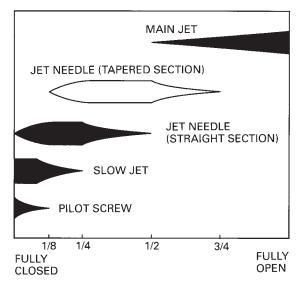
# **Carburetor Adjustments & Tuning Tips**

## **Carburetor Circuit Functions**

The carburetor has several major circuits, each providing the fuel/air mixture over a given portion of throttle valve opening.

These major circuits overlap as shown below.



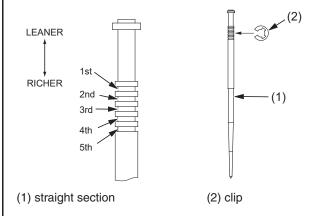
## Main jet

The main jet affects fuel/air ratio from half (1/2) to full throttle (4/4). The size should be reduced at higher altitudes.

Honda carburetor jet sizes are numbered in increments of 2 or 3. When changing the main jet size, increase or decrease it gradually until the desired jetting is obtained. Because Honda jet size numbers do not correspond with other carburetor manufacturer's jet size numbers, use only Honda jets.

#### Jet Needle

The jet needle controls fuel/air mixture over fully closed to 3/4 throttle. The straight section (1) affects throttle response at smaller throttle openings. By changing the position of the clip (2) in its groove, you can improve acceleration at medium low and medium speed.



#### Slow Jet and Pilot Screw

The slow jet and pilot screw affects fuel/air ratio over fully closed to 1/4 throttle. Adjust the pilot screw 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 adjustment 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 turns out, the next smaller slow jet is needed.

### Leak jet

The smaller the number, the smaller the jet bore diameter. This controls the amount of fuel returned to the float chamber under pressure, therefore the flow amount is increased or decreased. With a small jet, pressure is raised faster and the elapsed time before the fuel starts flowing is shorter.

## **Carburetor Removal**

- 1. Remove the seat and fuel tank (pages 29,30).
- 2. Drain the remaining fuel in the float bowl by loosening the drain screw (1).

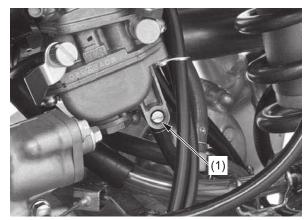
# A WARNING

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.
- 3. 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.



(1) drain screw