



Left, a sketch of one type of electric fuel gauge. Motion of the tank float causes the movable contact to slide over a rheostat. Right, disassembled view of air cleaner. Filter is easily cleaned with gasoline

parts, the carburetor body should be given a thorough cleaning with lacquer solvent (thinner), which will remove the accumulated gums and dirt. Pour the solvent into a container and place the carburetor body in the liquid, allowing it to remain immersed for about one hour. Cover the container during this time to prevent rapid evaporation of the contents. *Caution:* Lacquer solvent is highly flammable and volatile. Remember the fire hazard, and also avoid inhaling the fumes.

After cleaning with solvent, remove the carburetor body and blow out all the passages with compressed air. A bicycle pump will provide sufficient air pressure for this job. Clean small parts by placing them in a fine-mesh wire strainer and shaking them lightly in the solvent. Never use a sharp-pointed tool or a wire to clean the passages in the carburetor or jets. The jets are calibrated to precise dimensions and any enlargement of the openings or scoring of the seats will affect the operation of the carburetor.

Be especially careful when assembling jets and ball valves to make certain that dust and fine abrasive particles do not find their way into the seats and openings. Be sure that all retainers are installed with the proper gaskets. After installing the float, check the level to be sure that it agrees with the float level specified for that particular carburetor. Likewise, carburetor manufacturers provide specific recommendations for setting the metering rod and the antipercolator mechanisms as well as the automatic choke. These recommendations will vary for different makes and types of carburetors, so it's a good idea to have this information at hand for the

particular carburetor you are servicing.

After the carburetor has been cleaned, checked and reassembled, replace it on the manifold, using the proper gasket, and drawing the mounting screws down uniformly. Connect choke and throttle controls and the fuel line. Then disassemble the air cleaner and clean it thoroughly before replacing. To get the best performance from the carburetor, the engine must also have good ignition, strong compression and clean spark plugs.

Start the engine, and while it is warming up note carefully the action of the heat-control mechanism. When the engine is cold, the valve is closed and the hot exhaust gases are deflected upward and around the intake manifold. As the engine manifold warms to operating temperature, the thermostatic spring gradually loses tension, permitting the valve to open. Proper operation of the valve mechanism is

When engine and carburetor are in good operating condition, adjusting idling speed and mixture is simple

