## **It Failed to Proceed**

Jump in, turn the key, push the button, engine cranks but will not start. Sound familiar? Well it happens to us all at some time or other and as in this case, at the most inopportune time.

My wife, Gwen, and I had packed the TR for the TT to Lightning Ridge and were ready to go. I started the trusty TR and backed it out of the garage and turned it off. Closed the garage door and Gwen set the house alarm and shut the front door. We jumped in all full of enthusiasm for the upcoming tour with our TR friends. I turned the key, pushed the starter button and after a few splutters the engine died not to start again. Panic.....we were due to meet rest of the tour (13 other TRs) in fifteen minutes.

There are basically four things required to make an engine go. Fuel, spark, air, and compression.

Compression cannot be achieved without air and as the engine sounded OK during cranking, I immediately discounted air and compression as a likely cause of my dilemma.

That left fuel and spark. In my mind I discounted the carburettors, as it was highly unlikely that two fine pieces of equipment such as SU carburettors would fail at the same time. It is possible but not likely.

The easiest next step was to check to ensure we had fuel and that it was getting to the carbies. Yes there was fuel in the tank and removal of one of the float bowls confirmed that when the ignition was turned on, we had fuel flow and no water. My car is fitted with an electric fuel pump.

That only left spark. I pulled number one plug lead, attached it to a spare spark plug, earthed the plug and had Gwen crank the engine. Yep, there was spark. Not the best spark but spark. Now I was getting a little confused. All four things required for ignition were there, spark, fuel, air, and compression.

Now it is at this time the mind starts to think of all the improbable things that could be wrong. Up until this time I had, I thought, maintained a strictly logical trouble shooting approach.

Distributor I thought. My car is fitted with an electronic distributor from a Honda Civic, maybe it was faulty. I did not have the info or tools to check it so I would change it. I found the original Lucas distributor and after stripping and checking it I fitted it to the engine. During all this I received three calls from Register members after both second hand parts and technical information. It was during one of these calls that I fitted the distributor 180° out of sync and had to redo it.

Distributor refitted and the electrics jury-rigged to separate the wiring required for the Honda distributor, it was time to try it again. No luck, and it was luck I was relying on, not good trouble shooting practice.

The only item left was the coil. Now in all my years of motoring, over 49 years of it, I have never experienced a coil failure. Good trouble shooting practice tells us to take a

logical approach and to try the simplest things first. It would only have taken a couple of minutes to try another coil. Had I been able to try a new coil I would have but I did not have a spare and after all, the coil gave a spark. So at this point I had put aside the logical approach and gone for the distributor.

I dashed up to the nearest Repco and purchased a new coil. This coil was temporarily connected and varooom. The engine immediately started. I fitted the coil correctly, tied up the temporary wiring I had done, closed the lid, cleaned up, locked up, and departed some two hours late. We met up with the rest of the tour about fifty klicks short of our first nights stay. Needless to say they all felt for me and at least half of them were carrying a spare coil.

The car performed well on the tour and on returning home I checked out the failed coil. The primary coil resistance was within specs so I temporarily fitted it to my TR and it started, ran for about three seconds and stopped. It would not start again.

I have no idea what the problem with the coil is but this little exercise confirms the need for good and logical trouble shooting practices.