

# HINTS FOR THE MOTORIST

ALBERT L. CLOUGH

## Blocking-Out The Clutch

THOSE WHO LAY THEIR CARS UP for the winter or even leave them idle for several weeks at a time will be saved possible trouble if they perform the simple and easy operation which forms the title of this article.

### "Settling" Effect Of Long Continued Pressure

When surfaces are left in contact under heavy pressure for long continuous periods they tend to stick together and this is true of the steel and fabric surfaces, which form the engaging disc faces of motor car clutches.

### How Clutches Get Stuck

During the time that a car is left in idleness the clutch discs are continuously pressed together by the powerful spring and after weeks or months of this pressure the surfaces often come to adhere so strongly that pressure exerted upon the pedal will not separate them, rendering the car inoperative until they are forced apart. The accidental presence of oil or moisture in the disc facings seems to aggravate this "freezing" or "settling" action.

### Preventing The "Frozen" Clutch

To prevent this annoying occurrence, the clutch discs should be left out of contact, when a car is to be disused for a long time and this is accomplished by disengaging the clutch and retaining it in this condition until the car is to be returned to active service.

### The Blocking Out Operation

To effect this, push the clutch pedal into the disengaged position and measure the distance from its pad to the heel-board, cut a piece of wood to this length and leave it wedged in between the pedal and the board.

### BACKFIRES DURING ACCELERATION



D. A. C. writes: My 1917 car is still running "good and strong," but has one annoying fault. When I step on the accelerator suddenly, after it has been slowed down, instead of picking up quickly, there is usually a sharp pop in the carburetor and a sort of momentary hesitation before it gets away. Is there anything I can do to stop this?

Answer: If this car still has its original carburetor, substituting for it a modern one, which has an accelerating device, should help to remove this trouble. These accelerating devices, which were not found on the earlier cars, provide for an extra rate of gasoline feed, when the throttle is suddenly opened and thus tend to prevent the abnormally lean mixture and the popping and hesitation which accompanies it. Unless such a device is employed, the air supply enters the manifold so much more promptly than does the fuel supply, on sudden throttle openings, that the resulting mixture is too weak to give a quick pick up. No doubt, your carburetor is adjusted for an economical running mixture and this aggravates the tendency to over-leanness during acceleration.

### PAINT FOR EXHAUST PIPING

E. C. asks: What kind of paint can be applied to the exhaust piping of a car and stand up for any length of time? I have several times painted this piping, but it comes off very soon.

Answer: Some graphite preparation is the only thing we know of that will survive the heat at all

successfully, although there may be some form of black baking enamel that might be better and present a neater appearance. The graphite paint that is used on smokestacks would probably answer fairly well and even an application of stove blacking would last for a while. Personally we don't see why this piping need be painted at all, as it is out of sight.



### ANOTHER OIL PUMPER

N. E. K. writes: The engine of my 1924 car has begun to pump oil badly, what do you suggest that I should do?

Answer: It is not likely that the cylinder bore of so new an engine as this can be worn much out of true, but have the bore examined for scores and if any are found, this will explain the oil pumping. If there are no scores, examine all the rings and if any are found that have not worn bright throughout nearly their entire faces, if any of them are loose in their grooves, so that they have excessive up and down play or have altogether too much and clearance, have new rings accurately-fitted to take their places. Also, make sure that your lubricating system is not supplying an abnormal amount of oil-should find that all the rings seem in pretty good condition, it might be well to substitute an oil-control ring in one groove of each piston, but you better not make this change without obtaining the approval of the service station representatives of this make of car.

## Keep The Speedometer In Order

Proper Car Maintenance Is Otherwise Hardly Possible

SPEEDOMETER DERANGEMENTS are uncommon, but occasional. A broken chain, unmeshed gears or some other accident puts it out of commission and as its failure does not interfere with running the car, too often its repair is put off for a long time or indefinitely postponed, so that a very large number of cars in present use carry speedometers which are not working.

### Valuable As A Mileage Register

It is perhaps to be regretted that this instrument is always known as a "speedometer," for its function of measuring vehicle speed is the less important of its duties. Its service as an "odometer"—mileage or distance recorder—is of greater value and it is doubtful whether a car can be properly cared for unless the distance traveled by it can be read off at any time.

