

Chaincase oil level viewer.

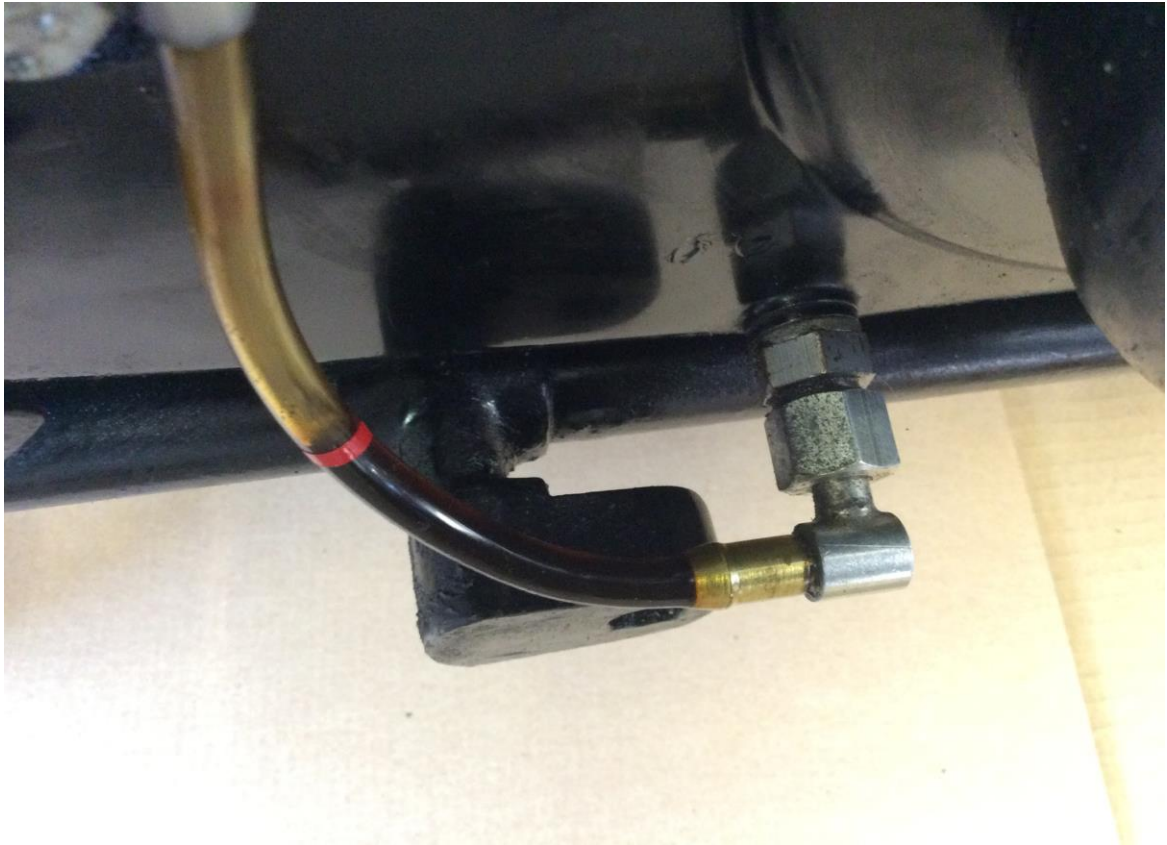
I was recently sat in the garage staring at the Venom I bought when I was seventeen and reminiscing about the trials and tribulations, along with the many good times we enjoyed together and still do. Whilst serving an engineering apprenticeship the Venom was my sole transportation taking me to work, college day release along with evening classes on week days, and rallies and race meetings at the weekends. During this time scheduled maintenance tasks occurred more frequently than they do now. For some reason in the seventy's primary chains frequently shed rollers and chaincases either filled with oil or lost it completely. The Fishtail editor at the time was obsessed with roller shedding, the magazine was full of doom and gloom. A lucky few owners possibly retained the correct oil level and even hung on to their rollers, but who could tell!

It was during this period I decided a visual indicator for the chaincase oil level was required as emptying it out and measuring it was messy and time consuming, and interfered with my time in the pub, and wasn't doing my chaincase paranoia any good.

I can't say the solution I came up with is my own original concept as I have seen other variations of the same thing since implementing it, but it's simple enough that lots of others would have arrived at the same or similar design.

First step was to drain the oil then replace the drain plug with an $\frac{1}{8}$ $\frac{1}{4}$ BSP union of the stepped sort on top of the timing chest cover. The $\frac{1}{8}$ BSP part screws into the chaincase leaving the $\frac{1}{4}$ BSP part sticking out. Onto this I fitted a right-angled fuel union tightening it parallel to the ground. By chance I had an old battery breather pipe that was a perfect fit and has remained flexible for over forty years! Next task was to make a 'P' clip out of a scrap piece of stainless and secure it to the chaincase centre bolt, then feed the pipe through it. Finally, a loose bolt was fitted into the top of the pipe, being loose prevents a vacuum that could prevent oil entering the pipe but also stops oil mist exiting or muck entering the pipe. All that remains is to ensure the bike is level, fill up with oil and mark the level so you can monitor the oil loss or gain. Simple but effective.

Hope you found this useful, no Velocettes were injured or upset during the modifications described.



View of the oil union



Complete solution, note red level marker.