## **BIG PROBLEMS – SIMPLE FIXES**

Story & Photo: Dave Burke

**INTRO:** In the story "Conquering A Closed Road", Dave mentioned his 1974 BMW R90/6. He has owned this bike for about 30 years. So it is well worth looking back on his history with this bike. He has another couple of stories coming – so watch out for those – but here he takes us back to the time when he bought the bike, and some problems he had with it.



I bought a 1974 BMW R90/6. This was around 1990-ish. It was cheap-ish due to the fact that it wouldn't run. I have all the mechanical skills of a koala so I took it to the local BMW dealership to have a look at.

They called me two weeks later and asked me to pick it up as they couldn't get it going either!

I brought it home, got a workshop manual and started thinking about it. Well, if it has fuel, air and spark (and it's not seized) it *has* to start, no? I learnt how to set the points, pulled out the little grommet on the side of the engine and rotated the motor to display the timing marks stamped on the fly-wheel. I pressed the starter, but still nothing. It will turn over but won't fire.

I did all the usual things, like changing the plugs, leads, coils etc. Still no go. Getting frustrated now, I took the plugs out and rotated the motor by hand and poked a stick into the cylinder until the piston pushed the stick out. "Ok", I thought, "*That* is where the plug has to fire". I re-set the points accordingly and pressed the button. Away she went!

So I put a dab of white paint on the fly-wheel where I reckoned the timing mark should have been. (Your mechanically-minded readers will have worked this out by now). I taught myself about retarding / advancing etc and ran it like that for years.

Eventually, I took the bike to an old BMW-whisperer out the back of Nimbin and told him the story. He immediately knew the answer. Apparently, at some point in the bike's life, the gear-box had been removed / replaced. Whoever replaced it had put the fly-wheel on the wrong way. (I'm told that the fly-wheel on this model did not have a key-way, as did later models). When the dealership tried to set the points, they used a strobe-gun. When that didn't work, they just gave up.

Incidentally, the reason I took the bike to the old hippie at Nimbin was for an ongoing issue. The bike would run for 45 minutes or so, then just die. Wait 5 minutes and away it would go again. I spent \$1000's on electronic ignition (which got installed, then removed).

I took it to quite a few "experts" who charged me lots of money only to have the problem continue. Finally, in desperation, I told the old hippie at Nimbin and he said, "Want me to fix that now?".......Of course!

He pulled off the fuel taps and showed me the tiny, brass mesh from the factory which was a rudimentary filter. The rubber washers on each side had perished and disintegrated. This left tiny bits of rubber stuck in the mesh. This blocked the fuel supply intermittently and caused the bike to stop. Wait a minute and the bowls would re-fill and run again.

Total cost of repair from the old hippie - \$5. The *many* mechanics the bike had been to had all failed to consider this.

P.S. The old girl has recently ticked over 400,000kms.

## **MY REPLY**

Thanks for the story, Dave. Wow, what a frustrating time you had with that! Well done for getting it going in the first place. You did well, because – as you probably know – there are 2 times in the cycle that the piston comes to the top of the cylinder, with the plug firing only on one of those. And the fuel filter – well that's another one that fooled the "experts" and in the end was a simple fix. It just goes to show that thinking "outside the square" (who else would have considered the timing marks would not be in the right place?) and specific knowledge of that particular bike, can be far superior to the usual trained-mechanic's approach.

It reminds me of a Mitsubishi Sigma my father-in-law had many years ago. It started cutting out after he had driven it for a certain distance. The car would stop, and refused to restart. He'd call the NRMA and when they came the car started instantly and ran fine. This happened several times, until one day a mechanic turned up and said, "I know what that is!" There was a solenoid in the system somewhere that was known to develop a fault where it would fail when hot, but worked fine when cold. So after a little while driving, when the engine was hot and there was heat in the engine-bay, the solenoid would break down and the engine would stop. By the time the NRMA arrived it had cooled down and was working again. The serviceman who came that day knew the problem and got it fixed.