

Spark Plug Pictures for Lean to Rich running Engines

This section provides a visual representation of how the Spark Plug can look depending on how the engine is running. If the engine is running to lean, the spark plug can look greyish white. If the engine is running to rich the spark plug will look black, sometimes a glossy black if it's really rich. The goal is to get a good dark coffee brown color on the spark plug, which represents the correct color on the spark plug itself, and assures you that the Fuel to Air mixture on your carb is set correctly. This will also help assure you get the most power and longest lifespan out of your engine. Use the chart below as a guide to determine the correct Fuel to Air mixture that your engine is burning.

<p>Spark Plug - Lean Major</p> <ul style="list-style-type: none">• The Spark Plug head will look greyish white in color.• There will be very little to no carbon buildup• This can cause the cylinder head to quickly overheat even at a normal idle speed, and if you give the engine some throttle it will burn a hole in the piston head within seconds killing your engine.	
<p>Spark Plug - Lean Minor</p> <ul style="list-style-type: none">• The Spark Plug head will look very lite tan in color.• There will be some minor carbon buildup• This can cause the cylinder head temperature to be elevated, and may overheat when giving the engine full throttle.• This will cut the engine lifespan by 1/2	
<p>Spark Plug - Normal</p> <ul style="list-style-type: none">• The Spark Plug head will look dark coffee in color• There will be a thin layer of carbon buildup• This will optimize the lifespan of the engine, and it helps the engine run cooler	

Spark Plug - Rich Minor

- The Spark Plug head will look black, but dry
- There will be a good amount of carbon buildup
 - Carbon deposits will start building up in the decompression port
 - Carbon deposits will build up around the piston rings causing the engine to lose compression
- This will increase the chance of fouling the spark plug and causing engine miss-fires
- This will cause more maintenance to keep the engine running

**Spark Plug - Rich Major**

- The Spark Plug head will look glossy black in color and look wet.
- There will be a major amount of carbon buildup
 - Carbon deposits will rapidly build up in the decompression port
 - Carbon deposits will rapidly build up around the piston rings causing the engine to lose compression
- The engine will run rough due to the rich mixture of Fuel to Air
- Uncontrolled Detonation of fuel in the cylinder that can cause the engine to overheat and burn up

