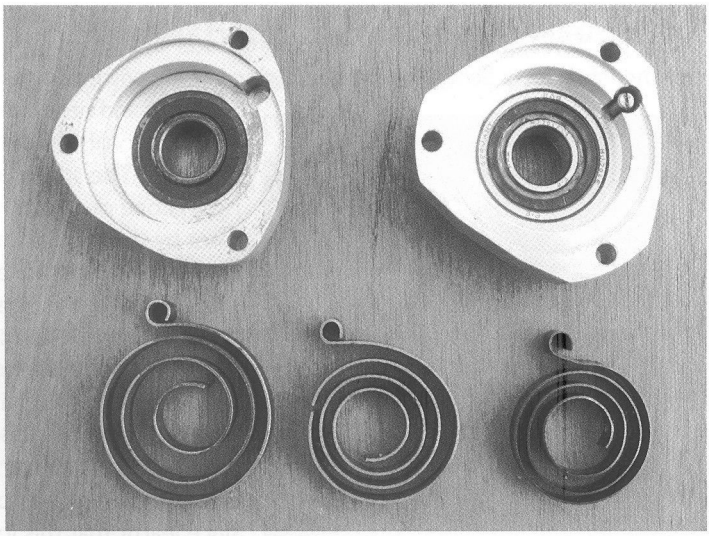
Dear Editors,

With regard to any intentional modifications made to my machine, frame no. 130, I try and execute these so that it will be possible to return the motorcycle to the specification that it was in when I acquired it. Involuntary modifications are more difficult to rectify.

Re: Silk 700S radiator cooling fan

To recap: A puller fan was fitted (90mm across the blades) running at 1450 rpm, 12 volts, 1.2 amps on start which falls to 1.1 amps continuous, fitted with integral cowling, no identifiable manufacturer and made in Taiwan. The fan is mounted from the original horn bracket with a proprietary horn bolted to an additional sheet metal folded plate positioning the horn behind the fan at an angle of about twenty degrees above the horizontal. The fan cowling is set approximately 3mm from the core of the radiator. The exhaust from the fan passes over the cylinder head and under the header tank.

The first test was conducted in still air with an ambient temperature of 25oC, with the engine running at 2,000 rpm, when the temperature gauge recorded 75oC. The fan was switched on for 5 minutes and a state of equilibrium maintained at 75oC indicating thermo-siphoning was taking place. The fan was turned off and at that point the temperature started to rise. Further testing in the laboratory (garage) was abandoned due to the high chance of suffocation (two stroke fog). Since fitting the fan I have yet to need to use it while riding... typical! To be more effective a larger diameter fan may be required to cool a greater area of radiator core. The conclusion so far is that fitting a fan helps when the motorcycle is stationary with the engine running!



Re: Silk 700S replacement kickstart lever return spring

The first time I had the kickstart return spring break, I had difficulty sourcing a genuine replacement. One solution is to fit an open wound kickstart spring from a Scott. However, I found that the outermost part of the spring eye would pull out of the milled slot in the Silk housing. The eye can be retained by adding a screw but this requires the housing to be drilled and tapped. The inner turn of the Scott spring is also more open than the original Silk spring so it can also pull off the locating peg fitted to the kickstart shaft. This necessitated making a shallow pan head screw from an Allen cap screw with the same thread. In order to hold the flat spring tail tight against the shoulder of the kickstart shaft, I drilled and turned a spacer out of iron water pipe which slid over the kickstart shaft, positioning the hole to take the screw uppermost, and retained the spacer in position by refitting the kickstart lever vertically downwards. The screw can be introduced through the slotted hole in the spring into the shaft whilst levering the first turn away from the gearbox. The spring housing can be positioned on the kickstart shaft, the new spring located over the screw in the housing and the housing engaged with the register on the gearbox outer casing. Add some preset and then bolt the housing into place followed by the kickstart lever which should now return when depressed.

Shown in the first photograph are two kickstart lever return spring housings, the one on the left is the original Silk part. The second photograph shows the outside of the two housings with the original again on the left. The housing on the right was turned from a block of aluminium alloy and used a spare roller bearing (BSA front wheel bearing) as the outrigger. The bearing outside diameter and width are greater than that in the Silk part so this was allowed for in machining. The bearing (shielded one side) also has a greased felt washer located behind the shallow sunken cover. This alternative housing allows for the Scott spring (as is or reset) and the commissioned springs to be used. As can be seen, a peg is positioned in the new housing to retain the spring outer eye.

The spring on the left is for a Scott. The broken spring in the centre was reset to the Silk form and heat treated and was functional without the need for a peg. The spring on the right is one of a batch that was reset by the spring winder in an attempt to retain the eye in the slot. The next reformed Scott spring will to be heat treated and have the hardness tempered by another 5oC which will hopefully increase service life. Both the original spring and the reshaped one failed in a similar place. I have since learnt that this form of flat spring, after heat treatment, can assume a reduced turn of some

15% following a few operations so copying the exact shape of an original used spring is not wise. Rather, a similar length of wire is used but with a more open set to allow for this natural tightening. In the future, I will try to use a spring winder that has in-house heat treatment facilities. Experience has shown that sending small batches of parts for tempering results in less than optimal heat treatment.

With a kickstart lever that now returns, I look forward to riding the bike in 2022 and being able to attend the next Gathering.

Des Wilkey

NOTICE

The Annual General Meeting of the Scott Owners' Club Limited will take place on

Saturday 9th April 2022

commencing at

11:00am

at

The National Motorcycle Museum

Coventry Road
Bickenhill
Solihull
West Midlands
B92 0EJ

Any member wishing to move a resolution at the meeting should provide notice to the Club Secretary in the manner required by Article 39 of the Club's Articles of Association. All members of the Committee are deemed to have resigned immediately prior to AGM so that all places are available to be filled by resolution of the members at the meeting.