

## Garage tales - The Velocette Service Manual – A New Discovery

In the second half of last year (at least) I knew I needed to do some maintenance on my Venom, although other problems such as spitting back and then charging issues kept taking priority.

The problem seemed minor in that if I let the clutch out too sharp I got a little clang from the area of the primary chain case, although clutch felt and worked normally – sounds like the primary chain needs adjusting. After a while I adjusted the Primary chain, better, but a noise was still there. Maybe not the chain – needs investigating.

So, took chain case etc off and dismantled clutch, mostly ok but the tangs on the metal plates look a bit bashed so ordered 3 new ones. Need to check everything else – Shock absorber ok, chain had no rollers missing but was worn, ordered new chain.

Clutch seemed to go together ok on the bench so everything put together again. But adjusting the chain with the cover off I could see variation of free play, so clearly slight ovality in clutch chain wheel (which was new with bearing 3 years ago) even with new chain – so that must be where the free play variation is from.

Start to adjust the clutch turning engine over with kick starter, suddenly a click from the primary chain case and it all goes completely free – S\*\*t. Try to adjust the clutch with the peg but doesn't work as the outside plate is turning free – it clearly wasn't all locating correctly on the bench and looks like I'll have to dismantle everything and start again – Oh dear, I'll leave that for another day!!

By chance talking on the phone to our Technical Advisor Dave, and he says "I think there is something in the Velocette Service Manual (red book) about using an intermediate gear to get round that". Sounds hopeful so I get out the manual again and there on page 32 found a section titled "Adjusting a Tight Clutch Spring Holder".

Do you know, it worked a treat! Engaged 2<sup>nd</sup> gear, locate peg and pull backwards on the rear wheel (several times checking in between) and the clutch was then slipping nicely. Bit more of the same and I couldn't believe it as I had no slip against full compression. I could then adjust it properly.

I couldn't believe it was fixed so easily, saving many hours of dismantling and rebuilding. I have been using this Service Manual for many, many years and had never noticed that section.

Thank you Velocette for documenting a fix for my problem! And Thank you Dave for knowing about the fix! What an asset to our club he is!

I wonder how many other gems there are hidden in our manuals, but we don't read them cover to cover, do we?

Appendum:

Following on from Norman's experience there is another problem that can be encountered while trying to get the clutch on to the sleeve gear and the nut started. The sleeve gear starts to disappear into the gearbox making it impossible to start the nut on the thread. Simple solution is engage top gear before you start and the sleeve gear is held in position. This solution isn't in the Service Manual for the Viper and Venom but is in the book Velocette by R W Burgess, page 94, Refitting the Clutch. It is also in Norm's Technicalities which the club sent out a couple years ago. Just had a look in the

Service Manual for a Rigid MAC and it is in there too! Why did Veloce omit it from the Viper, Venom Service Manual?

Jon