

## 12 ADJUSTMENT

**Caution** Be sure that the ends are flush. If the push rod guide is overtightened so that the push rod sticks out even 0.8 mm, the tensioner or chain may become damaged.

- Tighten the locknut, and install the chain tensioner cap and O ring.
- Install the contact breaker cover.

### VALVE CLEARANCE

Valve and valve seat wear decreases valve clearance, upsetting valve timing. If valve clearance is left unadjusted, the wear will eventually cause the valves to remain partly open, which lowers performance, burns the valves and valve seats, and may cause serious engine damage.

Valve clearance for each valve should be checked and, if incorrect, adjusted in accordance with the Periodic Maintenance Chart (Pg. 195) and any time that clearance may have been affected by disassembly.

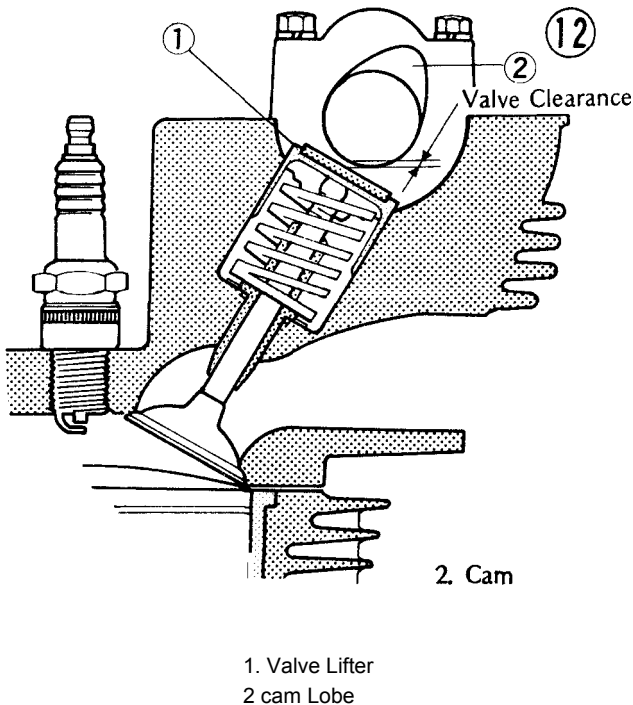
When carrying out adjustment, be careful to adjust within the specified clearance. Adjusting to a larger value will both disturb valve timing and cause engine noise.

**NOTE:** Valve clearance must be checked when the engine is cold.

To check and adjust the valve clearance:

- Remove the fuel tank (Pg. 32).
- Remove the spark plug cap from both plugs.
- Disconnect the ignition coil blue lead and yellow/red lead (Fig. 105).
- Take out the bolts, nuts, flat washers, and lock washers (4 each), and remove the brackets connecting the cylinder head cover to the frame (Fig.105).
- Remove the valve cover bolts (14), and lift the cover off the cylinder head and out of the way (Fig. 107).
- Remove the contact breaker cover.
- Using a 17 mm wrench on the crankshaft and checking one valve at a time, turn the crankshaft so that the cam lobe (highest part of the cam) is pointing directly away from the valve lifter.

### Valve Clearance Measurement



- Measure the clearance between the cam and the shim in the top of the valve lifter. The correct clearance is 0.05 ~ 0.10 mm.

- If the valve clearance is incorrect, continue the following procedures to replace the present shim with a new shim, which will give the proper clearance.

**NOTE:** If there is no clearance between the shim and cam, select a shim which is several sizes smaller and then remeasure the gap once it is installed.

- Use the valve lifter holder (special tool), according to the following instructions, to hold the valve lifter down; and then remove the shim.
  - oTurn the crankshaft so that the cam points away from the lifter. Position the notch in the lifter so it points toward the opposite camshaft. This will allow the shim to be lifted and grasped later.
  - oTurn the crankshaft so that the cam is pushing the lifter down.

opit the tool in place.

