish do if mixed with gasoline?

No rule can be given for this. Apply the graphite whenever it is found to be required. This may be only once a year, and then again it may be often. The object in using a lubricant between the spring leaves is to prevent squeaking, rusting and to cut down the friction. No great harm will be done if the car is used until the lubricant is exhausted. In fact, we would advise operating the car until it is noticed that a new application of graphite is required. Stove polish will not do. You should use flake or powder graphite. Your suggestion as to using gasoline brings up an interesting point. It is slightly preferable to mix the graphite with gasoline because after the paste is applied to the spring surfaces the fuel evaporates and leaves the dry graphite, which acts as a lubricant, yet there is no grease or oil to ooze out between the leaves to catch the dust and give the springs a dirty appearance.

In painting my radiator, head lights and other brass parts of my car black what can I use that will stand the heat of the lamps and radiator?

The simplest method of preparing a black varnish for brass is to fuse three pounds of asphaltum, and after it has been melted add one-half pound of shellac and one gallon of oil of turpentine.

In running less than a mile the water in my car becomes steaming hot and boils if I go very far. The cylinders are clean and timing correct. There is no stoppage. Can you suggest a remedy?

If the timing is correct and the water passages free there is no reason why the water should boil unless the mixture is too rich or the cylinders are carbonized. Examine the timing and the carburetor adjustment once more, then inspect the cylinders to see whether they are carbonized and look at the passageways to see that they are not clogged. Even if the radiator is free from obstructions and the hose connections are clear there may be dirt or sand in the water jackets. Lastly, make sure that water is not being lost either by leakage or by blowing out through the radiator vent pipe. Sometimes the vent opening is placed low, with the result that the water splashes out until enough has been lost to prevent proper cooling. To keep the water from boiling the radiator must be full or nearly so at all times. A shortage of water reduces the amount of cooling, and when the level of water drops below the top of the return connection to the radiator circulation stops entirely.

What is the best means of doing away with the vibration caused by my engine when making more than twenty miles per hour? It has always done this. The car and engine are in good condition except for the vibration. The car has been equipped with airless tires.

The vibration can be minimized by balancing the reciprocating parts carefully. Remove the pistons and connecting rods. Weigh the four pistons and remove the metal from the heavy three until they weigh exactly the same as the lightest one. Do the same with the connecting rods.

In addition, if the pistons are of exceptionally heavy construction it may be possible to remove some excess material from all of them, thereby reducing the weight and vibration. The same may be said of the connecting rods.

What is the best way to strengthen the engine bed? I find that the motor rocks violently when pulling hard. The bolts holding it to the bed are tight and the bed vibrates with it.

It is next to impossible to strengthen the engine bed without putting in a new crank case. Possibly your trouble is due to allowing the motor to pull too hard. When it begins to labor on a hill shift to low gear. Do not strain the motor by allowing it to work under these conditions.

The center bolt in my rear spring breaks frequently. How can I prevent this?

The only possible explanation seems to be that you allow this bolt to come loose, or when you put in a new one you do not tighten it sufficiently. Use a lock washer to hold the nut from turning and, in addition, see that the spring clips are kept tight, because if these work loose an additional strain is placed on the center bolt.

The front cylinder in my car gets too much oil. It works well when it has a clean plug, but after running about one hundred miles it misses. What is the cause of the oily cylinder?

The trouble is undoubtedly due to worn cylinder piston or rings or to the openings in the three rings being out of alignment. An inspection of this cylinder should show where the trouble is, and if the piston or rings are worn they should be replaced. The cause, of course, is due to the plug becoming fouled with oil.

The spark lever on my car is very hard to turn, especially when the motor is hot. Where do you think the trouble is, and how can I remedy it?

While this stiffness may be in any of the joints of the linkage operated by the spark lever, it is most likely that the breaker box is too tight a fit, so that when the motor becomes heated the expansion of the part on which it fits causes it to stick. Disconnect the breaker box from the linkage and note whether it moves freely. If it does not, remove it and rub the interior surface with emery paper until enough material has been removed to allow it to work freely.

Is the compressed oxygen method satisfactory for cleaning carbon out of cylinders so that the pistons and valves will be thoroughly cleaned, or is disassembling engine and scraping the different parts necessary?

