

## CARBURETTOR

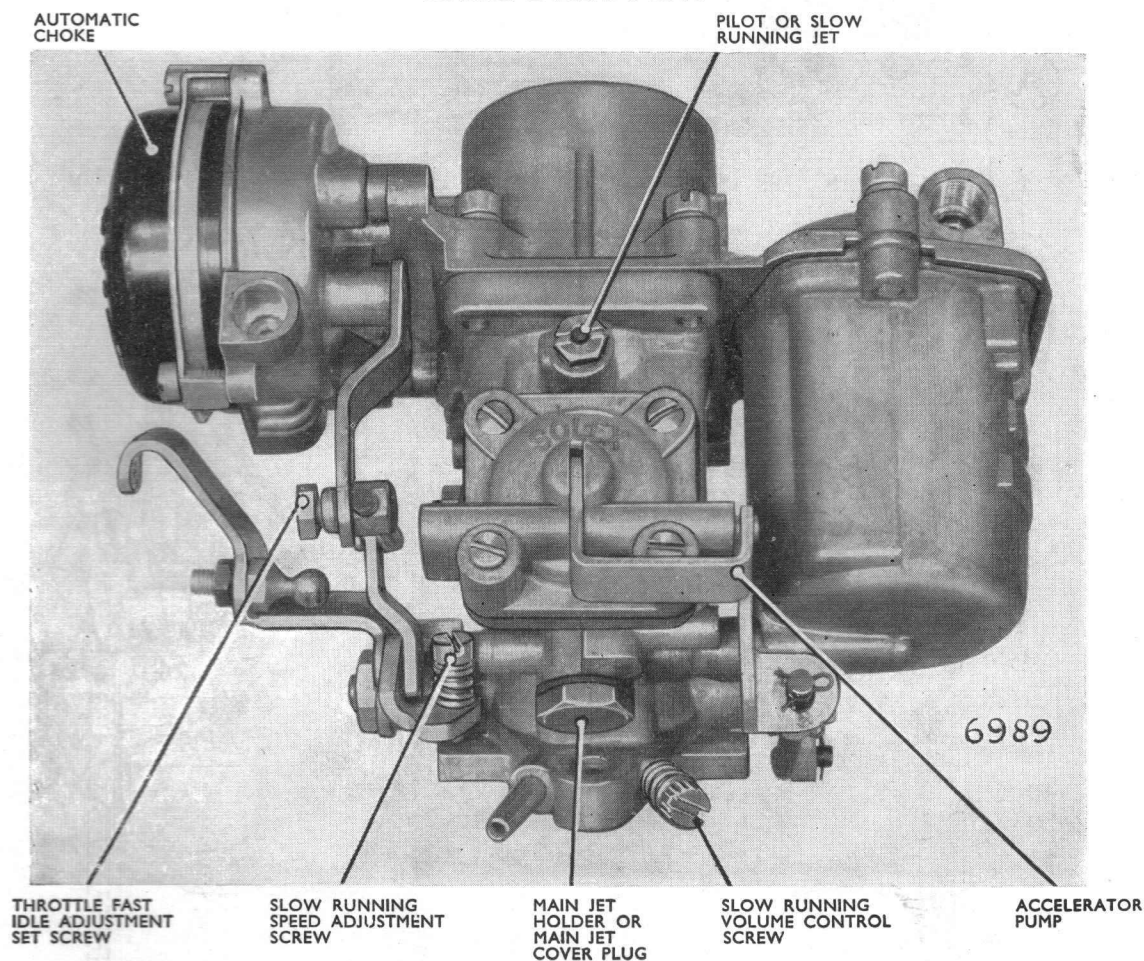


Fig. 4. Solex B30 PIHT, B30 PIHT-2 and B30 PIHT-3 carburettors—position of various parts

## DESCRIPTION

Automatic choke (strangler) valves are fitted to all Solex PIHT carburettors. Manual operated choke (strangler) valves are fitted to all Solex PIH carburettors used on these cars.

These are all semi-down draught carburettors having the following similar systems or circuits. Idling circuit, main spraying circuit, econostat circuit, and mechanically operated diaphragm type accelerator pump. These operate so that under all conditions of engine requirements, the carburettor provides the correct fuel/air mixture.

A schematic sectional view of the original PIHT carburettor is shown in the upper illustration of Fig. 5. The changes made on the PIHT-2 carburettor are shown in the lower left inset of Fig. 5. Further changes made on the PIHT-3 carburettor are shown in the lower right-hand inset of the illustration. These changes are incorporated in the PIH-5 carburettor; the first of these Solex carburettors used on these cars to have a manually operated choke (strangler) valve. The changes are also illustrated in Fig. 18.

**NOTE.** The choke tube used in PIHT-3 and PI-H5 carburettors has a cast in beak as shown in item 58A, Fig. 18.

The positions of the various carburettor parts are shown in Figs. 4, 5 and 6.

All data such as choke tube size, jet settings and drillings are given in the Data Section under "Fuel System". The different settings used for each carburettor should be carefully noted.

## OPERATION

## Fuel level (See Fig. 5)

The level of fuel in the float chamber is controlled by the slight rise and fall of the float (29), closing or opening the needle valve (17) to cut off or admit fuel as required. The design of this mechanism ensures complete stability of the predetermined level and eliminates all need for routine checking. The float assembly must be replaced, in the event of damage, to ensure that the correct fuel level is maintained.