

Ignition System

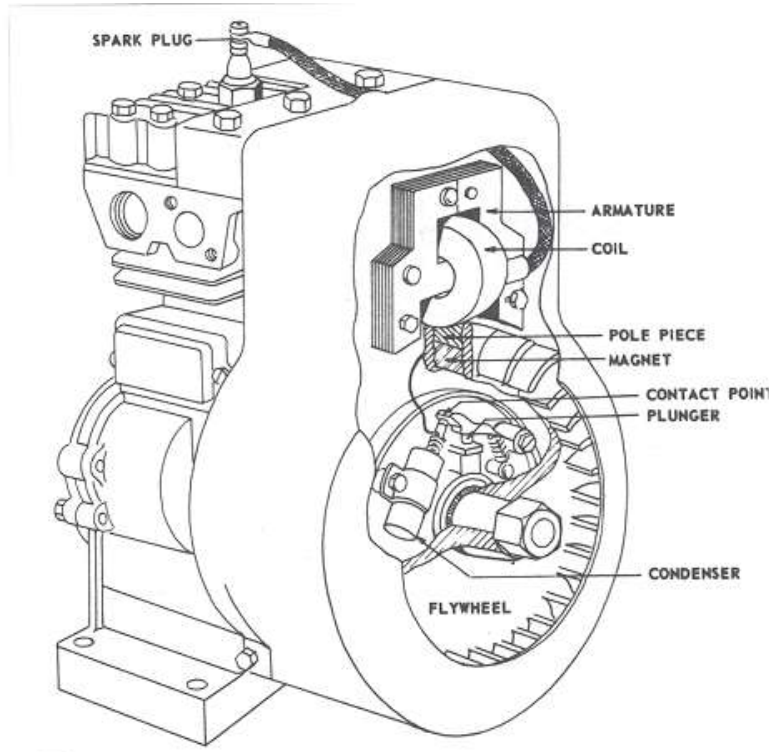


Trouble Diagnosis

Trouble Shooting Ignition System

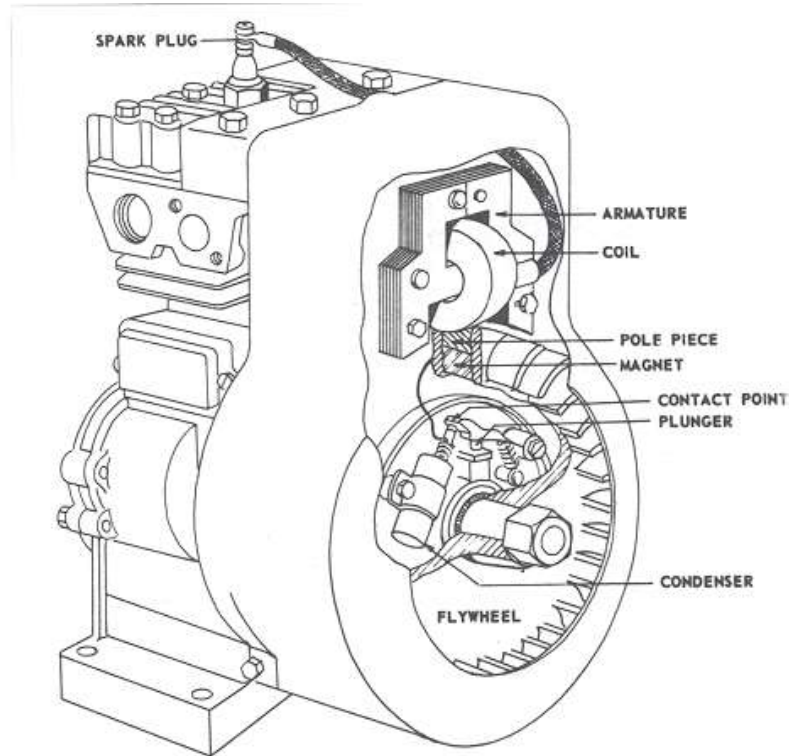
- Failure of an engine to start could be due to a fuel system problem which we will be discussing next, but it could also be an ignition problem.
- In trouble shooting your ignition system use the following steps in determining your problem;

Trouble Shooting Ignition System



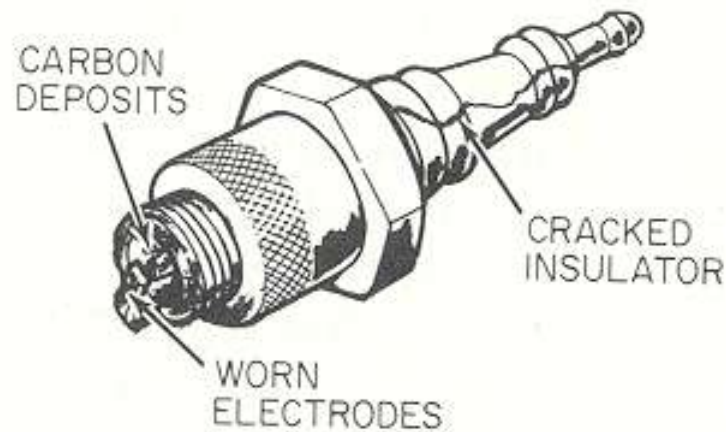
- Ensure the engine on – off switch is turned to the off position
- Observe the engine for normal compression (crank it) you should be able to determine a compression problem by feel. If the engine turns over unusually fast or long, you can suspect a loss of compression

