

CARE SHOULD BE TAKEN IN BUYING USED MOTOR CARS

Rules Are Given by Which Un-sophisticated Can Tell Pretty Well if Defects Exist.

BUY OF DEALER, IF POSSIBLE

Few Firms Handling Used Machines Will Misrepresent the Character of Auto to Buyer.

By Hal G. Childs

Sales Manager Covey Motor Car Co. Used cars, as far as they are available, must satisfy the longings or necessities of the human being in his evolution from the speed of the snail to that of the bird. As an aid to the unsophisticated in selecting such an article, the following rules may be observed insofar as they may apply:

It being, of course, necessary that the appearance of the car should satisfy the buyer, it will not be necessary to dwell upon conditions bearing on this subject. If the top is neatly folded down and covered, have it put up and look for tears, holes and broken rear lights. Also see that the side curtains are complete. Try the doors to see that they operate properly, and see that the sides of the body have not broken loose. Look the upholstery over, especially for broken down seat cushions. Raise the hood and see that the hangers, hinges and fasteners are intact.

Look at the radiator, to discover any visible leaks. Then take off the radiator cap and run the motor at high speed. If the radiator is clogged or dirty, it will probably overflow; this should be looked for, especially in the honeycomb radiators.

TEST WHEELS

Now, grip one front wheel and shake it back and forth, giving it the same motion as though steering. This action will detect any looseness in the bushings of the cross arms and drag link. Next, grasp the top of the same wheel and shake it sideways to determine whether there is wear or play in the steering knuckle bushing, wheel bearings, or probably some loose spokes.

Examine the springs and spring lingers for broken parts, and glance along the frame to see if it is, or ever has been, broken. Step heavily on the running boards, to ascertain if there are any broken step hangers. Shake the extra tire carrier, to note whether loose, and if so, see that it has not broken the wire where it is fastened to it.

Now look carefully at the brake lining. If thin, it is probable that the inside brake is worn also. Look for leaking grease at rear wheels and see that no grease is leaking from the plates and various sections of the differential housing; this would indicate hard usage, in which case it should be carefully tightened before purchasing.

Take the crank and turn the motor over slowly by hand, to see if there is compression. There are two causes for weak compression, one, that the pistons or rings are worn and two, that the valves are not seating properly. An investigation should be made in either case, and the trouble corrected. Now start the motor; run it slow, medium and fast, listening for "knocks" or pounds. These may occur from many conditions and various sources. A persistent clicking is usually caused by noisy valves, which do not always affect the efficiency of the motor. Sometimes a knocking sound will be heard when there is end play in the cam shaft, sometimes caused by the clutch, which latter will usually stop when it is disengaged.

WATCH OUT FOR "KNOCKS"
The "knocks" that eventually cause trouble, originate in loose connecting rods either at the upper or lower end, crank shaft bearings, or loose pistons, and unless you have absolute confidence in the firm or person selling the car, and they or he will guarantee the "knock" to be of the reasonably "harmless" variety, why it is just as well to let the present owner continue to own his little rattle box.

While your motor is still running, drop into high gear and put on both foot and emergency brake. Now let the clutch in until it creates a pull on the motor. If there is a heavy, rattling sound, it probably is an indication of worn universal joints. Drop into reverse and low and let the clutch in slowly. If it does not take hold smoothly the clutch is probably badly worn or out of line. Then go into intermediate and drive car.

Disco Starter For FORD CARS \$70

F. O. B. DETROIT

NO FORD TODAY IS COMPLETE WITHOUT SELF-STARTER

No Ford Owner should look at the question of equipping his car as a convenience, it is an absolute necessity in this age of economy, both in time and gasoline consumption. Why run the risk of injuring yourself in cranking a car? It should not be necessary for your wife or sister to crank a car, that is a man's job. If you Ford is Disco equipped you need never fear stalling your Ford in downtown traffic or on railroad crossings, the Disco is powerful enough to run your Ford for considerable distance in case of emergency. This might save your life if your engine stalled in a dangerous place.

