

Fig. 7

Partial Load

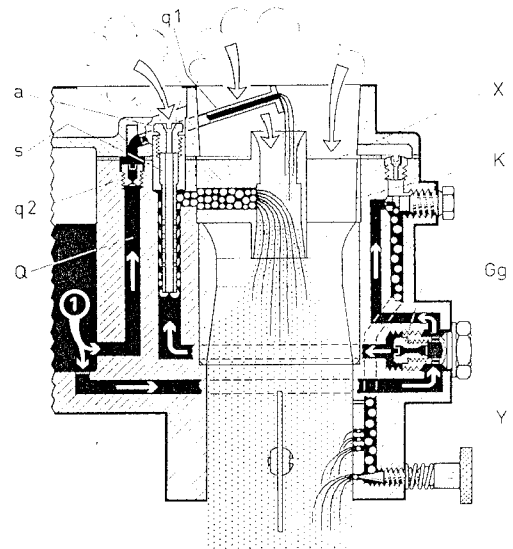


Fig. 8

Full Power with Enrichment

Incorporation of the fuel enrichment system into the main metering system makes it possible to finely balance and properly dose the fuel/air mixture with due regard to the desired fuel economy as well as to highest maximum performance upon demand.

Acceleration

A mechanically actuated diaphragm-type accelerating pump (R) is utilized. The pump is flooded with fuel supplied directly from the float chamber. When the pump is at rest, the diaphragm (M) is forced outward by the diaphragm spring (m). When the throttle valve is opened, the pump is acted upon over the pump rod (T) and the pump lever (L 5) which push the diaphragm inward, thus forcing the fuel to pass through the pump jet (Gp) and the calibrated injection nozzle (i) into the main venturi; this enrichment of the fuel/air mixture provides a smooth acceleration.

The check valve (H 1) located in the pump inlet prevents the fuel from flowing back into the float chamber. A second check valve (H 2), located at the base of the injection nozzle, keeps air from entering the pump through the injection nozzle when the pump is on the inlet stroke.

Quantity of fuel injected during acceleration is adjustable and depends upon the length of the pump stroke. The pump adjustment (t) affects the pump stroke and, thus, determines the quantity of fuel to be injected during acceleration. The pump jet together with the calibrated injection nozzle controls only the duration of injection.