

Fig. 3.125 Main jet
① Main jet

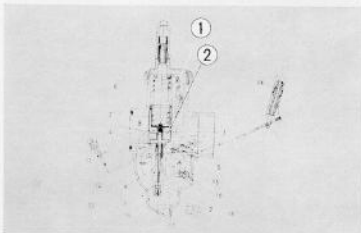


Fig. 3.126 Jet needle, Throttle valve
① Jet needle
② Throttle valve

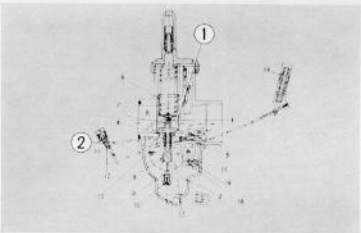


Fig. 3.127 Throttle valve, Air screw
① Throttle valve
② Air screw

D. Adjustment for High Speed

The control of the fuel mixture between 1/2 throttle to full throttle opening is the function of the main jet. (Fig. 3.125)

The determination of the fuel mixture ratio is made by the following method.

- (1) At full throttle, if the engine speed increases when the choke is slightly closed, it is an indication of lean mixture. Progressively replace the main jet and note the performance. (Main jets are numbered in sequence of 5.)
- (2) If the engine speed drops when the choke is slightly closed, it indicates that the main jet is either of the proper size or that it may be too large, in which case, perform the following check to make the determination.
 - (a) If the main jet had been of a proper size, the engine speed will drop when the main jet is replaced with one of a smaller size; the speed will increase if the choke is slightly closed. In such case, the original jet was of the proper size and therefore should be reinstalled.
 - (b) If the main jet had been too large, replace the main jet in sequence with that of a smaller size until the condition in (a) above is found and then reinstall the proper size jet.

E. Adjustment for Intermediate Speed

The fuel mixture adjustment in the intermediate speed range between 1/8 to 1/2 throttle opening is made by relocating the jet needle positioning clip and replacing the throttle valve with that of a different size cutaway. However, changing the throttle valve will also effect the operating condition below the speed range of 1/8 throttle opening, therefore, it is very difficult to adjust for intermediate speed by replacement of the throttle valve only. It is recommended that the adjustment for the intermediate speed be made by the jet needle, and stay within the range of acceptable accelerating performance since this would give a fuel consumption that is much lower. (Fig. 3.126)

- (1) Jet needle
 - (a) Black smoke emitted from the exhaust gas at intermediate speed is an indication of too rich a fuel mixture and is corrected by