

TRIUMPH T100R

ALLAN SMURTHWAITE - HYDRAULIC CLUTCH ADAPTION

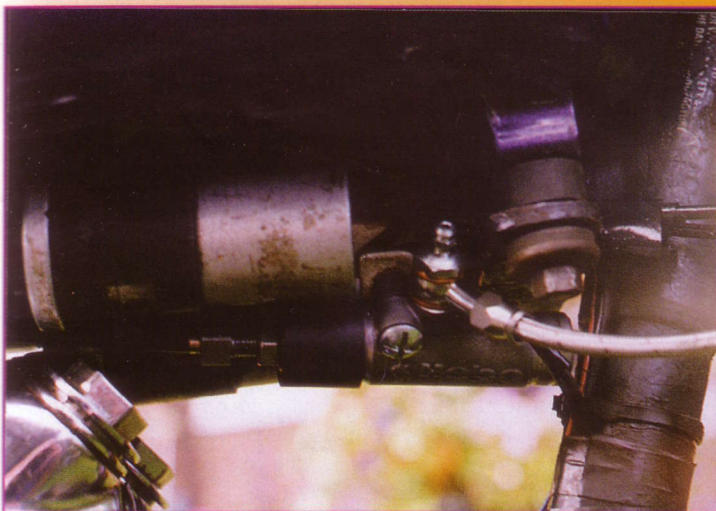
The clutch on my 1960's 500cc Triumph twin was not a problem to use, until I worked with defective hand tools which lead to me having 'defective hands'. Seeking ways to more easily operate the now heavy-to-use clutch, none were either going to fit the bike, with or without unacceptable irreversible damage to existing parts.

The only advertised source for 'hydraulic conversions' was a company so disinterested in replying to enquiries, that I gave up trying.

This was to be common as, the disinterest from businesses run only to 'take' money from bikers, contrasted with the help and interest you get from companies run 'by' bikers.

At the Stormin' the Castle rally, I spoke to Rick Hulse on the NABD stand, he advised me to initially try an 'Easyclutch' this made a difference though not enough, but it was encouraging.

After taking further advice from Billy Bigbeard, the NABD granted me a 'HEBO hydraulic-to-cable conversion kit' which more easily pulled the clutch (but not quite far enough). The multi-plate design of the Triumph needing more movement than a modern diaphragm clutch; yet the slave cylinder could move far enough if a bigger master cylinder were used.



Working out the sizes for the bigger master cylinder needed, I contacted potential suppliers. After many months of a mixture of no replies, unsuitable parts, or "try someone else", I give up in despair and tried 'pot luck' with a very helpful breaker and used one from a 1995 Honda VFR 750 which worked.

Removing the original clutch lever left a switch block needing a new back-plate made from half a steel tube and plates brazed to the edges, (a method used to make the frame tube clamps under the tank to mount the slave cylinder).

Initially I had made aluminium versions but the

local specialist alloy welder wanted £15 each for welding the 3 parts, so I used steel and did it myself for pennies. I used a shorter more flexible custom made hose (Norman Hyde), with a custom made nylon lined short cable (T Johnson Cables) connected to the clutch arm as the kit



one is not "Triumph compatible".

In the time wasted sourcing a master cylinder, I luckily found an advert for a performance set of clutch plates (LP Williams) using weaker springs (Tri Supply) which further reduced the force needed to pull the clutch.

The HEBO system would easily fit a more recent bike in less than an hour using all it's own parts, so the modifications and replacement parts I had to use are probably unique and not a particularly common situation.

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