

Technical Notes

Testing for Vacuum Leaks on the Model A

By Lynn Sondenaa

To properly test for vacuum leaks the Model A engine needs to be at operating temperature and idling. The vacuum leak can be found by spraying an igniter fuel. The igniter fuels that can be used are: propane (safest), starting fluid, and brake clean. Remember that these are all highly combustible so use caution on how much is sprayed and where it is sprayed. Be sure to keep the spray away from the air filter or carburetor choke opening. The carburetor will draw in the igniter fuel and this will speed up the engine giving false test results.

Test spray by each of the following areas:

- Exhaust manifold/block
- Intake manifold/block
- Carburetor mount to intake manifold
- Vacuum plug or line on the intake manifold

If the engine speeds up there is a vacuum leak. By doing the test in steps, it is easy to locate leaks. Leaks are usually due to loose bolts or nuts, deteriorated gaskets, or, sometimes, warped manifolds.

I use propane, because it is the safest. I place a small piece of rubber hose over the torch nozzle to extend its length and make it more flexible. (Fig. 1) Turn on the propane, **but do not light it**. Move the rubber hose slowly across each of the areas listed. This process should be done outside with no wind and no open flames present. Again, if the engine speeds up that will indicate that there is a vacuum leak in that area. Hopefully you will find this a quick and easy test for finding vacuum leaks.

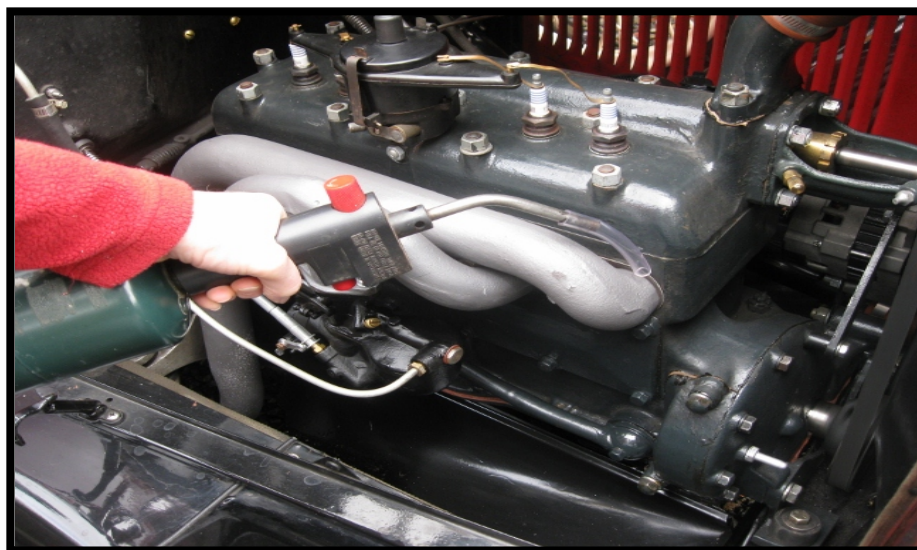


Fig 1