Washing is not always necessary if the car is frequently wiped off with a good dust cloth, just as you would wipe the dust off of furniture.

Good results may be obtained by occasionally using a good polish, like Simoniz Kleener or something of equal quality, followed by a thorough rubbing, being careful to not use too much of the polish, and not rub too hard.

We believe it advisable not to use polish more than two or three times during the year.

Do not use soap in washing, as many kinds of soap are harmful to Lacquer.

Detecting Difficulties

ELECTRIC CRANKING FAILS

1. Loose Battery Connections. Battery terminals are subject to corrosion that usually takes place between the battery post and terminal where it cannot be seen. When testing for a loose connection, remove terminal entirely from post and thoroughly wipe off both post and terminal. Replace terminal by again clamping it tightly to the post.

A sudden dimming of the lights when the starter button is pushed in usually indicates a broken or loose battery terminal.

- 2. Depleted Battery. Dim lights with failure to crank usually indicate a run-down battery.
 - 3. Starting motor brushes making faulty commutator contact.
 - 4. Seized motor bearings, or transmission gears engaged.

FAILURE OF ENGINE TO START

- 1. Switch not turned on.
- 2. No gasoline.
- Water in gasoline, or poor grade of gasoline in extreme cold weather.
 - 4. Weak ignition.
 - 5. Contact points in distributor head out of adjustment.
- Open circuit in the ignition resistance unit. Resistance coil may be disconnected or broken.
 - 7. Water on coil, distributor or spark plug terminals.
- 8. Spark plugs improperly adjusted. Clean and set to gap gauge mounted on distributor wrench.
- 9. Over-rich mixture, or what is commonly called "carburetor flooding" caused by continued use of choke. If there is good, clean gasoline in the carburetor and a good spark at the plugs, your engine will start when properly handled.

ENGINE STOPS

- 1. Lack of gasoline. A popping or choking usually precedes the final stopping of the engine when the gasoline ceases to flow into the carburetor.
 - 3. Contact arm adjustment loose.

4. Engine out of oil, usually indicated by a knocking in the engine, followed by a complete stop. If this occurs, do not attempt to use either the electric starter or hand crank. Let the engine cool off. This usually is a serious matter, and the engine should have the attention of a good mechanic before attempting to put the car into service again. This same condition may be the result of a sudden loss of water from the circulating system. Should this be the case do not pour a fresh supply of water into the radiator until the engine has had ample time to cool off thoroughly.

REASONS FOR ENGINE MISSING

- 1. Short-circuited or dirty spark plug, or plug out of adjustment.
- 2. Partially short-circuited or broken secondary terminals. These are the wires running from the distributor head on right hand side of engine to spark plugs.
 - 3. Poor contact between the various ends and clips of wires.
- 4. Loss of compression in one or more cylinders. Valves may be stuck in their guides. Valves may need regrinding or reseating. A valve spring may be broken or the adjustment of a tappet may have become loosened to a point where the tappet is either holding the valve open continually or not raising the valve off the seat at all. An inspection of all the tappet clearances will show this at once.
 - 5. Air leaks around inlet manifold, or float stuck in carburetor bowl.
 - 6. Improper functioning of vacuum tank.

ENGINE KNOCKS

- 1. Connecting rod bearings loose. Loose bearings give a light knock at high speed or when under a heavy pull. If you are convinced that this is the trouble, go to your dealer for assistance. Do not attempt to make major adjustments of this kind unless you are skilled in motor mechanics.
- 2. Loose main bearing. This can be distinguished from a loose connecting rod bearing by a heavy pounding under low engine speed or a heavy pull.
- 3. Too rich a mixture. See that dash carburetor adjustments are in "lean" position.
- 4. Carbon in cylinders, due to the use of improper oil. Have carbon cleaned out. Wash out present engine oil in reservoir and begin using an oil of better quality.
- 5. Worn valve tappet, (light tapping sound). Tappet adjustments loose.

ENGINE RUNS BUT WILL NOT PULL ON GRADES, OR WITH HEAVY LOADS

- 1. Loss of compression due to leaky valves. This is usually due to running with too rich a mixture, or too much oil may have caused valve seats to become gummed up.
- Too rich a mixture through some trouble in the carburetor—flooding probably, due to grit or foreign matter getting under the float valve seat.

- 3. Float in carburetor sticking.
- 4. Late ignition.
- 5. Cold engine. Improper vaporization is usually the result of a combination of cold and a poor grade of gasoline. This applies only to extremely cold weather and should prevail only for a few minutes when first starting out when the engine is thoroughly chilled.
- 6. Lack of water in the radiator or proper amount of oil in the engine.
- 7. Improper flow of gasoline to the carburetor, usually caused by some foreign matter getting into the gasoline line, and made known by "spitting back" through the carburetor, especially when you are about to open the throttle.

ENGINE OVERHEATS

Stop Engine immediately and investigate when this condition prevails. Some of the causes are as follows:

- 1. Low supply of water.
- 2. Carburetor choke improperly set.
- 3. Lack of engine oil.
- 4. Improper ignition timing.
- 5. Loose or broken fan belt.
- 6. Cylinders carbonized.