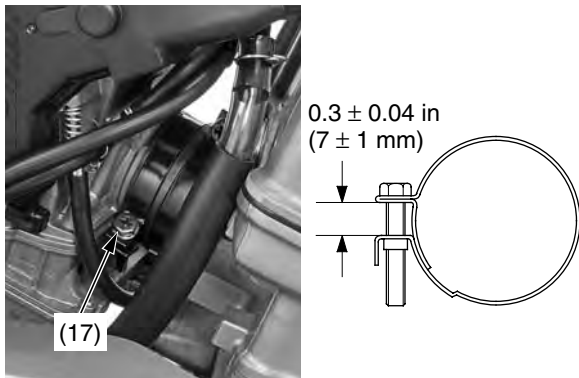


# Carburetor Adjustments & Tuning Tips

21. Tighten the insulator band screw (17) so the gap between the tabs of the clamp is  $0.3 \pm 0.04$  in ( $7 \pm 1$  mm).



(17) insulator band screw

22. Start the engine. If the engine idle speed is too high or too low or engine is not idling, adjust the engine idle speed (page 48).
23. Repeat steps 4 – 22 until the engine gives maximum power with the correct spark plug reading. It is always better to jet a little rich than a little lean. It is advisable to record the settings, course conditions, lap times, and climatic and barometric conditions for future reference.

## Spark Plug Reading

Refer to *Spark Plug* on page 52.

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.

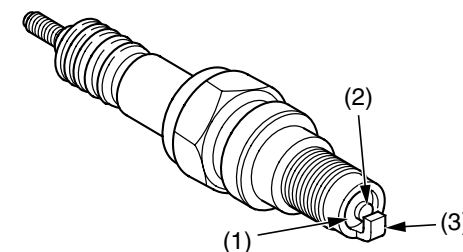
Ride for 10 – 15 minutes before taking a plug reading. A new plug will not color immediately.

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 center electrode (2) should appear clean and colorless with a gray ring around the center 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

(2) center electrode

(3) side 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 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.