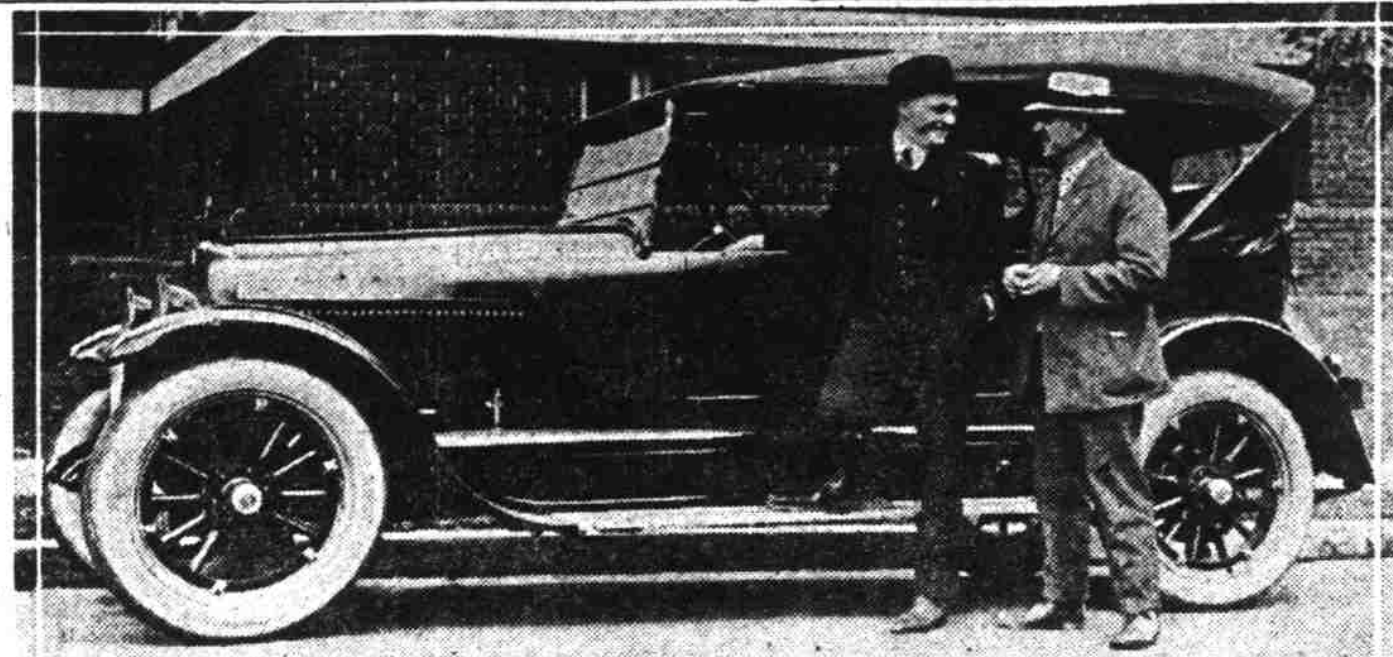
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We advise that you place your order early to insure delivery.

Electric Service Auto Co.
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EXPERTS

NEW OWNER IS DECIDEDLY PLEASSED MAN



F. W. Grosser with his new Jordan Six, purchased recently from C. H. Wertemberger of the Mitchell, Lewis & Staver Co., who stands at his right.

slowly. Next pick up a good rate of speed; the gear rods should be smooth and uniform. Now drop into high gear speed up and try the brakes. Drive over some rough places and listen for chassis rattles coming from steering rods, spring shackles and bushes. A slipping clutch can usually be discovered by slowing down on a hill and then applying the gas quickly. If the motor picks up faster than the relative car speed, the clutch is not holding.

Now stop the motor and run the self-starter several times without the ignition being turned on. This will probably show up any mechanical defects in the starting system, such as broken parts, stripped gears or weak springs. Be sure to have the battery tested by an expert battery man.

Look under the motor for unusual leakage of oil, which should be stopped if it appears. Also look closely for cracked or broken engine supports, which sometimes exist without the knowledge of the owner.

As long as there is a wide selection to choose from, it is just as well to buy from the most responsible dealer; you will seldom find that a house of this nature will misrepresent its cars.

Two Young Women Are Making Good in Accessory Business
At 329 Oak street is a little shop that makes a specialty of handling Kant-Break Spark Plugs and the Vulca Patch, and where two young women who came to Oregon only a short time ago are engaged in a rapidly growing business and are showing some of the old timers here a thing or two about the distribution of accessories.

Use Some Care in Folding Up Tops
Too few car owners are particular enough in folding the top when putting it down. The folds of material get between the top bows and often are destroyed. With some tops it is essential that all folds be kept from between the bows.

Jack Body Up if Lubricating Springs
Lubricating the spring leaves of your car is considered quite a nasty job, but it is more effectively and efficiently done by placing two jacks under the frame of the car and lifting up the end. In this way the weight is removed from the springs and it is an easy matter to work grease and graphite in among the leaves by means of an old kitchen knife or a thin flat tool.