Removing carbon from the cylinder by the use of compressed oxygen is entirely satisfactory and highly to be recommended. However, it is something that is best done by a garage, as it would hardly pay you to buy an outfit just for yourself. The carbon is removed by burning, and the reason oxygen is used is that carbon, or any substance for that matter, will burn about five times as readily in oxygen as in ordinary air. Thus carbon will burn with the rapidity of celluloid in an atmosphere of oxygen, yet the incrustated carbon cannot be ignited when exposed to the ordinary atmosphere.

The operation is simple. One of the valve caps and also the spark plug is removed from each cylinder and the piston is brought to top dead center. Then the cylinder is filled with oxygen gas and a piece of cotton waste is dropped into the cylinder and lighted. As long as there is any carbon to be burned oxygen is supplied to the cylinder. The reason that compressed oxygen is used is so that a great quantity of gas can be stored in a container of a given size. The oxygen gas is never used under pressure in the cylinder.

How can I make tire chains last longer?

Upon examination of an old chain it will be found that all the wear and strain are on the link upon which the cross chain is fastened.

When a cross chain wears through and breaks it will be found a good plan to fasten it to the link ahead of the one it was previously fastened to and to continue said operation until all the cross chains have been changed.

Is leakage from cylinder rings into crank case caused from the rings not being worn to fit cylinders or is it faulty rings? Also, when is fuel consumption the greatest, in climbing hills, in high or low gear?

Leakage is most likely due to worn rings, or it may be caused by the split ends of the rings being in line and in this way affording a direct passage for the gases. Before the rings are worn enough to perfectly fit the cylinders there may be a slight amount of leakage—that is to say, the rings will not hold the gas in the combustion chamber quite as well as they will when the rings have become worn to perfectly conform with the shape of the cylinder, but the extra amount of gas is so small that it is hardly worth while to consider it as a leakage.

The fuel consumption is greater when running on low gear for two reasons—the motor efficiency is lower and there is a power loss due to the four extra gears in the gear set that the driving torque must be transmitted through. The motor efficiency is reduced for the reason that when climbing a certain hill on intermediate or low gear that might be climbed on high the throttle opening required for a given speed is less. This means that the actual compression in the cylinders is correspondingly reduced and reduced compression lowers the efficiency. Needless to add, the lower the efficiency the greater the consumption of fuel.

Can gas such as generated from carbide be used in an automobile engine?

Yes. Occasionally we hear of a motorist driving home on acetylene gas when his supply of gasoline is exhausted. The objection to the use of this gas is that it is much more expensive than gasoline.

I notice that in the racing events the cars use castor oil as a motor lubricant. What advantages other than less smoke has this oil?

Castor oil has a greater viscosity than any other oil used for motor lubrication at the high temperatures experienced in racing motors; therefore it helps to prevent the passage of the gases past the piston and the flow of the oil up into the combustion chamber, where it would burn and cause smoke. Since very little of the castor oil makes its way up to the combustion chamber there is very little that is burned, but most of it is used for lubrication, with the secondary advantage that much less oil is necessary. It is not advisable to use this oil in everyday work, however, because it causes a heavy carbon deposit.

Bilious Attacks

When you have a bilious attack your liver fails to perform its functions. You become constipated. The food you eat ferments in your stomach instead of digesting. This inflames the stomach and causes nausea, vomiting and a terrible headache. Take Chamberlain's Tablets. They will tone up your liver, clean out your stomach and you will soon be as well as ever. They only cost a quarter. Obtainable everywhere.

"I am RED PEP Live Wire Philosopher live been hired for 52 weeks. Take my advice each week - be cheerful!"



Watch This Space Each Week



To Do That Fencing Job

at the lowest cost you better let us supply all the

Fence Posts

You can't get better stuff than we have ready, and we believe our figures are about the lowest that such quality was ever sold at.

Come in next time you are in town and we will talk over the situation.

You need some of our lumber, anyway.

Dierks Lumber Co.

CLASSIFIED DEPARTMENT

RATES—The charge for both regular and special editions is 1c per word per insertion, six words to the line. Advertisers so desiring may have answers to their advertisement addressed to a box number, care of The Herald.

