3.3.1 Independent starting circuit

It is called "independent" because the starting device operates with its own circuit including a starter jet, emulsion tube and a starter valve (fig. 15)

Start the engine from cold with the throttle closed (7) and the starter valve (2) opened by pulling up the lever (1). If a remote cable control is fitted instead of a lever on the carburettor, the lever should be operated fully.

Vacuum present in the barrel (8) downstream of the throttle valve (7) draws mixture to be delivered through passage (9) from the duct (4) and then it further mixes with the main airflow drawn from the intake (3). This mixture is formed by fuel metered through the starter jet (6) mixed with air from channel (10) and drawn through the emulsion tube holes (5).

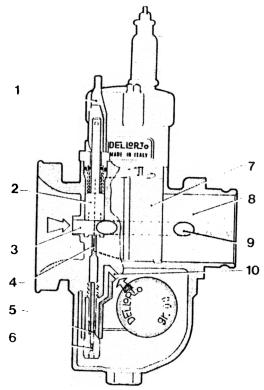


fig. 15

3.3.2. Selection of emulsion tube and starter jet

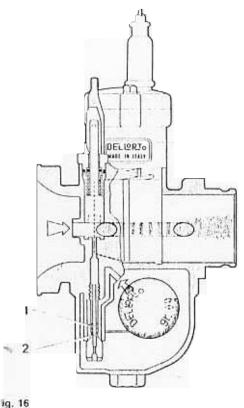
The operation of the independent circuit starting device can be divided into two parts:

Initially when starting, during the first few turns of the crankshaft on the kick-starter or the starter motor, the device delivers a very rich mixture.

Figure 16 shows the mixture ratio depends entirely on the variety of drillings in the emulsion tube, because air passing through holes (2) draws up fuel which is standing in the jet well (1). In this period, the mixture strength is not determined by the starter jet size but only by the amount of fuel contained in the well above the holes located below the float-chamber fuel level.

After this, a mixture leaner than previously is delivered and this mixture reaching the combustion chamber produces the first proper running of the engine.

Figure 15 shows the mixture strength delivered through the emulsion tube depends on the size of the starter jet (6) and on the size of the air duct (10).



ig, it