



## Roadster Clutch Slave Cylinder replacement

By Dave Berridge

Two and a half months into the ownership of my Roadster 3 ltr, the clutch concentric slave cylinder decided to give up the ghost just before the great North Run. It was not leaking too badly at first but within a week it was not drivable so was unable to take it up north as I didn't want it letting me down on the motorway. So, the work began!!

This was not going to be a one-man job so with the help of Kevin Biddle and Graham Archer (oh, and Pauline with the hot and cold drinks and lunches), work started.

It was obvious that the engine had to come out to get to the slave cylinder, this was where things started to get a bit awkward as there was no room to move the engine the six inches that was required to free the layshaft.

After a lot of thought it was decided that the wings would have to come off and the inner wings unbolted to allow enough movement for the engine to be removed, not only that but would also save any damage to the wings which I really didn't want.

The first job was to remove the exhausts and manifolds, and this was no mean feat with very little room to manoeuvre as there are two parts per side, which are the manifold-to-block and manifold-to-exhaust system, causing much spanner rash and a few choice words (like 'oh dear' and 'naughty spanner' or something similar). With the exhaust off it was on to the wings.

Removing the wings was straight forward. Firstly remove the grill and cowl which is secured by 6 x M6 bolts per side, then drain and remove the radiator, the sidelights, five 4mm studs and a handful of wood screws, headlight and sidelight wiring and gently remove.

We also had to unbolt the inner wings (without removing them) so that we could splay them by about 2 inches a side to give the required clearance. This avoided having to remove brake pipes etc that are attached to them.





Now to the engine. First we had to remove the air flow meter and air filter then the inlet manifold, fuel pipes, breather pipes, coolant hoses, alternator and starter motor. The was straight forward as they are all 'plug and socket' fittings so no need to mark them up as they only fit one way. Eight 13mm bolts hold the engine to the gearbox bell housing and with these removed it was time to get the engine hoist out and take the weight of the engine while the engine mounts were removed.

With everything free the engine would not release from the bell housing ! We searched for missed bolts but there were none and in the end, it was brute force and a crowbar; and it came apart.

We decided to take the engine right out as the original idea was to move it forward and replace the clutch and slave cylinder but to give more room, we took it out.

Well, it had taken a whole day to remove the engine and ten minutes to change the concentric slave cylinder.

On inspection of the clutch driven and pressure plate there was no significant wear and no fluid contamination on the driven plate. All were in good condition, so I decided not to renew these as there was no need and it would have been a waste of money.

While the engine was out it seemed a good time to clean the engine compartment and engine, not that it was that dirty anyway but worth doing.

Refitting the engine was not too much trouble but I had to make a clutch lining tool to make the fitting trouble free. There were no major issues, just a reversal of the above to refit and more spanner rash.

All fittings checked for tightness, filled cooling system with antifreeze and bled the clutch.

In all a three day job which I could not have done without the help of Kevin and Graham and I thank you both very much. It was an interesting job, to say the least, but I don't want to have to do again for a long while.



