<u>TEN YEARS BLISS,</u> TWO ANNUS HORRIBILIS

COLLECTING PXC200

Although a little early for Christmas, the snow and sleet were falling as I approached The Real Car Company premises in Bethesda in the Snowdonia National Park on 2nd December 1997. I had been two weeks before to choose one from the four Bentley Mark V1 and "R" Types which they had in stock at that time. As I knew absolutely nothing about vehicles from the Rolls Royce stable I had taken the precaution of asking a friend of mine, John Gratton, a long standing RREC member, to go with me to help me with my deliberations. Within an hour I had decided on PXC 200 (chassis number B97ZX) a mid grey over silver Standard Steel saloon which was received by her first owner on 26th November 1954 almost exactly 43 years before. Collection was arranged for two weeks later.

Although I had had a brief test drive on my earlier visit and had driven my late father-inlaw's 1937 Lagonda LG45 Tourer, which was of similar size and power, driving this large saloon with its massive steering wheel in snow, ice and sleet was a completely new experience. Even though I was on good quality "A" roads, at first I was not exceeding 30 mph and then gradually, as my confidence grew and I began to get the feel of the car, I found that I was increasing my speed. By the time I reached the A55 I was cruising at 50 mph and, fortunately, as I left North Wales the snow turned to rain and I felt more comfortable with the road surface.

The car was a re-import from the warm dry USA and this was one of the main reasons for my choice as the chassis and body had not suffered from our British winters. The down side for me on that day was that the wipers had not been used for a very long time and the battery was "tired" to say the least. My total journey back to Northumberland was 250 miles and by the time I made Leeds the wipers had packed up. Fortunately, I originate from that area and know a garage proprietor who understands the foibles of old cars and he sorted the wipers for me in about the time it took for me to consume a cup of his tea. On the way again and I reached Durham just in time for the evening "rush hour". Right in the middle of nose to tail traffic the battery finally died and PXC200 had to be recovered. The following day she was delivered to Alan Fearon the Rolls Royce/Bentley specialist in Newcastle who went through the whole car and re-commissioned her for me.

THE ITERMEDIATE YEARS

My intention on buying the car was to enjoy afternoon runs to the tea shops of rural Northumberland together with the myriad of car shows which we have in this part of the world, the pinnacle for me being the NECPWA show at Newby Hall on or about 15th July each year. (I believe there were about 1800 cars of every make and vintage there in 2009). However, as I now know often happens when you buy a Rolls Royce or Bentley, I was very quickly getting people knocking at the door to see if I would provide the transport for a local wedding. As I was now retired and wanted to improve the car without dipping too deeply into our savings I decided to form a small wedding car hire business. This I did for 10 years and whilst I did not make my fortune out of it, it did pay

for the restoration of PXC200. I must also say that throughout that period the Bentley performed impeccably starting "on the button" every time.

ANNUS HORRIBILIS 1

Although I did get much pleasure from doing the weddings it was starting to eat into our time and, as weddings are planned up to two years ahead, it was necessary to plan my exit strategy that far ahead. With this in mind the last wedding was carried out in July 2007.

After a rebore, early in my ownership, the engine ran superbly and I had concentrated most of my restoration work on the coachwork and interior. For this reason I had neglected the engine compartment and if someone asked to see the engine it was always a disappointment having seen the rest of the car. For this reason, at the end of the 2007 car show season, I decided to tackle the engine bay during the following winter months. In November my good friend David Clements (Morgan Plus 8 owner and NECPWA member) gave me a hand to dismantle the whole of the front end of the car. The radiator, water pump, and dynamo were sent away for restoration and I set about cleaning and degreasing everything else. Then rocker cover, heater pipes, carburettor dash pots and the like were sent away for repainting. By February 2008 we were ready for re-assembling.



Scruffy engine compartment, minus air filter, before work started

Now the "R" Type Bentleys with the later chassis numbers have an automatic choke linked to their twin SU's which, as far as I am aware, is unique to that model and, although I was unaware at the time, this would be the source of much head scratching and time wasting for almost two years. As I dismantled the carburettors a wire attached to the choke housing broke away from somewhere in the bowels of the engine compartment. Knowing my limitations when it comes to auto electricals I decided simply to make a mental note and ask a reputable local auto-electrician to "sort it out" when the time came to put everything back together again. It took some time to re-build the contents of the engine bay to my satisfaction and with much help, again from my friend David, eventually, we were almost there and time to call on the aforementioned auto-electrician. He took one look at the job and the wiring diagram in my Mark V1 workshop manual (that is very relevant although I did not realize it at the time) and said that rather than waste time trying to trace where the original feed came from he would pick up a new live feed near to the fuse box. Seemed alright to me.

