AUTOMOTIVE Restoration & Maintenance



Tech Tips

Engine Stopping - Vapor Lock

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 <u>engine flooding</u> or lack of gas due to <u>vapor lock</u>.



Vapor Lock - There are two main types of fuel problems that affect our old cars. One is the dreaded vapor lock due to gasoline percolation. Percolation is caused by the gas being heated sufficiently to turn the liquid gas into a gas vapor. The newer gasoline is even more susceptible to vaporizing. This problem usually occurs in the metal gas line routed close to a hot engine. The line doesn't have to touch any part of the engine in order to become hot enough for percolation to occur. Two things contribute to percolation, a slight leak in the line or low fuel pressure. The leak will not be evident under normal circumstances so it is very hard to detect. It will allow vapors to escape only under higher than normal pressure. Low fuel pressure is the result of a leak or a poor operating fuel pump.

The fix is to first check all fuel lines for possible leaks, especially at all connections. Second, reroute the fuel lines away from the engine as much as possible. Late 1952 and newer Kaisers are less prone to vapor lock as the line routing was changed by the factory. Third, install an electric fuel pump as close to the gas tank as possible along with a pressure regulator to maintain 5 to 6 psi. Be sure to route the wiring through the ignition switch circuit. An emergency cut-off pressure switch can also be installed. It will automatically cut off the fuel pump if the oil pressure drops due to engine stoppage and the ignition is still on.