

Tuning Tips

Spark Plug Reading

Refer to *Spark Plug* on page 80.

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.

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

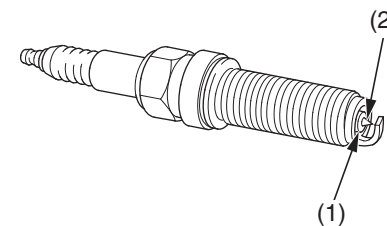
Before removing the spark plug, clean the spark plug area thoroughly to prevent dirt from entering the cylinder.

To obtain an accurate reading of a new spark plug:

1. Accelerate at full throttle on a straight.
2. Depress and hold the engine stop button and pull the clutch lever in.
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 center electrode (2) should appear clean and colorless with a gray ring around the center electrode where it exits the porcelain. Light gray or white color streaks the porcelain insulator and center electrode indicate lean air-fuel mixture. Wet or black sooty streaks on the porcelain indicate rich air-fuel mixture.

NOTICE

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



(1) porcelain insulator (2) center electrode

Spark Plug Coloring Guidelines

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

Remember that in addition to improper air-fuel mixture:

- 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, or use of a less-restrictive aftermarket exhaust system.
- A rich condition can be caused by a plugged or dirty air cleaner, use of a more-restrictive aftermarket exhaust system, or excessive oil on the air cleaner.
Excessive smoking will occur.