### A Dead Speedometer Involves Risk

Motorists who drive with their mileage recorders inoperative are "fooling themselves," and running the risk of all kinds of preventable damage to their cars. The first thing to do when the speedometer gives out is to have it repaired at once, as the expense thus incurred is the cheapest possible kind of insurance against the costly results of almost inevitable resultant neglect.

### The Odometer Indicates Lubrication Periods

Consistent lubrication is the most important safeguard against premature wearing out of cars and all oiling and greasing operations are performed on the basis of miles driven. With the odometer inoperative the operator has no knowledge of how many miles his car has traveled since its various parts were lubricated and there is nothing to inform him when they require re-oiling or greasing. Estimates as to the distance a car has been driven since a particular date are notoriously far from the truth and much more likely to be low than high, so that where lubrication is performed on the guess-work basis, some car parts are pretty sure to run dry and suffer serious wear.

### Oil Draining Time And Gas Mileage

It is worth while keeping the odometer always at work, merely to be able to tell when engine oil should be changed and for the satisfaction of knowing whether gasoline is being economically used or whether, through some derangement or mis-adjustment, much of it is being thrown away.

### USE OF THE TERM "DEGREE"



W. O. M. asks: What is meant by "degrees of spark advance?" What part of a stroke is a degree?

Answer: A circle is divided into 360 equal parts known as degrees and when a shaft is turned through a complete circle or one revolution, it turns through 360 degrees. One stroke of an engine piston turns the crankshaft through one half a revolution or 180 degrees. For example, if it is stated that the igniting spark takes place at 30 degrees before upper dead center, it means that the crankshaft has one-sixth of a revolution to turn before the piston is at top stroke, after the occurrence of the spark and the spark is said to have 30 degrees advance. Instead of going by degrees, distances on the face of the flywheel can be more conveniently used. One three hundred sixtieth of the circumference of the flywheel would be equivalent to one degree. In the case of a 15 inch flywheel, this would be a distance of slightly over one-eighth inch and the 30 degree advance above referred to would amount to almost four inches on the flywheel face.

Questions of general interest to the motorist will be answered by Mr. Clough in this column, space permitting. If an immediate answer is desired, enclose self-addressed, stamped envelope.



W. R. writes: The engine of my Ford has a knock, similar to a main-bearing knock, which does not occur on a slow, hard pull, such as climbing a steep hill, but becomes noticeable on level going at speeds over 20 m. p. h. What is the cause of this?

Answer: We do not know. Occasionally, when the two end main bearings are in correct adjustment, but the middle one is loose, an engine will operate quietly at low speeds but will knock when the speed is high and the crankshaft is under severe inertial stresses, but this condition is more usual in engines with longer crankshafts than yours. Loose timing gears sometimes become noisy at fairly high speeds, when they run quietly at low and medium speeds, even under heavy loads, but knocks from this cause are usually very noticeable during idling and you do not speak of this being the case. It might be worth your while to check up the adjustment of the center main bearing, as the possible source of this knock.

# CONQUEROR OF THE MONGOLIAN WILDS

Dr. Roy Chapman Andrews, who startled the world a few years ago by discovering a nest of dinosaur eggs ten million years old, arrived in New York on November 9th from his Third Asiatic Expedition under the auspices of the American Museum of Natural History.

Again he attributes much of the success of his expedition to the astounding performance of his five Dodge Brothers Motor Cars.

Following is a direct quotation from an official statement by Dr. Andrews upon his return to America:

The Gobi Desert in Mongolia is the most extensive undeveloped and unexplored region now left in the world. Until a few years ago it was retarded by the impossibly slow traffic of camel trains, the only means of communication.

But now it is being crisscrossed in every direction by motor cars, or, more correctly by one motor car, the Dodge. Sixty or seventy Dodge Brothers cars are making regular trips far into the interior of this vast waste, bringing out loads of furs, precious furs, wool and other products.

No other car except the Dodge is found there because we have tried it out on each of our three expeditions and have had it demonstrated to our satisfaction that the Dodge is the only car that will stand up under the strain of the roadless desert and do everything we ask of it.

