For Ford Dealers and Owners

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In many parts of America, snow-drifted roads, or roads that are muddy sloughs of despondency in the spring, make it impossible to use even a Ford car in the spring and winter months. And a few precautions are advisable when reviving the Ford from its long winter's nap.

If your car was properly prepared and stored last winter, you will have little to do this spring. However, such preparations are against human nature. And it is more likely that the Ford car was shoved into the barn, at the first cold snap, the water drained out—and nothing else done to it. Now, the car is rusty, the tires are flat, and the engine is stiff and hard to crank.

The first suggestion is that the car be given a good washing and cleaning—beginning with the top, and the seat cushions; and washing off the body, and even the under side of the chassis frame. The big advantage of such a cleaning, if you do it yourself, is that when the dirt is washed off, you will notice many loose nuts and bolts, and cracked parts, which need attention, or should be replaced. Make a list of the things to be done, as you wash off the car.

Spring Tire Trouble

Now pump up all the tires, including the spare. If the tires are pumped up, a couple of days before the car is first taken out on the road, the tires will have a chance to regain their natural shape. Also, the rubber of the inner tubes often rots or dries out, during the winter months; and then the tires give out easily. It is better to have the tires give this trouble, before the car is taken out on the road, than to have to get out on muddy roads to repair rotted tires.

After standing a day or so, it will often

be found that one or more of the tires have developed "slow" leaks. In such cases, it is well to replace both the tire valve "insides" and the valve cap. If the washer, in the valve cap, is good and makes an air-tight joint, it is really not so important as to whether the valve itself leaks a little. But it is preferable

to have both air-tight.

If any of the inner tubes have been patched with cementless, or other unvulcanized, patches last year, it is well to pull off these patches, and do a really good job of vulcanizing every patch, before replacing the inner tubes in the tires. When every patch is vulcanized, much tire trouble is avoided.

The tire casings should be examined for weak spots and breaks. If the casing is allover-old, then it will hardly pay to have the casing repaired. And it may be more economical to use blow-out patches, to reinforce the weak spots, and secure such mileage as may remain. If there is only 25 or 50 more miles of use in a tire, it is hardly advisable to run the risk of tearing a big blow-out in the inner tube, for so little more tire mileage.

Cuts in the rubber tread, which extend to the fabric, should be filled with rubber cement or vulcanized; to keep the water from reaching the tire fabric and rotting it. If the cuts do not extend clear through the rubber, it is hardly worth a busy man's time to bother patching the rubber.

Cooling System

Even if the cooling system has been drained all winter, it is probable that there is now some rust and dirt accumulated in it. It is suggested that the radiator drain cock be removed—as this gives a larger opening—and the radiator well flushed out with clean water.

The side water inlet hose connections should

now be examined, and replaced if they seem weak or rotten. If in good condition, then the hose clamps should be tightened. The top rubber hose connection usually suffers most, from vibration and heat, and often requires replacement.

The fan belt is also likely to require replacement. At least, it should be inspected for a weak joint, or splice. And it is amost certain to require tightening and adjusting, to

prevent belt slippage.

Fill up the cooling system with water and, after other work has been done on the car, it will be well to give the cooling system joints, and the joint between the cylinder head and the cylinder block, a close inspection for leaks.

Engine Lubrication

If the crank case was cleaned out with kerosene and filled with fresh oil, when the motor was stored; then it will not be necessary to do this now. But, it is dollars-to-doughnuts that it wasn't. If not, then the front end of the car should be jacked up, or the wheels run up on higher grounds. Then, when the plug on the bottom of the crank case is removed, the old oil will flow out freely.

The dirt can be washed out, by pouring a couple of quarts of kerosene in thorugh the oil filler opening, and then cranking the motor a few times, to splash the kerosene around in the crank case. Do not run the motor under its own power, with only kerosene in the crank case, as this may cut and score the

bearings.

After cleaning out the crank case, replace the plug and fill up the crank case with clean fresh oil, until the oil just begins to run out of the top pet cock of the crank case. Save the oil, drained from the engine, for oiling the spring leaves, and other chassis parts.

After a winter of disuse, the inside of the timer shell will usually be well gummed up with old oil. The case should be removed, and both timer, and roller brush assembly, should

be well cleaned with kerosene.

Don't oil the timer with cylinder oil. If you do, the heavy oil will keep the roller from making contact with the timer segments, and make the engine very hard to start. Use a light oil, such as sewing machine oil, or use a 50-50 mixture of cylinder oil and kerosene. And not too much of that.

