



## *Spark Plugs*

Spark plugs are vital to making an engine run. They ignite the vapour of the fuel, which starts the engine. Though they are small parts of what makes an engine run, they can also contribute to problems with the engine's capabilities if they are dirty. Also called fouled, dirty spark plugs are the result of the insulating noses at the firing tips getting clogged with debris, such as carbon, oil and fuel. The firing mechanisms of the spark plugs will no longer work properly when fouled and the automobile will not use fuel efficiently. It also may make a sputtering noise, a result of the miss-firing of the spark plugs. When this occurs, if you choose to save a little money by cleaning your spark plugs instead of purchasing new ones, following a few simple steps will lead to clean spark plugs.



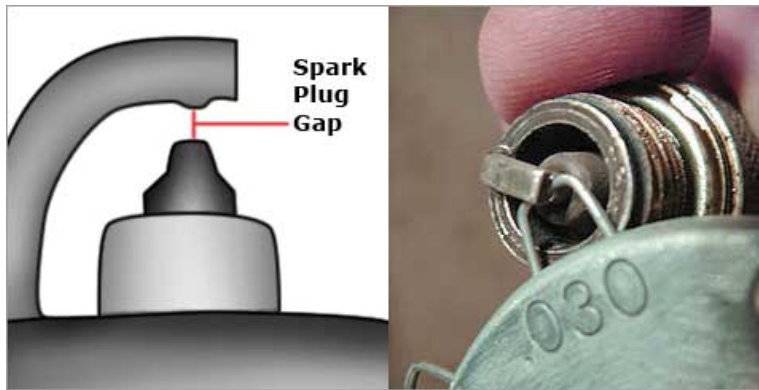
Start by disconnecting the spark plug lead from the spark plug. Remove any debris around the spark plug before you remove the plug to keep the debris from getting into the combustion chamber.

Remove the spark plug by using a spark plug socket wrench.

Using a wire brush and spray on plug cleaner, remove light deposits from the plug. If there are still difficult deposits, try using a strong knife to scrape them off. DO NOT use a shot blaster or abrasives to clean your spark plug.

Inspect your spark plug for damage and heavy deposits. If there is any damage, you should replace your spark plug. Refer to our guide on How to Read a Spark Plug to help you determine any issues with your spark plug.

Next, check the gap between the electrodes at the tip of the spark plug by using a spark plug gauge. A typical gap for small engine plugs is 0.030". But, you should always check the specifications for your particular model to be sure.



Note: Too small of a gap could result in a smaller and weaker spark, leading to an increase in fuel consumption. Too large of a gap could result in misfiring or premature electrode wear.

Finally, reinstall your spark plug and attach the spark plug lead. Be sure not to overtighten your spark plug when you reinstall it.

If you've done all this and still have problems you may want to use a spark plug tester to diagnose whether you have a problem with your ignition system or you are having a spark plug misfire. If you have a spark plug that is misfiring, you should replace your spark plug.



HVTM Outdoors use and recommend NGK and Champion brand spark plugs.

***Safety Tip.*** Before commencing any repair work make sure you disconnect the spark plug and or battery cables and wear appropriate safety glasses to protect against harmful chemicals and debris.