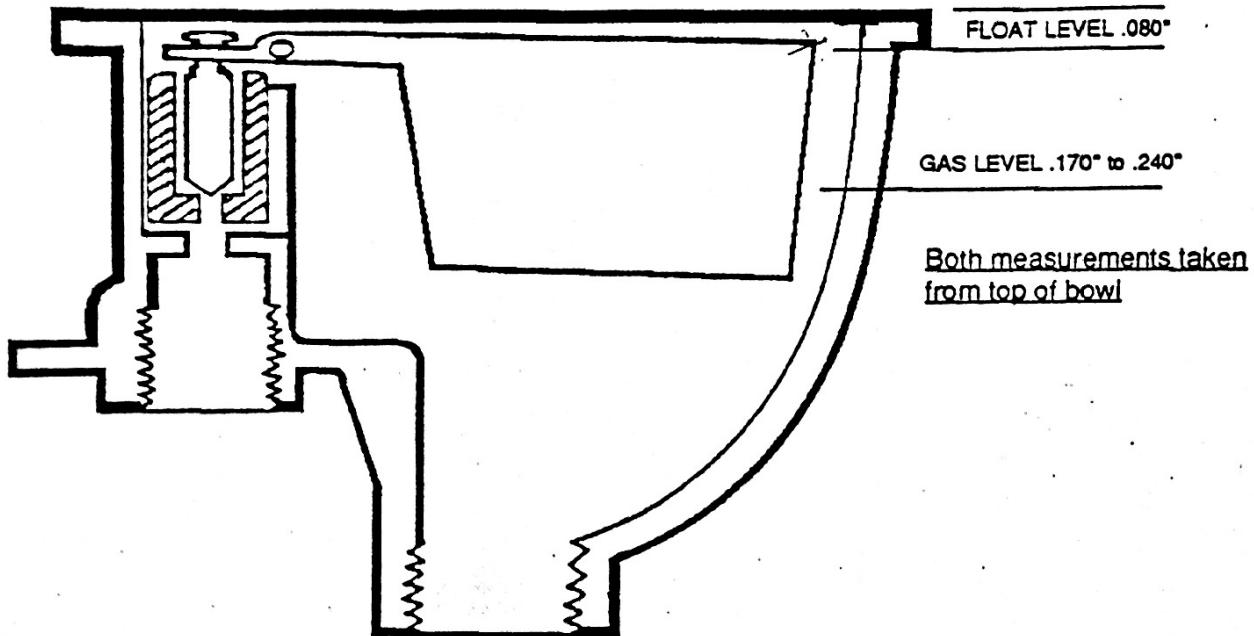


FLOAT LEVEL ADJUSTMENT IN MKI & MKII CARBS.

An often overlooked detail on Amal MKI & MKII carburetors is the GAS LEVEL in the bowl. The level is controlled by the relationship of the float, float needle and float needle seat.

It is common for the gas level to be too high. This will cause a bike, that has all the correct jets, needles, and adjustments, to run rich throughout the rpm range. The actual specification for the GAS LEVEL is .170" to .240" below the top edge of the bowl. It is difficult to set this GAS LEVEL without some special techniques.



FLOAT LEVEL AND GAS LEVEL FROM TOP OF BOWL

In practical terms you can achieve this GAS LEVEL by adjusting the top edge of the float, the edge opposite the needle, to approximately .080" below the top edge of the bowl (if it is adjusted so the top edge of the float is above the bowl, as shown in Norton Tech Tips 2, the level will be too high and the top of the float could hit the bottom of the tickler pin or carb body before the float closes the needle).

A special tool can be made from an old main jet, an old plastic bowl drain, and a 12" piece of 1/4" gas line. Drill (#4 drill) and tap (1/4" x 26 tpi) the plastic drain plug to accept the main jet. Slide the gas line on to the main jet. Install the plug and gas line into the bowl and turn on the

petcock. Hold the gas line along side the bowl and check the gas level in the tube. It should be between .170" and .240" below the top edge of the bowl.

The float level can be adjusted easily. You need two punches (1/8" and 7/32") and a small hammer (there are two schools of thought as to whether you need to heat the bowl or not. I attended the: "not to school" and it works for me. If you choose: "the heat the bowl school" be sure you do it in boiling water or a propane torch. It is possible to melt the bowl at very low temperatures so be careful.

Adjusting the level:

1. To raise the level take the larger punch (7/32") and insert it where the needle goes and very lightly drift the brass needle seat lower into the bowl.

2. To lower the level take the smaller punch (1/8") and insert it into the cavity formed for the banjo bolt. you will have to insert it through a small hole in the bowl before it contacts the brass needle seat. Very lightly drift the brass needle seat higher into the bowl. Check your progress frequently by putting the needle and float back in the bowl and taking a measurement. (You can purchase a new brass needle seat under part number 622/121.)

If you are fitting a new carb or tuning it because you changed the compression ration or exhaust system it is important to set the float level first. If you follow Amal's specifications your bike will run better and you will make any carb tuning easier.