

AUTOMOTIVE Restoration & Maintenance

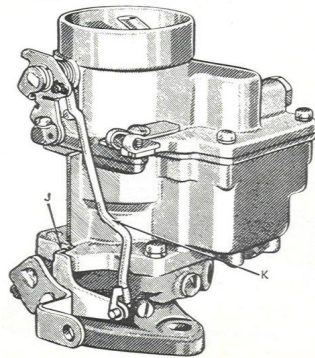


Tech Tip

Carburetor Flooding

There's nothing more troublesome than to have your car stop dead at a stop light and it won't start. In most cases you have become the victim of engine flooding (carburetor flooding) or lack of gas due to vapor lock. Vapor Lock is covered in another "tech Tip."

Carburetor Flooding - There are two basic reasons for Carburetor Flooding. The first is a leaking needle valve inside the carburetor. It is located just inside the carburetor where the gas line is attached. The needle valve allows just enough gas flow into the carburetor to maintain the proper level of gas in the carburetor "bowl." It is opened and shut by a needle valve operated by a "float" that rises and falls as the level of gas changes in the carburetor. A needle valve can leak due to a worn or damaged needle valve or "seat." Original needle valves in all our carburetors were all-metal and subject to wear, scratches or chemical deterioration. The needle valve "seats" were brass and also subject to wear and scratches.



Today's replacement needle valves usually have a softer neoprene tip which offers better sealing and will tolerate minor imperfections and wear in the "seat.."

In some cases high fuel pressure can cause a good needle valve to leak. High fuel pressure is the result of an incorrect fuel pump or an electric pump producing too much pressure. The fix is to first check the pressure to the carburetor. It should be between 4 to 6 psi. If it is too high you will need to replace the fuel pump or install a fuel pressure regulator.

The other common reason for carburetor flooding is a maladjusted or defective (leaking) float. If you have a carburetor rebuild sheet it will have the correct float setting. If not, a good rule is to set the float to shut the needle valve when the top of the float is approximately level or the top of the float is just below the top of the carburetor bowl. Lay a straight edge across the top of the carburetor bowl to check the float position.

If the float seems to "sink" in the gas, it probably has a leak. Remove it and shake it. If it has gas in it you'll need to get a new float. In some cases you can locate the leak and repair it with a soldering iron but it's a very tricky repair. Just a little additional solder will add enough weight to make the float too heavy.

- Kaiser Bill