Radiators on many cars can be flushed with a garden hose after cleaning compound has had time to do its work. Hose at radiator outlet is disconnected

measured amounts to the fuel, introduced directly into the air inlet to the carburetor and combined with the crankcase oil. It's a general practice, after adding the solvent, to operate the engine for at least 30 minutes at fast idle. Following this desludging, or "limbering," treatment, the crankcase is drained and flushed, the oil-filter cartridge is changed and the crankcase is refilled with new oil.

One of the best quick checks of general engine mechanical condition is made with a compression gauge. A variation of more than 10 lbs. pressure between cylinders indicates the presence of mechanical faults which need further investigation. The test always should be made with the engine at operating temperature and the throttle and choke in the wide-open position. Two faults commonly turned up by a compression check are bad rings and valves. To determine whether the valves or rings are at fault without removing the cylinder head, unscrew the spark plug and place about a tablespoonful of heavy oil on top of the piston to form a temporary compression seal. Replace the gauge and repeat the test. If the gauge comes up to normal, it is safe to assume that the rings are defective. There also is the possibility that either the piston or cylinder wall is at fault. If no change in the reading results from the second test, then the trouble probably is due to faulty valves. Sometimes a head-gasket leak is the cause of a low reading in one cylinder but this is comparatively rare. If the result of the tests indicates valve trouble, an experienced mechanic will listen carefully at the carburetor air intake and tell you in an instant which valve is leaking in the faulty cylinder. He knows that a leaking intake valve makes a sharp, distinct hissing sound, but a leak at the exhaust valve cannot be heard because the leakage is going into the exhaust manifold.

Cooling system: When it comes to smooth operation, one of the most important parts of the car is the cooling system. If you have a late-model car, all that may be necessary to condition the system is to clean the radiator with one of the compounds made for this purpose and flush it out with a garden hose. Simply allow the compound to remain in the system the length of time specified in the directions on the can. Then, disconnect the outlet hose from the bottom of the radiator and insert the garden-hose nozzle into the filler neck, flushing out the radiator with a gentle spray. Be sure to disconnect the lower hose, rather than merely open the drain cock, as the latter will not permit a sufficiently fast flow of water to carry away all the rust and scale loosened by the cleaner. Don't forget that the efficiency of the cooling system, as well as the operation of the generator, depends on the tension and condition of the fan belt. Replace a worn belt and adjust the tension by swinging the generator on its mounting so the slack in the belt is between ½ and ¾ in.

Ignition system: The condition of the battery is the first thing to consider when getting the electrical system in shape. Keep

Box wrenches placed over the terminals, as shown, form convenient grips for lifting battery from car