50 years with one Imp Roy Blunt, Llanfrechfa, Cwmbran, Gwent

I bought our Imp as a three-year-old secondhand car from Mulliners in Northampton on 19th September 1969 just a couple of weeks before I met my wife, Dawn. She is a 1966 Super Imp and was my first car – I was an enthusiastic motorcyclist then and named her *Suzy* after my Suzuki motorcycles. At the time I would surely never have believed that I would be driving the same car 50 years later or, even less, that I would be celebrating the event on the first evening of an Imp Club Wicked Welsh Weekend 2019 in Llangorse. However, that's what happened.



records, *Suzy* came off the Linwood production line on 15th April 1966 and was first registered in Hastings (essentially at the other end of the country – the delivery system must have worked really well) on 22nd April, just one week later. I have no idea what happened to her in her first three years but when I first saw her she had 33,000 miles on the clock (a very high mileage for a small car in those days). The logbook (it really was a book in those days – sad to say that I returned it for a V5 without making a copy) had just one previous owner in it, a garage in Hastings. By the time I collected *Suzy* she had been 'clocked' – the odometer returned to zero – as was common garage practice with secondhand cars at the time. She was my only car until May 1983 when I took her off

the road with the intention of carrying out a restoration. However, life got in the way (as it does) and this didn't get very far although she was r egularly started and driven out of the garage onto the drive and back. Many years later she went to Ron Aspinwall at Impspeed for a complete restora-



tion (including the fitting of Fiesta front disc brakes and comfortable front seats – with headrests – from a Metro GTA) and she was back on the road in April 2004. She shares her garage with a 1981 Triumph Spitfire 1500 (named *Nel* – after her registration – and originally bought by my son in 1997). **Minor mods.** The first thing that I fitted to *Suzy* was a hazard warning lights system – I recall the kit was named 'Tragonic Heavy Duty Prevent-a-Crash' – and, 50 years on, it is still there and still works. A manually operated reversing light was also fitted but this was soon modified to be automatic using a roller micro-switch operating on a small piece of aluminium Araldited to the long gear change control rod. I also fitted a tow-bar, lights in both the boot and engine compartments and a 12 volt 'cigarette lighter' type accessory socket. She also had a transparent 'catch' bottle fitted to the radiator overflow pipe – to my mind an essential addition for any Imp – and an uprated radiator. She also has a 'lights left on' buzzer wired into the door courtesy light switches.

Ignition. *Suzy* has had electronic ignition systems for most of her life. Obviously when I first bought her she had a standard ignition. However, in the January 1970 edition of *Wireless World* RM Marston published a design for a Capacitor Discharge Ignition (CDI) system and, having been an electronics



enthusiast for many years, I built one. It still retained the contact breaker points but these only carried a small non-inductive current rather than the normal large inductive current. To be on the safe side I included a couple of additional protective diodes in the circuit and also set up a plug and socket arrangement that allowed me to change quickly between CDI and conventional ignition. The CDI system was brilliant – *Suzy* started better, felt more responsive in general, and used slightly less petrol than with the standard system. In addition the contact breaker points never seemed to wear or need adjustment. However, after a few years use the

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CDI unit began to give trouble, failing on the road a couple of times but, perhaps predictably, working perfectly when tested at home. I couldn't find any faults but won't put up with things like that for long so replaced my home-built system with a Sparkrite unit (not a CDI system but still using the contact breaker points). This lasted until the restoration when *Suzy* went back to a conventional system for a time. When the time came to change the contact breaker points I put in an Accuspark module which does away with the contact breaker points altogether – I'd been running one in the Spitfire for many years so felt confident. I know that many people have had trouble with these but, at the risk of tempting fate, have to say that the units in both *Suzy* and *Nel* have performed beautifully for many years and some 20,000 miles. As an overall summary I'd say that both the Sparkrite and Accuspark systems seem to give exactly the same performance and economy as a correctly setup contact breaker points system but they don't go out of adjustment. The home-built CDI system did offer a small but definite benefit – perhaps I should build another one! In the years after I removed the CDI system I gradually stripped it for bits and pieces to use in other projects. One component (a fuse holder of all things) fell apart in my hands – presumably that was the issue for the intermittent failures years before but by that time there was virtually nothing else left!