Trouble Shooting Ignition System



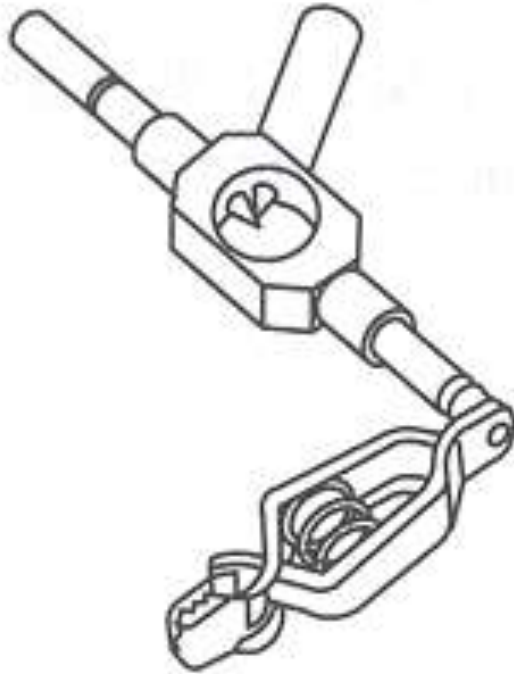
- If your engine has a major compression loss it is probably due to worn bearings, scored cylinder walls or pistons, or broken rings or other parts
- If your engine has normal compression then the next step is to check the ignition

Trouble Shooting Ignition System



- Remove and examine your spark plug for evidence of ;
 - ⊕ cracked insulator
 - ⊕ worn electrodes
 - ⊕ carbon deposits

Trouble Shooting Ignition System



- Clean and or replace defective spark plug
- Set plugs' air gap
- Check engine for spark using a spark tester or the bolt method
- If no spark occurs the fault could be worn or dirty contact points, points out of adjustment, a defective capacitor, high tension lead, on-off switch, or magneto coil

Trouble Shooting Ignition System

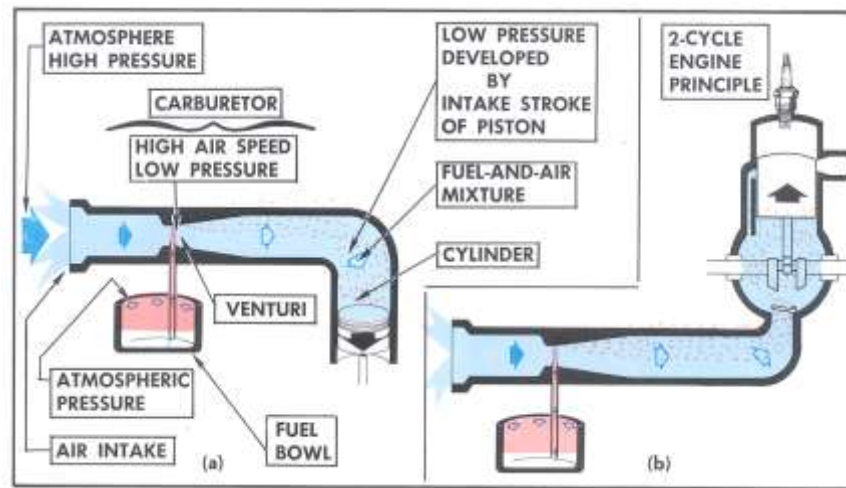
- If spark appears using the spark tester but the engine still fails to start then check the plug itself to see if it can deliver the spark
- Remove the plug, reattach it to the high tension lead and lay it or hold it against cylinder head while cranking the engine to see if the spark jumps the gap. If it does not then the plug is probably bad and should be re-examined for cracks, black sooty deposits on the porcelain or electrodes, burned electrodes, or too wide a gap

Trouble Shooting Ignition System

- One other thing to look for with regard to a spark plug that has just been removed from an engine that has been cranked but failed to start is the presence of fuel.
- If one end of the plug is wet that means that fuel has probably been delivered to the combustion chamber.
- You can also put your finger over the spark plug hole and crank the engine. If your finger gets wet (gas) it also tells you that fuel is being delivered

Trouble Shooting Ignition System

- If fuel is delivered and all of our other tests prove to be okay then your problem is most likely with your carburetor



Ignition System



Trouble Diagnosis
