3. High speed system.
The high speed system consists of the main jet (1), main air bleeder (2), main nozzle (3), small venturi (4), and main venturi (5).

As the throttle valve opens gradually, low pressure area transfers from the idle discharge holes to the main fuel nozzle. The pressure difference between the main nozzle, and the float chamber forces the fuel to flow through the main fuel system. The fuel passes through the main jet into the bottom of the main well, and flows up the main well.

The air entering through the main air bleeder hole into the air bleeder mixes with the fuel, then the mixture of air and fuel flows up the main nozzle. Here, the mixture is atomized, and is mixed with the air stream through the air-horn.

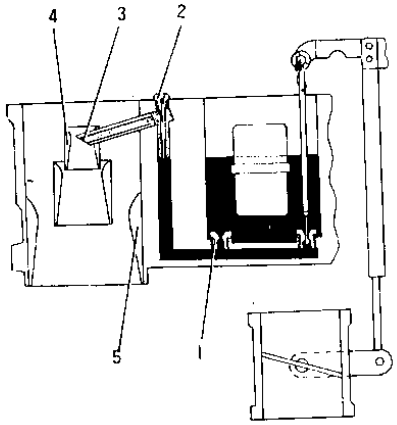


Fig.4-6 High Speed System X4982

4. Power system.
As the throttle valve opens the air velocity increases, and the balance between the incoming air flow, and the fuel flow differentiates, and more air is drawn in making the air-fuel mixture lean. To prevent this difference, the step-up-rod (1) is installed.
This rod is provided with step-cut lands so that the gap area between the rod, and the rod jet (2) may change together with the movement of the throttle valve.

As the throttle valve opens wider the gap area increases allowing more fuel to flow through to maintain proper ratio of air-fuel mixture. The step-up-rod is provided with the step-up-rod spring (3) to keep the rod in proper alignment.

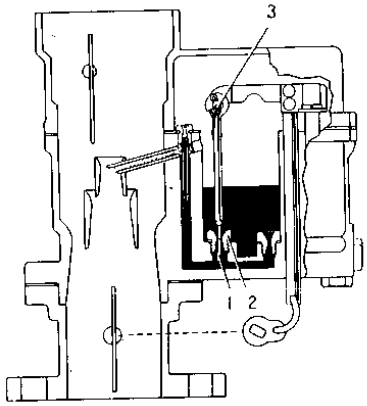


Fig.4-7 Power System X4983

One over-size rod is installed as a spare for more economical fuel consumption.

5. Accelerating system.
The accelerating system consists of the plunger assembly (1), strainer screen (5), intake ball check valve (4), discharge ball check valve (3), and pump jet (2).

When the accelerator pedal is depressed for quick acceleration, the pump plunger connected to the throttle valve is pushed down onto the fuel in the pump cylinder.

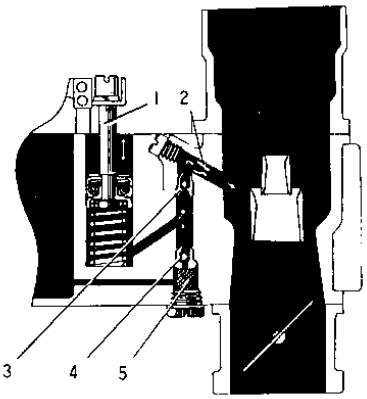


Fig.4-8 Accelerating System X4984