



SERVICE BULLETIN #11C

DATE: January 8, 1992 revised May 9, 1994

SUBJECT: Rotax carburetor venting

APPLICABILITY: All Rotax equipped Kitfoxes

COMPLIANCE: Mandatory

FROM: SkyStar Aircraft, Engineering Department

The purpose of this bulletin is to define the correct configuration of the carburetor venting system used on Rotax engines. We have had several reports in the past of builders having mixture control problems, and our investigations have shown that in all cases the cause was incorrect carburetor venting.

For the 503, 532, and 582 engines, the correct configuration is for each carb to have both venting nipples connected to each other by a length of Tygon tube. This tube should have two small holes drilled in it to provide venting. Do not interconnect the carbs to each other, and do not 'Y' the tubes to an overboard vent line. If the lines are 'Y'ed to an overboard line, the different pressure on the overboard line will result in incorrect carburetor performance. The carbs will only function normally if the pressure on the vents is the same as the pressure at the carb inlets.

For the 912 engine, each carb has only a single vent nipple, and the proper way to vent the carb is to connect a short length of Tygon tube to the nipple and route it to a point just below the carb, tucking the tube under the float bowl attach spring. Again, it is important to understand that you are trying to vent the carbs so that the internal and external pressures at the carburetor are the same.

The vent ports on the carburetors are vents only, and should never have liquid fuel in them. If you detect fuel in the vent lines, then you have serious carburetor problems that should be remedied before further flight.

The engines as shipped from Rotax should be equipped with the proper carb vent lines, but you should double check the installation to insure that your engine will not be forced to run excessively lean.

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