suited to the throttle opening and engine speed. However, for that purpose, it is necessary to keep fuel level constant in the carburetor. This is performed by the float chamber. The fuel from the fuel tank passes through the passage (14), between valve seat (15) and the valve (16), and then enters the float chamber (2). The float (17) becomes buoyant as fuel enters, raises the float valve (16) hinged at the float arm and which seats the float valve into the valve seat to stop the flow of the fuel. When fuel in the float chamber is consumed and the fuel level drops, the float (17), lower along with the fuel level. Clearance between the valve (16) and the valve seat (15), allows fuel to enter the float chamber. By repeating this, the level is always maintained constant. A spring is fitted into the section of the valve (16) which contacts the float arm (18), and prevents the valve fromoscilla ting.

When the vehicle is on a grade or when dirt is lodged between the valve and seat, gasoline will over flow and enters the cylinder. Therefore, for preventing the fuel from rising above a certain level, an overflow line is installed. **(Fig. 3.116)**

(3) Choke

When an engine is cold or the temperature is low during starting, a rich fuel mixture is temporarily required. This can be had by the use of the choke. When the choke lever is pulled up, the choke (20) is fully closed. The opening (23) is normally closed by the relief valve (21), however, during starting when the throttle is opened approximately 1/4 and the kick starter operated, the negative pressure created in the cylinder will cause the relief valve (21) to open by the proper amount (dotted section 24) and permit air to pass through the carburetor; this flow of air draws the fuel out of the needle jet (4) to provide an air fuel mixture ideal for starting. After the engine starts, the inlet negative pressure increases, and causes the relief valve (21) to open correspondingly wider to assure a suitable mixture. Thus, the opening of the relief valve (21) changes according to the opening of the throttle valve (6), section (25). **(Fig. 3.117)**

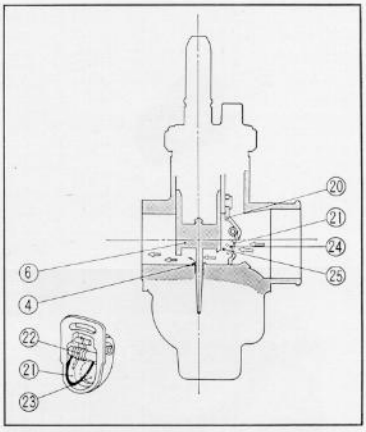

Fig. 3.117 Choke

B. Functions of Each Component

(1) Main Jet

Its main purpose is to obtain a proper fuel mixture ratio by controlling the flow of fuel when the throttle