I checked everything through and having done all the right things like new plugs, recharged battery etc I pressed the button. Eventually she fired, but only just, but I managed to keep her running. Things seemed to be going o.k. but the running became rougher and rougher and eventually she died on me. Time and time again I cleaned the plugs checked carburettors and the like but exactly the same happened. Eventually, I decided to contact Colin Watson of Auto Start, Cramlington and, as it proved eventually, it was the most intelligent decision I had made so far. Colin is a man, how shall I put it, of mature years who has "been round the block a few times" and served his apprenticeship on the classics of the 1950's and 60's. - you are probably working out exactly how "mature" he is by now. Colin went through everything, checking all that I had done and, apart from errors I had made on re-assembling the carburettors after fitting new needles and jets, could not find anything major. I spoke with IntroCar the "R" Type specialists and it was thought that fitting their electronic ignition pack and new coil might give a bigger fatter spark. This we did but things were no better. So – carburettors o.k., ignition o.k., timing o.k. what could it possibly be? Many months had passed and I now had a very pretty "R" Type inside and out with an engine compartment "you could eat your dinner off" but the car would not even get out of the drive. Even Colin, with all his experience, was beginning to despair.

It was then that I made two more intelligent decisions. One was to roll the car back into a corner of the garage for the second winter and the other was to persuade my wife to buy me the Silver Wraith, Silver Dawn, Mark V1 and "R" Type Service Handbook. Note that this specifically refers to the "R" Type., and, what is more, has a whole section relating to my automatic choke - this was missing from the Mark V1 Workshop Manual. There I learnt that there is an electro-thermostatic control which closes the choke butterfly completely for 5-7 seconds upon starting. As soon as the oil pressure of the engine reaches 15 lbs/sq.ins. an oil pressure switch breaks the electrical supply and the choke opens to 5 degrees thus allowing some air into the mixture and then gradually the thermostatic coil unwinds completely and a full air supply is available to the carburettors. One cold winter's night in our sitting room reading this new manual the solution to the problem hit me between the eyes. My auto-electrician friend had picked up my feed for the automatic choke from an "always on" supply rather than from the oil pressure switch on the block. This meant that the choke closed completely for starting but then stayed completely closed. This was the reason that with good clean plugs etc she would start perfectly but very quickly the running would deteriorate! Eureka! Problem solved - or more accurately ONE problem solved.

Colin came over and wired up as per the new manual and, with yet another set of new plugs, she fired up and ran beautifully. Plans were made to attend NECPWA Newby Hall in July and RREC Harewood House in August.

Come the 19 July we set off for Newby Hall feeling quite confident but there was still that intermittent misfiring for the first 5 miles or so. After that she ran well for the 90 mile journey and I assumed that the "missing" was simply dirt in the system and she had just needed a good run. We had a glorious day at what is the premier multi make car show in the North East of England with an auto jumble to die for. After a picnic tea we started our journey home and to my surprise we had the same misfiring again for the first five mile or so which subsequently cleared but obviously this still concerned me.

Once again I telephoned Colin (by now a good friend) to ask him to investigate the misfiring and suggested that whilst we were at it we would replace the rear exhaust manifold gaskets as I could hear the sound of escaping pressure towards the rear of the engine. We decided to tackle the manifold gaskets first as it is a straightforward job. A couple of hours later with everything re-assembled we started the engine and, unbelievably, the noise of escaping pressure was still there. "Detective Colin" then broke the really bad news. As he slipped his hand into the small gap between the rear of the cylinder head and the bulkhead he could feel escaping pressure. The worst possible news - the head gasket had blown. Very quickly I went from delight that I had managed to get to Newby Hall to despair that to have this work carried out at the Bentley specialist would cost many hundreds of pounds. It also meant that, as an RREC member, I was going to miss the best show of the year the Northern at Harewood House in August. Time to stand back and take stock.

Having carried out similar work on other vintage and classic cars I decided that carrying out such work on the Bentley would be basically the same but everything would be much bigger and heavier. If I did the "donkey work" and called upon Colin at crucial points in the process I could do it. Telephone call to Colin and, once again, he agreed to help – what a splendid fellow. And so, having painstakingly rebuilt my engine ancillaries only weeks before, I once more started to dismantle them again. Eventually I had carefully removed the rocker gear according to the manual and was left with the simple matter of lifting the head. Or so I thought.

