Amal Mk I Concentric Float Level

Of all the adjustments you can make to your Amal Mk I Concentric, the float level is probably one of the most important adjustments. A lot of people believe the float levels on the Concentric are set at the factory and do not need to be checked. Nothing could be further from the truth. While it is true that float level numbers were not published for several years after the introduction of the Concentric, now that we have the numbers it’s very important to use them. This is especially true if your Brit bike has more than 1 carburetor.

The method of adjustment is as follows.
• Determine if the level needs to go up or down
• Heat the float bowl with mild heat. A hair dryer seems to work better and be much safer than a torch
• To raise the fluid level, lightly tap the top of the brass float valve seat with a 0.375 inch diameter drift, driving it downward a very small amount
• To lower the fluid level, lightly tap the bottom of the brass float valve seat with a 0.125 inch diameter drift, driving it upward a very small amount
• Recheck your setting per the diagram on sheet 2 of this article

Remember:
• Each time you change the float bowl, float pin, plastic float, or float valve, the float level must be checked and readjusted if necessary.
• If you disassemble 2 carbs in the same work area, do not intermix the float bowl parts.

Although the position of the plastic float is important, what we are really hoping to achieve is a standardized fuel level within all the float bowls on the same bike. The real objective is to achieve the same height on the surface of the liquid fuel in the float bowl, so that the fuel can be the same distance from the throat of the carburetor. Therefore, if you are racing and really want accurate carburetion, then the thing to do is to measure the fuel height and not the float height. The correct fuel height is 0.170 to 0.240 inches below the bowl’s surface. In most cases, the float height given on sheet 2 will result in this measurement, but when racing it’s always best to check.

Hope this helps!

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CHECKING AND ADJUSTING THE AMAL CONCENTRIC FLOAT LEVEL

Occasionally you may encounter a machine which runs erratically due to an over-rich condition. You may also find that this problem machine is fitted with the proper size jets and has the same adjustments as a model which runs perfectly.

After many hours of investigation, we found that the normal cause for the problem outlined above is a high float level setting.

CHECK FLOAT LEVEL

Remove the float assembly from carburetor. Drain gas from float bowl. Using a small screwdriver or other suitable tool, depress the float tab which operates the float needle, until needle contacts seat. While holding the float in this position, measure the distance from the top of float bowl to the top of float. The proper measurement is .080. If the measurement is less than .080 the float level will need lowering. SEE FIG. 1.

FIG. 1

PUSH ON TAB ONLY
NOT ON NEEDLE