



The majority of these tips have appeared in club newsletters over the years. Please note that you use them at your own risk as neither the Bristol Austin 7 Club nor the authors can be responsible for the results of trying to follow the instructions given.

Carburettor - Zenith 22FZ and 22FZB - fuel levelling - Richard Rowe

In an attempt to improve the performance of my Chummy I turned my attention to the carb. There may be at least a 5% improvement to be found if the mixture is correctly adjusted. However 5% of a small number of horses is an even smaller number but "every little helps" as they say and as we are never again going to see petrol at 3/6 a gallon it is best not to waste it.

There is an excellent article by Hillary Bagshaw in the Dorset club's technical area which describes a method for checking the fuel level using cocktail sticks. I have tried this and found it quite difficult, perhaps it would be easier if I had spent my youth looking through keyholes. However it does describe a simple method for finding the height of the outlet of the main jet in the middle of the choke tube without the use of instruments or pieces of stiff wire.



I combined this with using a wet method to check the jet outlet height and the fuel level. I am sure that this must have been described elsewhere but I have not seen it.

A clear plastic tube is attached to one of the jet covers in the bottom of the carb, other carbs may have a drain plug which could be used.

This tube is turned upwards and attached to the side of the carb. Another tube from a small tank is attached to the fuel inlet to the carb to add fuel.



Fuel is added with the Zenith float needle held upwards to allow the carb to flood. After the fuel stops overflowing from the jet outlet the level in the plastic tube attached to the side of the carb will be at the same level as the top of the jet outlet.

After draining the carb, the process is repeated with the float needle being allowed to move and regulate the influx of fuel. The level of the fuel in the plastic tube now shows the level in the float bowl. This should be 3 mm below the previous level.

The fuel level is adjusted by moving the brass collar which is soldered onto the float needle.



This movement only needs to be very slight as it is magnified by the longer legs of the levers. The round ends of the two levers should be level when the float lid is held upside down and any small difference can be corrected by swapping the levers over or inverting one or other of them.

The outlet of the main jet should be level with the top of the shroud around the jet. This shroud allows the passage of fuel from the compensating jet to the middle of the choke tube.



If the fibre washer at the base of the shroud has become flattened the top of the shroud will be below the main jet outlet and give a false reading when measuring the main jet height by overflow as above.

This method could be used without removing the carb from the engine but is a lot easier on the bench.