

Check that the throttle cable has about 1 mm free play when the slide is fully closed.

Always adjust the idle setting with the engine fully warm.

Screw in the idle-speed screw (4) to obtain a slightly-higher idling speed than normal (about 1200 rpm for a four-stroke engine or about 1400 rpm for a two-stroke); Then adjust the air-adjusting screw (1) to obtain the most even running.

Then unscrew the idle-speed screw again until you obtain the normal idling speed.

Finally, to obtain the best engine running, it is worth rechecking by very carefully readjusting the air-adjusting screw.

3.4.3 - Selection of the correct size of idle jet

To select the proper size of idle jet, slowly open the throttle with the twistgrip (opening should not exceed a quarter throttle); a slow and uneven increase in rpm indicates that the idle jet is too small. This effect can also be observed when the idle mixture screw is open too much or when the idle air-screw is closed too much and therefore not properly responsive to the engine's running.

If you observe smoke in the exhaust gas and a dull noise, it means that the idle jet size is too large; this can also occur when the mixture-adjusting screw is screwed in too much and oversensitive or when the air-adjusting screw is screwed out too much.

Usually with racing motorcycles, after having adjusted the idle as above, unscrew the idle-speed screw to allow the throttle to close completely so that you will obtain the maximum engine braking on closing the throttle. In this case however, do not readjust the mixture screw or air-screw setting because any further mixture screw closure or air-screw opening may cause two-stroke engines to seize on the overrun.

3.5 — Progression system

By progression we mean the transition period between mixture delivery from the idle circuit and the beginning of mixture delivery from the main jet circuit.

On first opening the throttle, the air drawn into the engine increases and therefore, in order to have an inflammable mixture still, the fuel supply must also be increased.

As previously noted, the idle hole(3) shown in figure 20, only delivers sufficient fuel for engine idle operation and the main circuit still does not deliver any fuel because of insufficient vacuum upstream of the throttle. The progression hole (2) is therefore necessary to deliver the fuel required during this transition period. The progression hole draws fuel from the idle circuit (4) and is positioned immediately upstream of the closing edge of the throttle slide (1) for the promptest response to fuel demand when the airflow suddenly increases.

It is interesting to note that the progression hole serves a dual purpose: When the engine is idling, air from the main barrel passes into the progression hole and weakens the mixture flowing through the idle circuit; When the throttle is opened slightly, the idle circuit mixture flows into the main barrel through the progression hole.

The progression hole therefore first feeds air in one direction and then feeds mixture in the opposite direction.

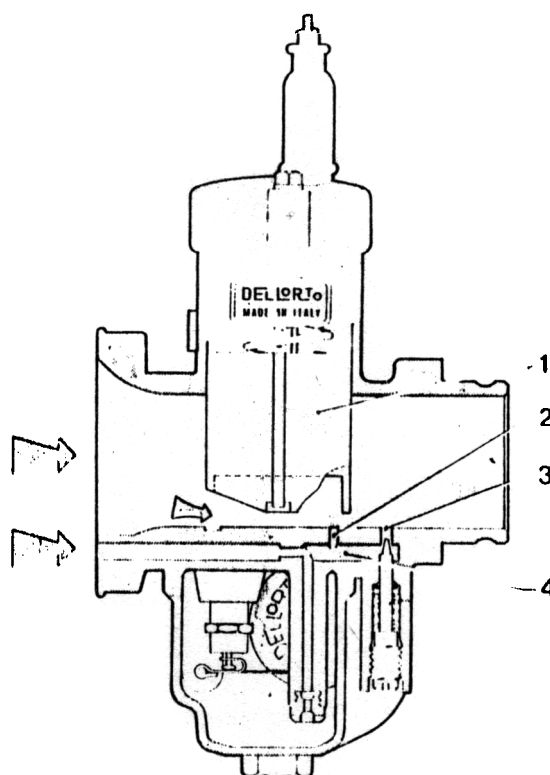


fig. 20