Few people have occasion to subject their motor cars to punishment of this severity. It is reassuring, however, to know that in emergencies Dodge Brothers Motor Car is built to meet the test.

These dependable and sturdy qualities also account for the fact that more than 90% of all the motor cars Dodge Brothers have built during the past eleven years, are still in active service.

M. OBERNDORFFER  
124 CLARENCE STREET

## THE HUPMOBILE EIGHT SETS ANOTHER RECORD.

10-Year-Old Boy Drives 484 Miles Over Strange Roads and Through Mountains in 9 1/2 Hours.

Over a route wholly strange to both of them, and which included four hours of night driving through the Berkshire, Southern Massachusetts and into Connecticut, H. M. Lee, of Lansing, Mich., and his son, David W. Lee, recently went from Buffalo, N.Y., to Glastonbury, Conn., 484 miles, in 9 1/2 hours in a Hupmobile Eight sedan. This is an average of 45.88 miles an hour. Mr. Lee, who is with the Motor Wheel Corporation, of Lansing, calls the run to the attention of Hupp Motor Car Corporation officials.

O. C. Hutchinson, Hupp general sales manager, in commenting on the trip, pointed out that "it is the third outstanding performance of a Hupmobile Eight in recent weeks. It follows on the heels of a record 366-mile run from Hartford, Conn., to Windsor, Ont., at an average speed of 44.79 miles an hour, and a 1484-mile run from Rochester, N.Y., to Miami, Fla., at an average speed of 44.86 miles an hour. It again serves to illustrate the remarkable performance ability, easy riding, tremendous flexibility and ease of handling of the car which, ever since the day of its announcement, has been the largest selling straight eight in the world, and has created a record never before approached by any other line car in its first year."

Two of these three record runs, Mr. Hutchinson added, have been made by owners with their personal cars.

### Mileage No. Guide.

While many motorists change the oil in the crankcase of the engine every 500 or 1000 miles, engineers say that mileage is merely a makeshift guide, and often a positively dangerous one. To be on the safe side, it is necessary to know how much dilution of the oil is taking place in the crankcase. Oil should be changed more often in winter than in summer, more often for city driving than for hard driving on trips, more often for an old engine

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than for a new one, excepting an engine that is so new as to be difficult to start.

Uneven Brakes Cause Skids. If the car has a tendency to skid when the brakes are applied, it indicates that one wheel is free and the other dragging. This condition is caused by a lack of equalization in brake adjustment and can be corrected by having the brakes properly equalized.

### Saves Skids or Smashes.

Test brakes carefully before it is necessary to make an emergency stop after the car has been washed. Water, soap or distillate which has been used to remove the grease will frequently affect the brake lining, but after a few applications of the brakes it will be removed.

### Scored Cylinders.

A deeply scored cylinder can be remedied only by re-boring, reaming or grinding and fitting with oversize piston rings. If the cylinders are but slightly scored, they can be lapped in with an old piston covered with oil and emery or any other good lapping compound.

### Account for Loss of Power.

When the engine fails to develop its usual amount of power, it may be due to any one of four principal causes—loss of compression, deranged valve action, faulty ignition or improper carburetion.

All connections on the radiator should be tightened before placing anti-freeze solutions, either glycerine or alcohol, in the car.

Why the Horn Hesitates. One of the most common causes of horn failure is too tight an adjustment. If there is any danger of having the horn fall altogether, it is better to adjust its shaft so that it does not bear so heavily upon the

## When a Scream Startles You

—and your heart jumps up in your throat—and you know one of the children is hurt—run to the medicine cabinet for the bottle of

### Absorbine Jr.

Whether it is a cut hand or a gashed knee—a torn arm, burnt finger, sprained ankle, bruise or open wound—apply "ABSORBINE JR." full strength.

It may smart for an instant—but it will cleanse the wound, destroy germs, prevent infection, ease the pain and promote rapid and healthy healing.

For toothache, severe colic with "ABSORBINE JR." and place in the cavity in the tooth. Then rub the face with this reliable liniment—it stops the pain.

If the children get sore throat or tonsillitis, make a gargle with "ABSORBINE JR." You see how useful, how handy, how necessary it is to keep a bottle of "ABSORBINE JR." always in the house—it saves so much pain and suffering.

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