

Carburetor Adjustments & Tuning Tips

Spark Plug Reading

Refer to *Spark Plug* on page 54.

Check any jetting change by reading the spark plug. The following procedure is recommended. You may not get an accurate reading if you simply turn off the engine and pull the plug for inspection.

Use a new spark plug. Inspect the plug before installing it.

NOTICE

Using spark plugs with an improper heat range or incorrect reach can cause engine damage.

Before removing the spark plug, clean the spark plug area thoroughly to prevent dirt from entering the cylinder.

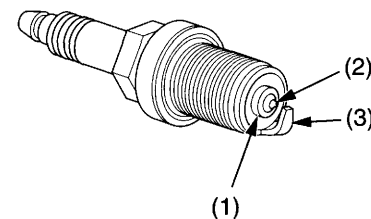
Ride for 10 – 15 minutes before taking a plug reading. A new plug will not colour immediately.

To obtain an accurate reading of a new spark plug:

1. Accelerate at full throttle on a straight.
2. Push the engine stop button and pull the clutch lever in to release the clutch.
3. Coast to a stop.
4. Remove the spark plug.
5. Use a magnifying glass to inspect the spark plug. The porcelain insulator (1) around the centre electrode (2) should appear clean and colourless with a gray ring around the centre electrode where it exits the porcelain. Metallic specks indicate lean jetting that is removing metal from the piston. Black sooty streaks on the porcelain indicate rich jetting.

NOTICE

An improperly tightened spark plug can damage the engine. If a plug is too loose, a piston may be damaged. If a plug is too tight, the threads may be damaged.



(1) porcelain insulator (3) side electrode
(2) centre electrode

Spark Plug Colouring Guidelines

Condition	Spark Plug Appearance	Mixture
Normal	Dark brown to light tan colour with dry electrode	correct
Overheating (Lean)	Light gray or white colour	lean
Wet (Rich)	Wet or sooty	rich

Remember that in addition to improper jetting:

- A lean condition can be caused by air leaks in the inlet tract or exhaust system, the passage of too much air because of the use of the wrong air cleaner, use of a less-restrictive aftermarket exhaust system, or a hole or holes (deliberate or unintentional) in the air cleaner housing.
- A rich condition can be caused by a plugged or dirty air cleaner, use of a more-restrictive aftermarket exhaust system, a clogged spark arrester, or excessive oil on the air cleaner. Excessive smoking will occur.