

How to Sync the ST1100 Carbs

Contributed by:

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You need:

A four column manometer or vacuum guage set.

A philips screwdriver with 12" long blade.

A plastic T piece such as is used in windscreen washer pipework on your car

(not essential but useful)

1. Warm engine up
2. Remove seat, maintenance covers, tank cover (top shelter), both fairing pockets.
3. Remove the diddy little caps from vacuum tubes from carbs 1,2 & 4.
4. Hook up manometer tubes to vacuum tubes from each cylinder. NB. for carb #3 you need to remove the vacuum line from the fuel cutoff valve, attach a short piece of spare tube to the fuel valve, insert T-piece between this and vacuum tube from carb, and then attach the manometer to the T piece. (All this does is ensure that you have a vacuum applied to the fuel cut-off valve whilst synching the carbs so that there is no possibility of the carbs getting starved of fuel).
5. Start motor, set to fast idle 1200 rpm or so. I've synched at up to 2000 RPM successfully but most seem to recommend 1200.
6. Peer at manometer tubes/dials - the idea is to get the vacuum equal for each carb - ie all columns or guages reading the same.

7. Adjust by turning the carb synch screws on the individual carbs - #4 is the master and has no adjuster so you have to make the other three line up with #4 carb.

Tips:

Adjust in small increments.

Allow the motor plenty of time to settle between adjustments.

Use a light downward pressure on the screwdriver only. Too much opens the

butterfly a fraction and upsets the adjustment.

A mini maglite focussed on the adjusting screw aids finding it!

When you have a good balance, swap the manometer tubes to different carbs

and take another look just to check that you don't have a sticky tube or

dial (doesn't apply to mercury tubes)

If using mercury filled manometer take care that mercury is not sucked into

the carb. I've not experienced this but another liSTer mentioned it.

Oh yeah: Check plugs/gaps are in good order and air filter is clean before doing any of the above.