Fuel Vapour locks (an ethanol containing petrol related problem). *Suzy* had never suffered from this until we were on our way to the Perth National in 2013 on a fairly hot day. We had stopped in a layby for ten minutes or so and then *Suzy* just would not restart. The starter was working, there was a good spark, but there was air and just a very weak spray of petrol going into the (transparent and empty) fuel filter positioned between the fuel pump and carburettor. Once she had cooled down everything was back to normal and we started off again. We suffered a similar, but less severe, problem later on in the day but then everything was OK for the rest of the event. When we got home I checked the cleanliness of the petrol tank and fuel pipework in case it had actually been a case of dirty petrol or general debris but everything (including the fuel pump filter) was perfectly clean. In the next few years there was just an occasional slight reluctance to restart when very hot but nothing that a second burst on the starter couldn't overcome. Then, one day – actually what turned out to be the hottest day in 2017 – we set off in *Suzy* but after a few miles the engine just sputtered to a halt on the road. Again it was a fuel (or rather a lack of fuel) problem, and again it solved itself once *Suzy* had cooled down. However, the problem recurred every few miles making

2019 Preston National. Always worth parking near an AA van! Photo: Roy Blunt it impossible to continue safely. We pulled into a convenient pub car park to get off the road, think about the problem, and have a spot of lunch. The day was getting hotter and I seriously thought about calling recovery to get home safely. Then, while looking at the fuel system a thought struck me.



Fuel vapour locks usually occur in the pipe leading to the fuel pump because it is essentially under a slight vacuum (necessary to pull the fuel through into the pump). On an Imp with a standard fuel pump the flexible rubber pipe leading to the fuel pump is positioned above the inlet and exhaust manifold. Because you have to leave some slack in the pipe (to allow for engine movement) this pipe can sag downwards under the influence of gravity and get closer to the exhaust manifold. This was the case with Suzy. The pipe was still well away from the manifolds but a lot closer than it need be. I re-routed the pipe so that the 'slack' was away from the manifolds and held towards the air cleaner. The day was even hotter by then and we started off back home with me expecting a problem at any minute – however, we made it home without any issues. Subsequently I set up a series of experiments to measure the temperature of the fuel pipe in various positions. Unfortunately it proved impossible to get truly reproducible results even after making allowances for different ambient temperature though it was obvious that the temperature of the pipe, if it was allowed to droop naturally towards the manifolds, was several degrees higher than if it was pulled over towards the air cleaner. All I can say is that, having made the re-routing permanent we haven't suffered from fuel vapour lock despite running in some very hot weather. If you have a similar problem why not give it a try; it is simpler than fitting an electric fuel pump although that might be necessary in future if we are forced into using E10 petrol which will be prone to worse vapour lock issues than the current E5 fuel.

Brake light switch. The original brake light switch lasted some 50 years (40 years on ordinary brake fluid, 10 years on silicone fluid). Since then I have replaced three – they lasted about 12 months each. The last one failed on the journey home from the Preston National. Instead of putting in another hydraulic switch I have put in a mechanical unit – using a micro-switch clamped to the bottom of the steering column with the lever acting on part of the brake pedal itself (idea copied from Barry 'Baz' Blackmore). I intended to make up something more 'high tech' using an optical switch and a few bits of electronics but the micro-switch works so well that I have left it as it stands. Because we've become a bit paranoid about brake light switch failures there is also a small LED 'repeater' in the glove box area so that we can easily check that it is still working (intentionally the repeater is positioned so that I can't see it while I'm actually driving). *(The quality of replacement*

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brake light switches seems to have declined. I too have had three fail in the last ten years, prior to that the original lasted over 40 years. Thankfully my Imp has an ammeter so it is easy to check it is still working. GP)

