## Preparations of Mighty Mark IV – Tamworth 2012

10 days before departure for the Tamworth Rally I called a friend mechanic over to help check everything on the new motor before installation. He removed plugs and put a camera down each bore to make sure there were no ugly spots as the motor had been sitting around for a few years. Everything looked good so we put 5 litres of thin running-in



oil, connected up a starter motor, connected an external oil pressure gauge, and then connected battery to spin the motor over. We had oil pressure very quickly and I was therefore very happy to continue with the installation. I swapped everything over from the original motor: manifolds, carburetor, starter motor, generator, fuel pump etc. There was a little bit of difficulty installing the fuel pump as there was rag wrapped around the camshaft which took quite a bit of removing (rocker covers, lifters, pushrods to give enough clearance to remove rags. I didn't think too much about it except to think that this was probably a good thing, to protect that

area of the camshaft which may have been vulnerable to rust from sitting for a long time. An oily rag was good protection.

Anyway, we got past that, installed the engine, installed the gearbox, connected everything up, and started it up. It all fired up very quickly, and quietly, and very quickly lost oil pressure.

I walked away and came back again next day and installed an external oil pressure gauge, just in case mine was faulty, but still no joy. I drained the oil out and noticed lumps of fluff. I then set about removing the sump to see what was going on. I could not believe what I saw: there was oily rag wrapped around the crankshaft, the oil pump pick up,

camshaft. distributor shaft. because the motor had been running, bits of disintegrated rag were thrown everywhere.

It took me hours to clean everything up!

Eventually, I replaced the oil filter, new

thin oil (8 litres worth), refitted the

sump and tried again. All was well and time for a test drive.

I went out of town to my mechanic friend, we connected up a diagnostic mixture tester and went for a nice country drive. I could not believe how well it went. Hardly any throttle needed, and the mixture was perfect at 14.5 to 1. This was as good as it gets and all looked good for the trip. I went home and as I was putting the car away, I noticed two things: low oil pressure on idle, and a rather disconcerting rattle when I let the clutch out. So I changed the oil for a slightly thicker grade. The thin oil is only really critical for the first twenty minutes, and the engine had done at least that.

New Penrite oil fixed that problem.

After much discussion, the consensus was that the input bearing on the gearbox had collapsed, hence quiet when engaged but noisy on clutch release. Nothing else for it but remove the gearbox. I had another one handy, so quickly removed the selector plate to check the internals. All looked practically brand new, or at least rebuilt, no untoward movements anywhere. Again, to save time, the decision was made to install this one instead of rebuilding the old one. Time constraints were really beginning to kick in.

Test run time again, oops, no third and fourth gear. I had apparently not quite lined things up properly when I installed the selector plate. Another few hours later, and much adjustment on the linkages, and once again all four gears were accessible, sort of.

Test run time again, oops, still very noisy when I let the clutch out. It was now late Thursday afternoon, 3 days before we were due to leave.

OK, remove the gearbox again, and this time remove the clutch and pressure plate, and the fly wheel. The spigot bearing was loose, and had in fact fallen out on the last gearbox removal so that was "lock-tited" in. The adapter plate that bolts on to the motor hadn't been, but this wasn't obvious until the flywheel was removed, so an extra eight bolts were fitted and the flywheel re-installed. I arranged for my mechanic mate to come over, and contemplate/inspect everything, drink lots of coffee, deliberate and try and find something else. Eventually, he looked at the two clutch plates, my old one and the new one supplied with the new motor and Bingo, noticed that they had different splines. To confirm, we slid the new clutch plate onto the old gearbox spline and confirmed that it was in fact, nearly floating around as it had that much clearance. Problem solved.

I spent many hours slowly and deliberately installing everything and checking everything at least twice during the installation process, including much time on getting the linkages right. Finally, at noon Saturday, it was time to start it up again, and go for another test drive.

All was well. It ran beautifully quiet, it had all gears, the oil pressure was good, and I had finally got to the point where I was reasonably comfortable with taking it on the Tamworth Trek

The gear linkages where still a bit problematic. There is a problem with matching beautifully new selector arms with 56 year old linkages. First and second are not all that easy to find, but I figured most of the drive was highway, in top gear, so I could cope and look at it again when I returned.

One last check before putting it away, and lo and behold, the heater tap was leaking.

OK, no drama, I had another tap so just swapped them over, checked for leaks, all OK. We were finally ready to go.

So confident was I that I relaxed, and had a very pleasant Sunday morning walking the Castlemaine swap meet, then brunch at a local café.

The MM4's trek is another story.....

## The National Rally

Many stories will be told around the campfires (or general meetings) but this particular rally stands out for a number of reasons. The countryside was built for driving, the venues great, and once again it was good to catch up with some interstate friends that we only get to see ever so briefly every two years or so.

The weather was unseasonably warm (for southerners), with temperatures in the low 30s, and some hasty shopping for summer gear was called for.

Many participants had lots of little troubles getting to the rally, one SA member just arriving as the welcoming BBQ was underway. I did ask Steve Wright (NSW president) if everyone made it, and he confirmed that everyone that set out in their Humbers did in fact arrive in their Humbers. All the preparation in the world will not necessarily make for a trouble free run. Some of the intermittent faults included fuel pumps, carburetors, regulators, fuel tanks, distributor caps, heater taps, and the list goes on. But the important thing is that everyone did make it, and a fantastic time was had by all. The temperatures had dropped a little for our return journey, mid to high 20s, so travelling was much more comfortable. The Mighty Mark 4 once again lived up to its name!

Many thanks to the NSW Rally Committee for putting on a magnificent event that we will not forget.

