5. CARBURETORS

Two sets of carburetors, one for each cylinder, are equipped. They are of a single-barrel, CV (Constant Vacuum type, the venturi area is automatically changed by the negative pressure created by air to be drawn into the cylinder) type. Following are the remarkable features:

(1) Because of a variable-venture type, smooth power transition between low-speed and high-speed operations is provided.
(2) The construction is simple.
(3) Acceleration is good and fuel consumption is less.

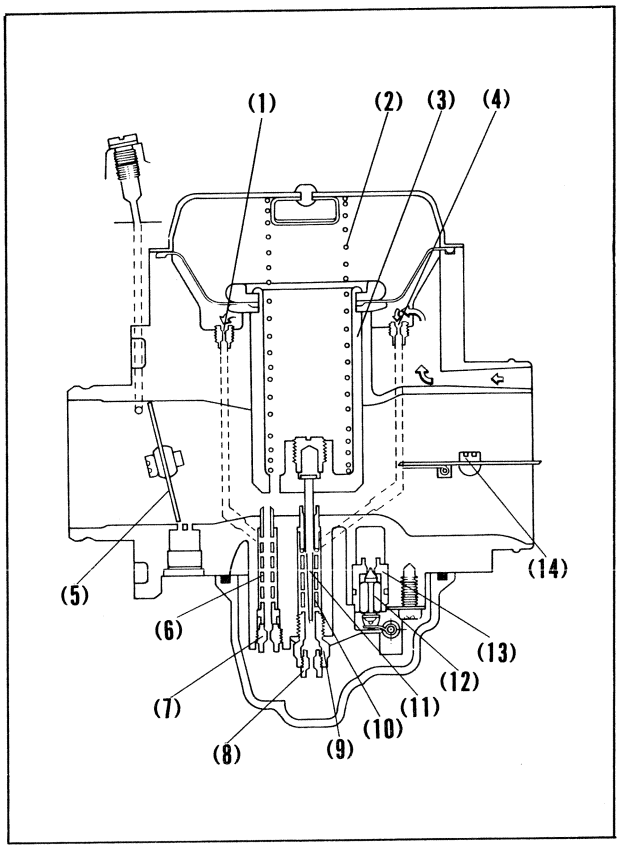

Fig. 2–15
(1) Primary air jet
(2) Vacuum piston spring
(3) Vacuum piston
(4) Secondary air jet
(5) Throttle valve
(6) Main nozzle
(7) Primary main jet
(8) Secondary main jet
(9) Needle jet holder
(10) Needle jet
(11) Jet needle
(12) Float valve
(13) Valve seat
(14) Choke valve

1. Starting circuit

When the engine is started while it is cold, a richer fuel-air mixture is required.
When the choke lever is raised, the choke valve is closed to cause the amount of incoming air to be reduced, resulting in an increased negative pressure within the main bore. Now fuel is fed to the bore from the low-speed and main circuits. The choke valve is controlled by the relief valve depending on vacuum created by air to be drawn into the main bore.

2. Low-speed circuit

The low-speed circuit is provided to supply the proper amount of mixture to the engine at idle and low speeds.

Fuel passes through the primary main jet and slow jet and is mixed with the air bled by the slow air jet here. Then the mixture is squirted from the bypass and pilot outlet. The mixture to be squirted from the pilot outlet is regulated by the pilot screw.

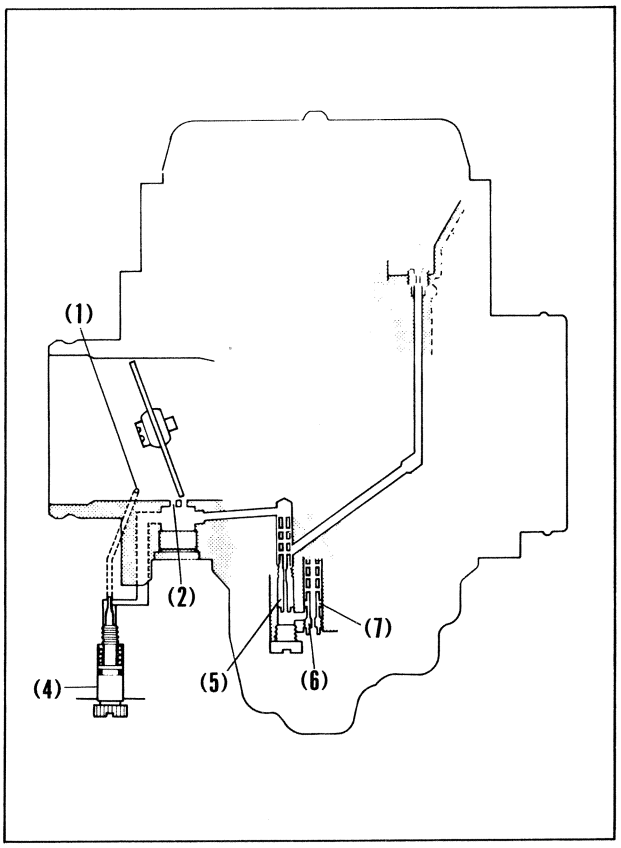

Fig. 2–16 (1) Pilot outlet
(2) Bypass
(3) Slow air jet
(4) Pilot screw
(5) Slow jet
(6) Primary main jet
(7) Main nozzle