Chassis Lubrication

Fill an oil can, with oil which has been drained from the crank case and, beginning at the front end of the car, oil every joint and rubbing place on the car. A Ford tends to get stiff and rusty, during its long winter nap. Oil between the dashboard and the body,

between the fender aprons and the chassis frame, and oil the hood latches, the door hinges; and all other parts that move, even the least little bit, when the car is racked and twisted in going over rough roads. This will do much to eliminate those minor squeaks and chirps, which do much to detract from the pleasure of driving a car.

If the spring leaves are liberally oiled all over, and especially at the ends and around the spring shackle bolts, this oil will gradually work in between the leaves, and make it unnecessary to separate the spring leaves for

Shoving a wad, of oil-soaked waste, up into

the corners of the cross members of the chassis frame, above the springs, is a good way of keeping the springs oiled. The motion of the springs, compresses the waste and gradually squeezes out the oil.

The hub caps should be removed from the front wheels, and the wheels tried for play and looseness. If too loose, the wheel bearings should be adjusted. And, if the grease is hard and gummy, it should be washed out with kerosene or gasoline; and the hub and the hub cap filled with soft, fresh grease.

Also, it is a good plan to pour some kerosene in the rear axle housing and, after running it a few moments, drain out the greaseand-kerosene mixture with a grease gun, and replace with fresh grease. Even if not cleaned out, some new, clean grease should be added to that already in the rear axle housing. And the other cups, on the rear axle, and on the universal, should also be filled, and turned down a couple of times.

The Gasoline Supply

The changes in atmospheric conditions, during the winter months, cause more or less moisture to condense, in both the carburetor and in the gasoline tank. So the valve of the sediment bulb, under the gasoline tank, should be shut off. Then the plug should be removed, and the water and dirty gasoline in the sediment bulb should be allowed to drain

Also, the drain plug, under the carburetor, should be opened; and the water and stale, dirty gasoline, in the carburetor and feed pipe, should be allowed to drain out.

By filling the carburetor with comparatively fresh gasoline, the engine will be more easy to start. Even at best, it is sometimes hard to start the engine on fuel that has been standing in the gasoline tank all winter. But a few gallons of fresh gasoline, added to that already in the tank, will make the starting of the eng. easier.

Ignition System

When the timer was off for a cleaning, it was easy to see whether the timer wires were worn and faryed, and whether they required replacing. Replacing worn timer wires eliminates much misfiring and grief in Ford car operation.

The four spark plugs should also be removed and cleaned. The spark plugs should be taken apart for cleaning the porcelains, should not be cleaned with emery cloth or sand paper, as this removes the glaze of the porcelain, and makes them fill up with oil much more easily. The points should be carefully spaced, at just 1/32 inch apart.

It is a good plan to take the four coil units to the nearest Ford Agency and have new points put on. And the four coil units tested and adjusted, on a coil unit testing machine.

Starting the Engine

Sometimes the Ford engine seems to forget how to start-after it has not been used for a long time. Turn the switch on. And, if convenient, use about 5 dry cells, attached to the battery side of the coil box. Open the carburetor adjusting needle about one or one and a half turns, from the closed position.

After starting the engine, adjust the car-buretor for smooth running. Now allow the engine to run slowly and easily, for 5 or 10

mnutes, to give the new coil a chance to work into the bearings and other parts, which were cleaned out with kerosene. When the pistons have become well oiled, try the compression of each cylinder separately, by lifting up on the starting crank handle.

The compression should be "lively." That is, the starting crank handle should bounce back a number of times, when the crank is not pulled all the way over the compression. And the compression, of all four cylinders should be about the same.

If the compression is not good, then it is probable that the valves require grinding, or that the valve tappet clearance should be adjusted to between 1/64 and 1/32 inch. Or, it is possible that the piston rings are not a good fit with the cylinder walls. If the en-

gine is full of carbon, or if the valves require grinding, it will probably be well to combine the two jobs, as they go nicely together.

Final Once-Over

Now give the Ford the final once-over, and tighten and adjust such bolts and parts as seem to be loose. Running the engine may have shown up water leaks, or oil leaks, which should now be fixed. Test the rear hub brakes, and the adjustment of the transmission bands.

Inspect the tool kit, and the tire repair outfit, and make sure that these needed materials are all in the car. Troubles are most apt to develop, when the car is first placed in service—and small troubles become big troubles, if one does not have the proper tools to cope with them.