2 stroke Oil Consumption and Smoking Engines – The ramblings of a man possessed! **Part 2**

Triggered by a discussion that started way back in May of last year during our memorable Spanish excursion; I embarked upon a quest to uncover the mysteries of excessive smoking, oil consumption and the workings of the Oil pump. In Part 1 (Flier 88); we covered the first 2 subjects and the general causes of, and began to focus upon Oil pump function and output and how it factored into determining whether our oil consumption could be viewed as good, bad or average. Before you read on, you may wish to re-acquaint yourself with Part 1. In Part 2, we continue that theme and look a little closer at our oil pump; the symptoms of wear, adjustment and maintenance.

Oil Pump Wear

As mentioned in Part 1; the oil pump was never designed to be serviced and to that end, it was listed as a singular part number. If you read the Engine Service manual closely, it states: *"The oil pump is manufactured with precision and its efficiency may be reduced once dissembled and is restored to original, possibly leading to engine trouble. It is constructed therefore as a non-disassembly type…… It is recommended that the whole of the oil pump assembly should be renewed". Further to this, it also states: "When abnormal oil consumption is noted, it is first recommended to replace the oil pump. If the oil consumption does not improve, it is most possible that the oil pump has a leakage or the check valve is out of order".*

Sage advice maybe, but all well and good if you could just nip to your local Suzuki dealership and pluck one from the shelf! Unfortunately, we no longer have that luxury and have to make do with what we've got, or what we can get our hands on. So, if we want to keep our old girls running, we're going to have to determine whether there is anything wrong with our pumps in the first place and whether there is any scope in repairing them i.e what is and is not possible.

Frankly, after studying the construction of the oil pump and having grasped an understanding of its operation; I have come to the conclusion that there are only 2 components within the pump that can suffer wear to any degree which is likely to induce **increased** oil consumption, albeit difficult to quantify. Wear of the Valve post and/or the Control cam would increase the contact between the cam track and the cam guide, resulting in an increased output from the pump, anytime that the actuating arm opening angle is less than 37.2 . Having said that; I'd suggest that this wear would have to be quite significant (see Fig.s 6&7). In all other respects however, I would opine that wear would affect our oil pump just like it would any other pump i.e its efficiency would decrease. This opinion is further reinforced by the guidance offered in the Trouble Shooting section of the Service Manual, which offers somewhat contradictory advice to the afore-mentioned statements from the book, in that the only symptom mentioned that might require replacement of the oil pump is Piston seizure, which infers **insufficient** output. What is also obvious is that, due to the nature of its design and function; without the presence of any other fault, it would appear

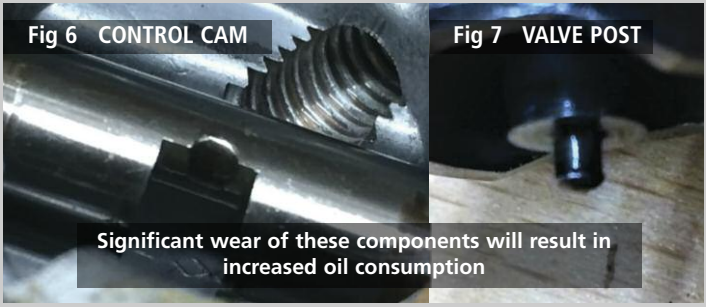

Fig 6 CONTROL CAM

Fig 7 VALVE POST

Significant wear of these components will result in increased oil consumption