

Starting an engine for the first time after many years sitting

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There are times we are faced with having to start an engine that has been sitting for many years. After several years the fuel degrades to the point where it becomes like tar; and it gets a very distinctive foul odor. Since the pistons have not moved in such a long time there is the danger of breaking the rings the first time the engine is moved. It is therefore important not to rotate the engine until the cylinders are well lubricated. The oil around the bearings has long dried out so the oil passages need to be primed before the engine is started.

The following steps should help you get the engine back running with minimum stress to the engine itself.

- 1 Remove the spark plugs and put in a generous amount of Mystery Oil into each cylinder.
2. Let the oil soak in for a few days and then hand turn the engine about 90 degrees.
3. Put more Mystery Oil and let it soak again for a few days.
4. Now you are ready to hand rotate the engine (in the normal direction of rotation!) several times to make sure the engine "feels" right. If everything seems okay then it is time to change the engine oil and filter.
5. Still with the spark plugs removed; disconnect the fuel pump (either the fuse or relay) and use the starter to rotate the engine. I like to install a mechanical oil pressure gauge at this point and rotate the engine with the starter several times until oil pressure is indicated.
6. You have now primed the engine with fresh oil with minimal engine stress as the spark plugs are removed. You should check that the ignition is operational at this point. Remove one spark plug wire and verify there is spark when the starter is engaged.
7. The next step is the fuel system. This will require the most work as the old fuel will have degraded and you want to make sure none of the old stuff gets sucked into the engine. At a minimum remove and clean the gas tank, and replace all fuel filters, including the one inside the tank (if there is one). The carbs will need to be taken apart and cleaned. If the carbs have accelerator pumps, they will most likely need to be replaced as they will be hard and brittle. The fuel lines between the carbs are likely hard as plastic ... replace them. Put fresh fuel in the tank but before connecting the line to the carbs run the fuel pump with the line going into a canister. This should clean anything that was left in the fuel lines. Make sure the fuel looks nice and clean. Put a fuel gauge and test for fuel pressure of around 3 psi. Connect the fuel line to the carbs, start the car ... and hope for the best.

You will get a lot of smoke, do not be alarmed, as some of that Mystery Oil ended up in the exhaust and will need to burn.