

WHY WON'T IT RUN PART II

By Dick Ray
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The first article in this series described the ignition troubleshooting steps to follow when your car stops running during a run. All of your efforts have established that there is a good spark. Maybe the trouble is in the fuel system. By now several of your fellow track car operators who are running with you have walked up to your car to ask if it's out of gas. If you don't find the trouble soon, you will find yourself on the embarrassing end of a tow bar.

What to do...first, turn off the fuel flow valve, and remove the fuel bowl. If the bowl is full of dirt or water, empty and clean it. You should then open the valve for a few seconds, with the bowl off, to drain any potential dirt particles from the bottom of the tank, so as to prevent refoiling of the strainer. Next, drain the carburetor by loosening the petcock on the bottom. Leave the petcock open, replace the fuel bowl, and turn on the fuel flow valve to flush the fuel line and carburetor with fresh gas. Finally, close the carburetor petcock, and try starting your car (Ed. Note: before you begin cranking, it would be a good idea to push the car a few feet ahead from where the flushed gas spilled onto the roadbed, so as to avoid a fire hazard from any "stray" coil or timer sparks igniting the gas fumes). The engine should now start, unless you have other problems!

If dirt, fuel tank rust, or water was the problem, then the fuel bowl will have to be cleaned at frequent intervals. If it is excessive, then the tank should be removed and cleaned with lacquer thinner or other solvent. Placing a length of chain or crushed stone into the tank while shaking vigorously has been known to help. Do not be alarmed if the fuel bowl does not fill promptly with fuel after you replace it after cleaning. It is full of air, which will "bleed" out, as it's replaced with fuel.

The above procedures should solve 90% of the breakdowns due to fuel system troubles. However, other problems can cause a breakdown. A clogged vent in the fuel tank cap is especially subtle. The symptom is that the car will start after sitting, or priming, but will stop soon thereafter. Leaving the cap loose or off will get you moving again (you didn't inadvertently switch gas and condenser caps did you?...the condenser cap has no vent).

Flooding is rare, and is accompanied by all kind of rich fuel mixture symptoms. It could be caused by a bad float or dirt under the inlet valve needle. A small hole in the side of the carburetor is

supposed to leak excess fuel onto the ground before it fills the crankcase. This vent hole also allows the air above the fuel level inside the carburetor to be at atmospheric pressure. The hole must be kept open. If the engine is flooded, the spark plug will be wet with fuel. To clear the engine, open the crankcase petcock and drain it. While the spark plug is out, close the mixture adjustment, open the throttle, and crank the engine over. This will clear out excess fuel in the cylinder and ports. Now install a new plug, adjust the mixture to the normal setting, and start it up.

The presence of water in the gas tank is a normal occurrence for infrequently used vehicle. The accumulation can be minimized by either keeping the tank full of fuel at all times, or moving to Arizona! Water also come from the bottom of your gas can. Never empty the very last pint of gas from your gas can, because that is where the water may be. A fuel bowl normally does an excellent job of separating the water and dirt from the fuel. It also gives a visual indicating of when it need cleaning. Adding an in-line fuel filter will really not help much, since they are designed to work on a 3-7 psi pressure system, instead of the gravity systems that most of or track cars utilize. In addition, these filters have little capacity, and they plug up easily. Some forms of "dry" gas should be avoided, since they frequently contain methanol, which could corrode some fuel system parts.

One final fuel system problem, which Fairmont also cautions about, is loops in the fuel line causing air locks. A flexible fuel line of the correct length is the long-term solution.