Dipping mirror. I've long since got used to the advantages of having a dipping mirror on my modern cars and had fitted one to the Spitfire (taking the easy route – sticking it directly onto the windscreen) as my son used it regularly at night. However, I'd never bothered to fit one to *Suzy* as, after the restoration, we very rarely used her in the dark. That changed when we started holding regular Imp Club area centre

meetings in Cardiff and I quickly decided that she needed one. I could have fitted a self-adhesive unit to the windscreen like the Spitfire's but I wanted to keep the original Imp 'mirror on a stick' arrangement. Fortunately Andy Gill ('617 Squadron' on the Forum) had put a 'How2' item on the Forum describing how to modify the Imp mirror 'stick' to take a modern dipping mirror and I followed that. It works beautifully, looks right, and is, in my opinion, a very worthwhile mod. **Generator.** Suzy was originally fitted with a C4oL dynamo – the slightly longer, slightly higher (25) Amp against 22 Amp) output option compared to the normal C40. (The 'L' for 'long' dynamo – easily recognisable as it lacks the 'step' in the casing – was only fitted as standard to the Imp variants which had four headlights. GP) I have to say that I've always found the dynamo perfectly adequate for our requirements – but Suzy isn't festooned with power hungry spotlights or audio systems and my commuting run (in the days when Suzy was our only transport) was fairly long giving the battery ample time to replace the volts lost in starting. The original dynamo served until 2009 when we were going along in pouring rain with wipers, headlights and heater blower motor all on (i.e. classic conditions for dynamo failure). There was suddenly a very strong smell of fish/burning electrical insulation but everything kept working and no red lights came on. I stopped as soon as possible and opened the engine cover – to see wisps of smoke coming from the dynamo! Amazingly, once things had cooled down, everything seemed fine and we got home OK. However, it was obvious that the dynamo had been damaged. It was replaced with an exchange C4oL from a local source. However, this one lasted less than four years before suffering from a bearing problem (despite the fan belt being correctly adjusted and oil being applied to the rear bearing lubrication point regularly), nowhere near as long or as many miles as the original had lasted. Perhaps it was a reconditioned unit which had had the brushes replaced but not the bearings. The question was - get another dynamo or change to an alternator? For some reason I've never thought that an alternator looks quite 'right' on an Imp engine but if a dynamo is only going to last four years I could probably get over that prejudice. Coincidentally, one of our local area centre members had just fitted a Dynamator which worked well and gave alternator performance with 'classic' dynamo looks – so that's what I fitted (after upgrading some of the wiring to cope with a potential 45A output). It performs well and is much quieter than the dynamo it replaced – but perhaps the dynamo noise was an early indication of the bearing problem on the replacement C4oL!

One of the many great things about *Suzy* is that she always seems to do her best to tell us if there is something wrong with her while we are at home or, if something goes wrong on the road, to get us back home. A classic example of this – I had just taken her out for a short run before putting her in the garage for the winter. As usual she ran beautifully until the moment (literally) when she got back onto our drive and the engine just cut out. No misfire or any other warning sign – the engine just cut dead. I could see nothing obvious wrong – there was a spark on a test spark plug just laid on the engine and normal petrol flow to the carburettor – but still there was no sign of her restarting. Despite the spark I had a feeling that it had to be an ignition issue and started to work through each item one by one. I checked the timing, replaced the Accuspark (temporarily) with points and condenser, changed the coil, changed the HT leads – still absolutely no result. The last thing to be replaced was the rotor arm – and that gave an instant result. I did a few tests to the old rotor arm later – it appears that the insulation could withstand the spark voltage required to jump the gap on a spark plug outside the engine but not on a plug when fitted in the engine – it takes a higher voltage to jump the plug gap under compression.

Suzy has covered roughly 150,000 miles since new – and I have driven her nearly 120,000 of those. Dawn and I both love her dearly. She has carried us all over the country, on honeymoon, on holidays, brought our baby son home, towed our trailer tent, and carried me many miles on business before being taken off the road prior to restoration. Since restoration she has been driven to nearly all of the major Imp Club events (we haven't managed the Irish Experience yet – so far the dates haven't fitted but hopefully one day they will) including Going Dutch and we always love driving along in her. As we all know, many people smile when they see an Imp and often want to talk about them with us – we're always happy to oblige – a complete contrast to *Nel* (the Spitfire) where the usual reaction is to want to have a race with her! Dawn and I feel immensely lucky to own such an excellent Imp as *Suzy* and hopefully will continue to enjoy driving her for many years to come.



The Blunt collection: *Suzy* with Spitfire *Nel*, *Rou* (the Honda) and *Des* (the Dandy folding camper) *Photo: Roy Blunt*

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