Advertisements charged to patrons having accounts are measured by the line, not by the word.

MONEY TO LOAN on your land. Write the First Mortgage Loan & Security Co., Council Bluffs, Iowa. 27-1f-4933

Elderly woman wants light housework or chamber work. No washing. Small wages. Inquire No. 594 East Second street. 27-2f-5644

HELP WANTED—FEMALE
LADY COOK and helper wanted at hotel. D. L. Shull, Hemingford, Nebr. 23-1f-5664

FOR RENT—HOUSES
HOUSE FOR RENT—220 Big Horn avenue. Robert Campbell, phone 712. 26-1f-5627

HOUSE FOR RENT OR SALE. Inquire of C. C. Rodgers. 25-1f-5588

FOR SALE—LANDS
LAND FOR SALE—640 acres, 32 miles from Alliance, two miles from Canton. Call at Herald office or address Box 5629, care Alliance Herald. 26-1f-5629

New Country, Just Opened
New railroads, new towns, soil deep

Eat at the Alliance Cafe

During the Convention and get

**QUICK SERVICE GOOD MEALS
PLENTY TO EAT REASONABLE PRICES**

We are equipped to care for 1500 per day during the convention. Try us.

Alliance Cafe J. M. Miller, Prop.

While Attending the Convention Stop at Hotel Alliance

Nicely Furnished Rooms
50c, 75c and \$1.00

Modern Cafe in Connection
Telephone Black 388

Have Your Old Worn Out Carpets Made Into Beautiful Rugs

FREIGHT PAID

Write for Descriptive Price List

LINCOLN RUG FACTORY
2373 O Street Lincoln, Nebraska

prairie lands with poplar groves, crop failures unknown, no stones, no stumps, cheap lands, easy terms, the poor man's chance to get a home, and the rich man's opportunity for investment. Maps and printed matter free. We also have a few farms to exchange for other desirable property. Thief River Valley Land Co., Thief River Falls, Minn. 14-22f-5701

LAND TO TRADE
80 acre farm near Kansas City, Mo., to trade for cattle or privilege to lease ranch. Box 493, Harrisonville, Mo. 27-1f-5651f

WANTED TO TRADE—Irrigated farm in eastern Wyoming. Water right paid for in government canal. Well improved. Address Box 4789, care Alliance Herald. 611f-4785

FOR EXCHANGE for western Nebraska land. 320 acre improved farm in Nance county, Nebraska. Five miles from Palmer and seventeen miles from Fullerton. Address Box 5764, care Alliance Herald, with full description of land which you wish to exchange and price. 65-1f-5764

FOR SALE—MISCELLANEOUS
RELINQUISHMENT on homestead for sale. I offer for sale a homestead relinquishment of 191 acres in good location. Price reasonable for quick sale. Inquire at The Herald office or address Box 5245, care Alliance Herald. 19-1f-5245

FOR SALE—My property in Duncan's addition, consisting of nine room house and six and a half acres of land. Barn 16x34, including granary, chicken house, buggy shed. Price reasonable. Inquire Charles Watteyne. 22-1f-5525

LOST
LOST—Twin topaz stick pin connected with chain. Finder return to Herald office, or phone 100. may 20-1f-5569

MISCELLANEOUS
WANTED—Man to contract putting up my hay. J. R. PHELAN, Alliance, Nebr. 27-1f-5777

ROOMS WANTED—300 rooms wanted for use of visitors to the Stockmen's Convention. Phone 74. Alliance Commercial Club. 26-2f-5626

JAMES M. KENNEDY, DENTIST—First National Bank Building, Alliance, Nebr. Phones: Office, 23; Residence, Black 10.

Money to loan on real estate. F. E. REDDISH.

RECORD FOR TRAINMEN
Railroad men can secure a very useful book at The Herald office. It is a daily time book for trainmen and engineers. The price is reasonable. 6-1f-5728

LAND FOR RENT
Thirty acres of land adjoining the fair grounds for rent. Can be planted to any crop. Phone Red 365. 23-1f-5549

WANTED—Horses to pasture. Write C. V. Kennedy, Marsland, Nebraska, or phone 340. 25-1f-5236