I followed all three alternative methods listed in the workshop manual to try to remove the head, none of which came remotely near to moving it. If all these failed the manual had no further suggestions to make. Over the next three weeks I poured gallons of penetrating oil down the plug holes but this did not work. Soft nylon rope passed into the cylinder through the plug hole and very gentle pressure on the starting handle to try to lift the head from inside but, again, no success. I then made a plate to attach to the rocker shaft studs and attached this to an engine hoist with the load spread right across the head. This was left under tension for a further two weeks with penetrating oil being poured in on a daily basis. Still no success. Slowly it was dawning on me that there is a massive difference in removing the head of a 1 or 1.5 litre engine with, say, 10 head studs and that of the Bentley with an amazing 39 head studs! I was now beginning to mentally word the advertisement to sell the whole lot as a "basket case".

Again, walk away from it and think. The manual expressly tells you not to "insert an instrument between the cylinder head and cylinder block face... as this would damage the faces, especially that of the aluminum cylinder head". Not a good idea. In desperation I rang my contact at one of the main RR & B specialist suppliers who I knew also dismantled for spares. We went through all that I had tried and were about to finish

the conversation when he said "You have, of course, tried tapping in wedges!" I could not believe my ears and made the point made in the manual that this was definitely not a good idea. He said that the manual was written for work to be carried out on new and almost new cars and with vehicles over 50 years old and when all else fails they did resort to gentle use of very thin steel wedges to start with but quickly replaced with wooden ones once a small gap had been started. Having established that they had a good replacement head in stock, should I cause irreparable damage, I decided to try this. It took Colin and me two whole days with yet more penetrating oil (and inserting the wedges between the block and the gasket to protect the head) to very gradually get some movement and eventually lift it off. I now know why the professionals need to charge so much for this work. The good news was that there was no damage either to the head or the block but the head was being sent away for skimming in any case. The other good news was that Colin identified the cause of my misfiring. Number 6 piston crown was very black and Colin suspected that the valve stem seal was worn and allowing oil to drip onto the plug when the car was stationary. This caused misfiring on start up but burnt itself clear after a few miles. Therefore we took the opportunity to replace this with a more up to date seal and the misfiring has now been solved.

A couple of weeks later with the "new looking" head back and carefully bolted down we could now rebuild the ancillaries. Yet again, new plugs, slight adjustment to the timing, and carburetors re-checked and she was ready to test run. Absolutely brilliant – fired first time, all the power returned.

All my problems over - or, yet again, so I thought.



The completed engine bay

The M.O.T. was due in October and so, in late September, I proudly drove to the M.O.T. testing station about 10 miles away. It was a very hot Indian summer day and she performed well. I had also asked the tester to attend to one or two small matters before carrying out the test and so the engine was running in a stationary position for quite some time. She passed the test and I drove home quite content with myself – until I noticed the temperature gauge begin to climb higher than normal as I was approaching home. By the time I pulled up in the drive she was boiling. Everything had been set up perfectly, timing, carburetors etc and so there was only one thing left – the thermostat. I am used to parts for the Bentley being quite expensive but expected to have to pay about $\pm 50/60$ for a new thermostat as thermostats for most classic cars are about $\pm 20/30$. Imagine my shock when my usual supplier quoted almost £300. I shopped around and found that Theo Hendrickson in Leeds could do the same thing for just under £100. At first I was suspicious as to the quality but Theo explained that because the "R" Type engine in a different state of tune has a military/marine application these were brand new ex military units and he had sold many without any come back. I decided to take my chance and within a few days my new thermostat arrived wrapped in waxed cloth. Because the thermostat fits flush with the housing it was a real job getting the old one out, but with a little friendly persuasion it was free. New one fitted and run up the road. Temperature gauge shows that everything is working perfectly.

And so in September 2009, almost two years after I started on this venture and many pounds the worse off we were ready for the last couple of shows of the season. PXC 200 now runs better than she has ever done in my ownership. I would like to thank Mike Kendrick, our Register Technical Adviser, for being at the other end of the telephone – sometimes when I felt that I was making no progress and just needed to talk things through Mike's help was invaluable.

Although at the time it seemed a real rollercoaster of good and bad fortune, as one wise friend of mine said "You have learned such a lot about your car – consider it money well spent!"