

TO SET AND ADJUST THE AMAL CARBURETTOR

Having installed the engine as per our instruction manual, we would suggest you use the engine for 10 hours approximately, to allow for settling in and then, if necessary, proceed as follows:

1. Get engine started and run for 2-3 minutes until warm. Reduce to idle.
2. Slacken off throttle to carburettor top cap. You should be able to lift the cable on top of carb by at least 2mm without effecting the tick-over speed at all. (*It is most important that the carburettor settings are not interfered with by the cables*).
3. Allow engine to idle, and adjust **throttle stop** screw until safe tick-over is obtained.
4. Adjust in an anti-clock direction (weaken) the **mixture control** screw until tick-over starts to slow, and then screw in $\frac{1}{4}$ to $\frac{1}{2}$ turn.
5. Try to reduce the tick-over speed and then repeat 4.
6. You may need to repeat 4 & 5 several times to obtain the best setting at all temperatures. A 2-stroke engine is best adjusted when it has run for about 4-5 minutes, i.e., do not adjust when very hot after a long hard run.
7. Run engine at half throttle and listen for any misfiring. If misfire is (a) reduced by operating the choke then engine is too lean. If misfire (more accurately called "four-stroking") is (b) increased by operating the choke then engine is four stroking through richness. In the event of (a) lift slide needle and (b) drop needle one notch. **REPEAT 3-6**
(To access slide needle, unscrew top cap of carburettor and withdraw entire slide needle assembly. Remove cable by depressing spring and carefully lift out needle. Move circlip nearer to middle of needle for (a) and nearer to end for (b).
8. Remove slack from the carb bowden cable to the throttle reduction arm and adjust length of single lever control (SLC) cable to allow increase of engine speed, which best suits you're usual running speed. Ideally the throttle should just open as the gearbox engages, however, this means that the engine is running at a fast cruising speed once the first detent in the SLC is reached. This is personal taste but you may wish to increase the slack in either the bowden or SLC cable to allow more control over the Engine speed at the lower throttle openings
9. Do not run carburettor out of fuel unless engine is to be left for more than 2-3 weeks. (Excessive cranking will be required to pump fuel to the carburettor)