

A spring is incorporated in the head of the float valve which comes in contact with the float arm. The purpose of this spring is to prevent the float valve from oscillating so that a constant fuel level can be maintained even when riding over rough or bad roads. It further serves to prevent any shock between the float valve and seat, thereby reducing the amount of wear to these parts.

Overflow pipe

When riding on a steep grade or when any foreign substance becomes lodge in the float valve, it causes the fuel to overflow from the needle jet or the slow jet, and enters the engine causing the engine oil to become diluted. In order to prevent such a condition, an overflow pipe has been incorporated in the float chamber. At normal condition, the pipe opening is above the fuel level and it serves no purpose, but when the overflow condition exists and the fuel level rises, the fuel will drain out of the overflow pipe to the outside rather than into the engine.

3. CHOKE (Fig. 3-117)

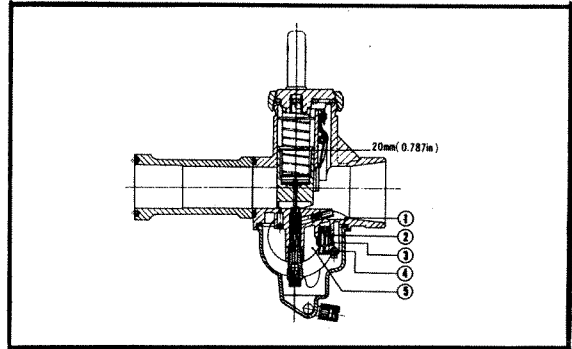
For starting in cold weather, a rich fuel mixture is momentarily required; to serve this purpose, a choke valve ① is used in the carburetor. A relief valve ② is included in the choke valve and is held closed by a spring. By raising the choke lever fully, the choke valve closes and the air entering from the air inlet becomes restricted. When the starting motor is engaged with the throttle lever opened approximately 1/4, the fuel will be drawn out of the pilot outlet and the needle jet by the vacuum pressure. At the same time, the vacuum pressure will cause the relief valve to open by the proper amount to provide an ideal fuel mixture to effect and engine start. As the engine starts, the vacuum pressure becomes greater and the relief valve is opened further to provide the proper fuel mixture to warm up the engine. In this manner, the throttle valve movement causes the relief valve to operate and, therefore, the operation of the choke valve is not required to warm up the engine. The choke valve is opened after the engine warms up.

FUNCTION OF THE MAIN COMPONENTS

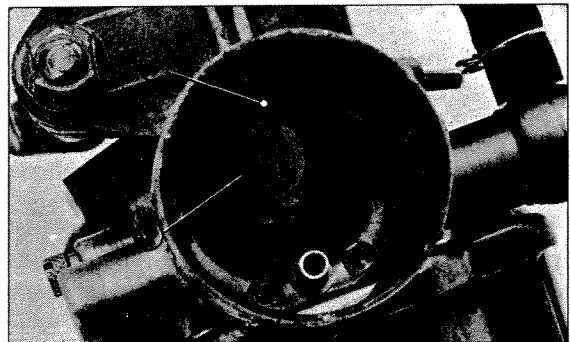
The main components of the carburetor functions in the following manner.

1. MAIN JET (Fig. 3-118)

The function of the main jet is to control the fuel discharge and to provide the proper fuel air mixture at the higher range of throttle opening (driving at maximum speed). However, the main jet will also have a varying degree of effect in the vicinity of 1/2 throttle opening. The main jets are numbered, so that the larger the number, bigger the opening and consequently a richer fuel-air mixture.



① Float chamber washer ② Float valve
③ Float valve seat ④ Float arm ⑤ Float
Fig. 3-116. Sectional view of float chamber.



① Choke valve ② Relief valve
Fig. 3-117. Choke valve.

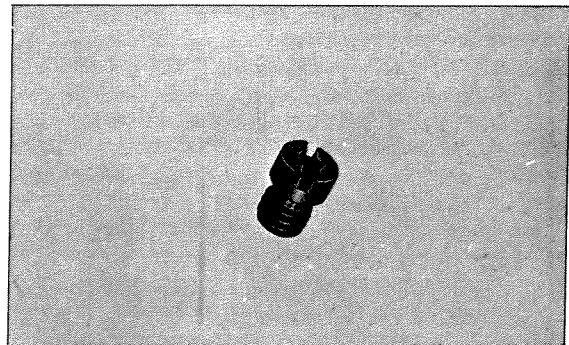


Fig. 3-118. Main jet