

# Carburetor Adjustments & Tuning Tips

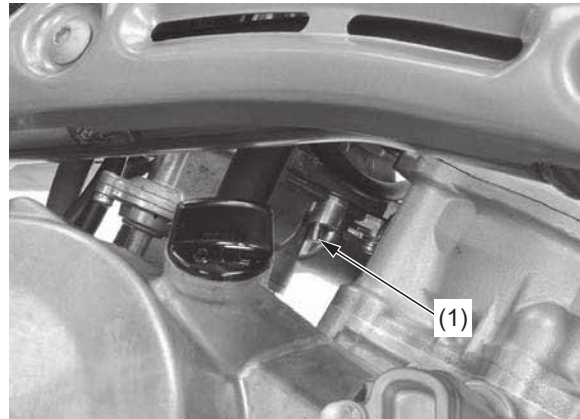
## Carburetor Minor Adjustments

The standard carburetor settings are ideal for the following conditions: sea level altitude, and 68°F (20°C) air temperature. If your conditions are different, you may need to adjust the carburetor settings, using the tuning information on [pages 117 to 119](#). Confirm your settings are correct before proceeding.

### Minor Adjustments

1. Adjust the carburetor setting using the tuning information on [pages 117 to 119](#).
2. When the engine is warm enough to run without the choke, push the choke knob in to its off position.
3. Adjust the pilot screw (1) to obtain the best off-idle performance.
  - If the engine blubbers (rich) exiting a corner, turn the pilot screw clockwise to lean the mixture.
  - If the engine surges (lean) exiting a corner, turn the pilot screw counterclockwise to richen the mixture.

The minimum to maximum range of pilot screw adjustments is 1 1/2 to 2 1/4 turns out from the lightly seated position. If you exceed 2 1/4 turns out, the next larger slow jet is needed. If you are under 1 1/2 turn out, the next smaller slow jet is needed.



(1) pilot screw

### Adjustment Procedure

1. Turn the pilot screw in until it is lightly seated and record the number of turns. Turn the pilot screw out the same number of turns.
2. Warm up the engine.
3. Adjust the engine idle speed ([page 48](#)).
4. Make two or three laps of a course with the standard setting or corrected jetting ([page 117](#)) and spark plug. Note engine acceleration and other engine conditions in relation to throttle opening. Verify carburetion by removing the spark plug and reading its firing end ([page 122](#)). It may take more than two or three laps to get a good spark plug reading with a new spark plug.
5. Change carburetor settings or select suitable carburetor jets, taking into consideration the engine conditions and factors for temperature and altitude ([page 117](#)).
6. Adjust the pilot screw as required.

## ⚠ WARNING

Gasoline is highly flammable and explosive. You can be burned or seriously injured when handling fuel.

- Stop the engine and keep heat, sparks and flame away.
- Handle fuel only outdoors.
- Wipe up spills immediately.

If you've determined that the main and slow jets must be changed, you must rotate the carburetor and remove the float bowl plug.

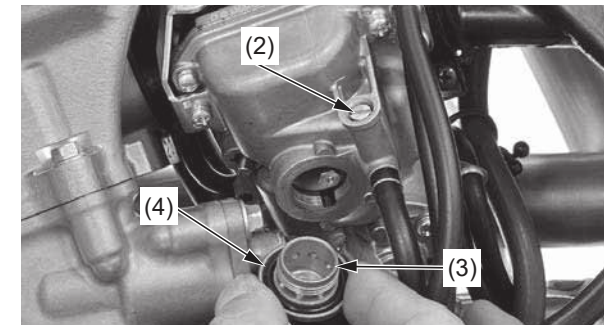
7. Turn the fuel valve OFF.
8. Drain the remaining fuel in the float bowl by loosening the drain screw (2). Then tighten the drain screw after draining the fuel.

Drain the carburetor into an approved gasoline container and dispose of it in an approved manner ([page 130](#)).

## NOTICE

*Improper disposal of drained fluids is harmful to the environment.*

9. Loosen the connecting tube clamp and insulator band screws. Rotate the carburetor.
10. Remove the float bowl plug (3). Check the float bowl plug O-ring (4) is in good condition. Replace it if necessary.



(1) drain screw  
(3) float bowl plug

(4) float bowl plug O-ring