AMERICAN FARMS LEAD ALL IN USE OF MOTOR TRUCKS

Producers Have 79,789 Machines in Operation; Handle 350,000,000 Tons Annually.

The biggest users of motor trucks in the world are the American farmers, with 79,789 motor trucks in operation.

Manufacturers come second, with 75,928, and retailers third, with 74,486.

These figures are taken from reliable statistics for the year 1917. Estimates for 1918 show a tremendous increase in the number of motor trucks in use, but with the farmer still in the lead.

It is estimated that during 1918 approximately 350,000,000 tons of farm products were hauled to market in motor trucks by the farmers and gardeners of the United States.

The actual operating figures averaged for the United States show that motor truck transportation is twice as cheap as horse-drawn transportation.

The motor truck handles life's necessities.

Legislation which hits motor trucks hits at the very source of the life supply of the people," says F. C. Atwell of the International Mack corporation, distributor of Mack trucks. "To unwisely legislate against the motor truck is to take food away from those who need it and to increase its cost."

The motor truck is the people's friend and servant, and legislation aimed to injure and handicap motor truck transportation is a blow against the best interests of the people—both producers and consumers.

"Much of this 350,000,000 tons of food products hauled from the farm to the city by motor trucks was of a perishable nature, and hundreds of thousands of tons of it would have been lost but for the rapid transportation possible with the motor truck."

Legislation aimed to hit motor truck transportation is the result of a narrow-minded attitude of some who hold mistaken notions that the motor truck hurts certain interests of the people. It is for the people, both producers and consumers, to see that the motor truck is given a square deal and not discriminated against the source of livelihood of the people."

Cause of Trouble
When trouble occurs in the lighting system ordinarily it will be found to be due to a blowout fuse, an accidental ground or short-circuit, loose contacts, disconnected battery or accidently run down or burned-out lamps.

SPITS AND POPS NOT ALWAYS DUE TO CARBURETOR

Distributor Points Often Occasion Trouble; Driver Should Know What He Is Doing.

SPARK PLUG POINTS ANOTHER

Weak Valve Spring and Sticking Valve Other Reasons Why Machines May Sputter.

Welcome the day when owners of automobiles will try to remember every time their motor misses or "spits" or "pops"—the terms used, along with considerable language, to express their trouble to the service man—that nine times out of 10 their trouble is not in the carburetor, as most of them suppose.

A carburetor, mechanically correct, will not get noticeably out of adjustment, and unless you know exactly what you are doing, leave it alone. A proper adjustment necessarily means that the motor must run a few minutes

before it warms up to its greatest efficiency. An adjustment that starts right off the reel in the morning might suit some of these would-be drivers but it also means greater expense and more or less trouble all the rest of the day.

Quite often a miss is located in the distributor points, where, after many miles of travel, the fiber block on the distributor arm becomes worn to such an extent that there is no break or gap in the points, which causes no end of trouble, but which is very easily remedied. Then again a miss might be located as a result of badly spaced spark plug points. It is as necessary to have these corrected as any other part of your motor. Other times a weak valve spring may hold and jump when

running on high at a low speed, and more often over-adjustment of valve rods, which is no job for an amateur to handle.

Then there is the sticking valve, which, though more serious than some of the other symptoms, can be righted in a very few minutes by the liberal use of coal oil, and the motorist who will take the trouble to use coal oil on his valve stems about twice a week will cut out dozens of little troubles.

When there is the least doubt in your mind, leave the hood hooks alone and do your diving in the lake, not under the hood. In this way you will prove that you have something under your hat besides your hair.

Way of Removing Pinion Nut Given

The car owner who does his own work is sometimes puzzled in regard to removing the drive shaft pinion nut. The operation begins by taking out the cotter or locking wire. Next a special wrench is used, and this may be made from a quarter inch steel plate, the length and nut size being made to fit the particular make of car. To remove the nut the gear is placed in reverse, the pinion cups are opened and the engine turned over by hand. To put the nut on, the gear is put in low, and the engine is cranked.

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First on the streets of Detroit—1894.
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First in America with left-side drive.
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First to completely equip a car as it should be, including—5 wire wheels—5 oversize cord tires—Victoria side curtains—Johnson plate-glass side and rear curtains—bumper—spot light—glass rain and wind deflectors—motor meter—trouble lamp—automatic tire pump—full tire cover—tank of gasoline—license tag—and, last but not least—

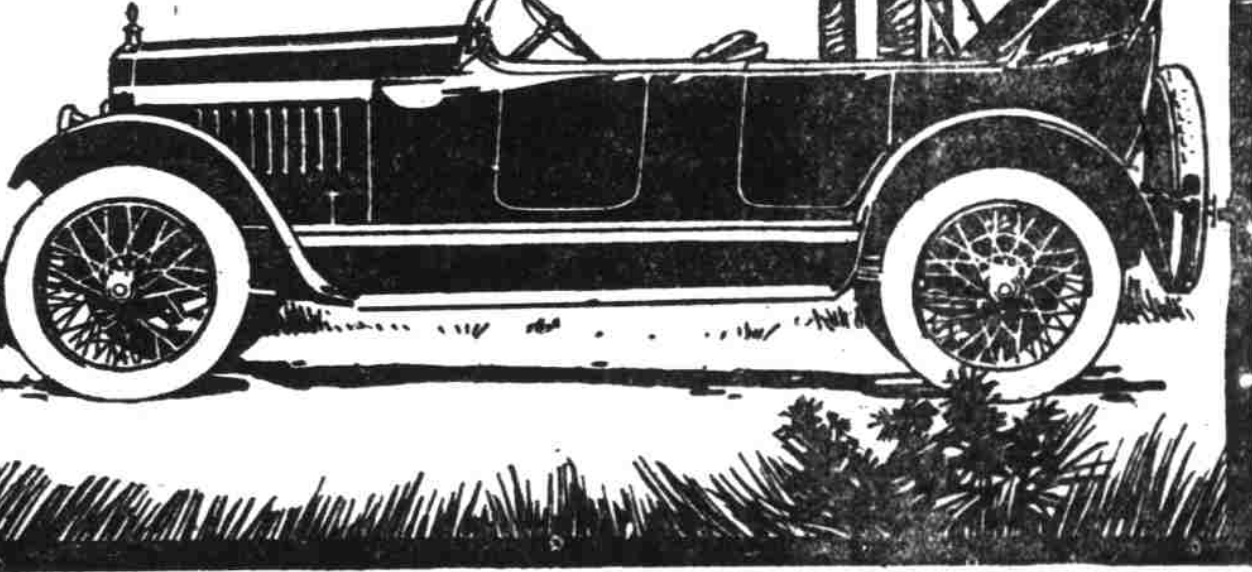
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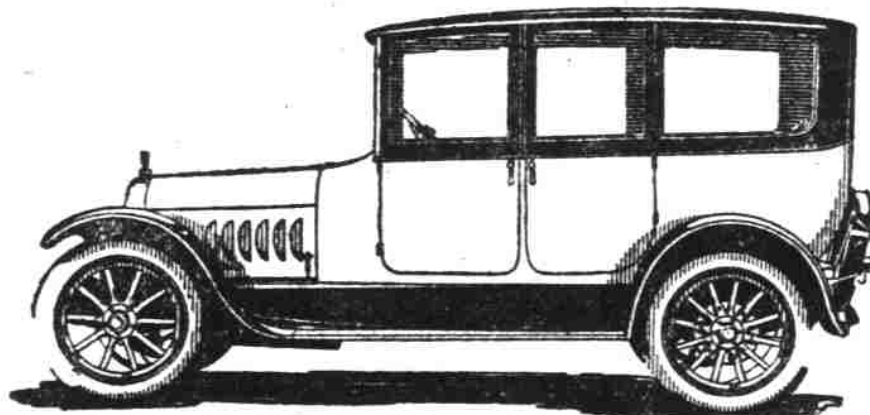
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Every Dot represents Ten Satisfied Delco-Light Users

More Than 75,000 Satisfied Users

DELCO-LIGHT was designed and built by men who were raised in farm homes—who experienced the discomforts and inconveniences of farm life—and who set out deliberately years ago to develop an electric plant that would provide city advantages for rural communities. They were the same men whose engineering talent had made DELCO Starting, Lighting and Ignition Equipment for automobiles the standard of the world— They knew electricity—and they knew the needs and limitations of farm life— They knew that an electric plant to give service in a farm home must be simple so that it would not get out of order and require complicated repairs— It must be easily operated and require little attention— It must be very economical in operation— It must be built to stand hard usage and it must last indefinitely—

It required five years to develop a plant that would measure up to these specifications. There were five years of hard engineering effort back of DELCO-LIGHT before the first plant was put on the market three and a half years ago. Today DELCO-LIGHT is furnishing the conveniences and comforts of electricity to more than Seventy-five Thousand farm homes. It is providing an abundance of clean, bright, economical electric light for these homes. It is furnishing power to pump water, operate washing machine, churn, separator, vacuum cleaner, electric iron, milking machine, and other small machinery. And everywhere it is demonstrating its wonderful efficiency—and actually paying for itself in time and labor saved.

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