The BMW Club

Vintage & Classic News

Issue 23/2010

'In The Workshop-7', R90S Road Report, Mannheim 2009, Appreciating an R60/2 ?



Club Member Mick Taylor's R45 Based Racer in Action at the 2009 Spa Classic Meeting

Editorial

Well, this is our last Newsletter for the Register but if the publication is continued we will try and contribute items now and again. On the subject of contributions we must thank 'The Amateur Mechanic' and 'The Jolly Jester' for their input over the years; without their articles the content would have been very minimal.

How things have changed since the earlier days when Wendy would be writing over six hundred envelopes by hand and stapling the A4 newsletter pages together; very much like the early days of the club in the 1950's. The Register numbers have increased from 65 to 1100 (at the last count) in the past ten years and hopefully the numbers will continue to rise as the interest in the older BMW's does. Obviously we will be about at the events but if we can help at any other time please feel free to telephone or email.

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Register Diary for 2010

April 24th/25th The Classic Motorcycle Show at Stafford

30th May - Classic Bike Clubs Show at Stanford Hall, Nr. Lutterworth, Leics.

17th - 20th June The 9th Vintage & Classic Rally at Newport, Pembroke-shire, S.W.Wales

9th/11th July VMCC Festival of 1000 Bikes at Mallory Park

18th July VMCC Founders Day Rally Stanford Hall, Nr. Lutterworth Leics.

Thanks to the following for their contributions:-

'The Amateur Mechanic'

Robert Freeman (alias 'The Jolly Jester')

John Latham

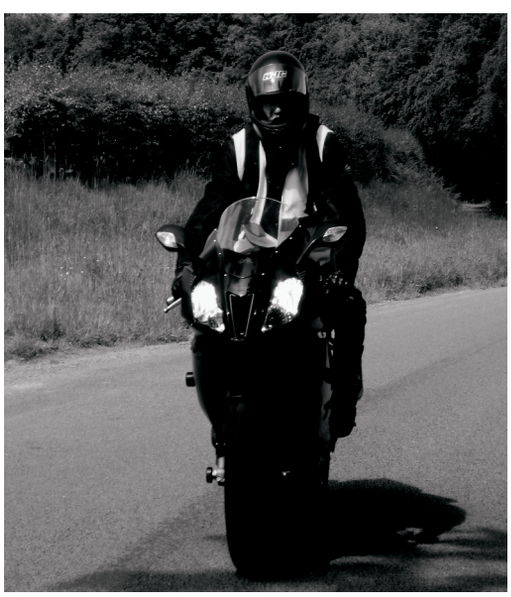
The Cossack Owners Club

Eddie Heitmann from Hamburg

Getting to appreciate my R60/2

by John Latham

Born again bikers tend to get a bad press, I even read a comment on a bike tour and hire website to the effect that the company was fed up with these people wrecking their bikes and had consequently given up unsupervised renting out altogether. At 59 I guess caution came to the fore and a partner who was only luke-warm about me getting another bike I needed to tread warily on this one. After a lot of reassurance about how careful I would be I signed up to a one day refresher course and then since that proved a fair success another one with the BMW people in South Wales that I can only describe a gruelling but effective. Another very enjoyable day out with Rider's Edge and their Harleys (I only really bonded with the Buell and they said they didn't normally let people use that one). I decided about time I set off on my own so I followed all that up by renting four different bikes from a couple of rental companies, one conveniently located in Builth Wells loaned me a Kawasaki, ER6f, an Aprilia RSV 1000R and a Suzuki GSX 600R, the Aprilia possibly a mistake but I somehow managed not to drop it although wrists were aching for at least two weeks . The Suzuki however was great fun, the best of three.



The rented Aprilia RSV 1000R



My R60/2

Ok so can I actually buy a bike that you won't panic about me riding I said to my partner. By chance she saw an ad for a R60/2 and thought that would be an appropriate machine for someone of my advanced years. Horrified that it was in fact older than the R60/5 which was my last bike but one, I was only luke-warm but went to look anyway (a mere 60 miles away) and well, it was immaculate and ok I caved in (there may never have been another chance). The seller delivered it so I never got to ride it home or indeed at all before buying it (possibly a mistake?) After considerable hassle getting it to start and quite a few phone calls to the previous owner the bike is finally just about ok now but oh dear starting it has proved a perennial pain and I have had to push start it out of petrol stations a couple of times and have on occasions after anticipating a nice ride out, given up entirely after getting all togged up at home, practically collapsing in a sweat sodden heap. I half suspect that the starter lever is only making a half swing due to an internal problem that I have not investigated. First few rides I was terrified and with no indicators and only a bar-end mirror meant I had no idea whether or not I was communicating my intentions with other road users. However after taking various bits of it apart, notably

the carburettors, fitting a new petrol tap and petrol filters (so I can see where the stuff is going) it's been reasonably ok recently and I have also fitted indicators (from Paul Goff which are reasonable copies of original bar-end Hella ones, plus rear repeaters), engine bars, knob end levers (from Bench Mark Works) and proper mirrors so it is at least an approximation of a modern bike, minus electric start of course (regrettably).
One way I thought might make me feel better about this machine was to sort of introduce it to other bikes and thus my most recent adventure on it other than the usual lone ride out was attending a police BikeSafe day.



Bikesafe Day Aberystwyth Fire Station

I wondered if the bike would keep up but surprisingly this was not a problem and the chap on the VFR ended up hanging back. The seven of us were split into three groups and fortunately I was put with the lot that went on the 80 mile ride-out as opposed to the lot that went around Lake Vyrnwy, a 120 mile round trip. I was very impressed by Tony the police rider who was both tactful and very patient, never made any comment about my ancient machine or its suitability. I was a bit concerned about all the briefing stops en route ie. would it re-start but it did amazingly and I came away proudly with my certificate (straight BS). The indoor sessions I would also highly recommend as I had seen some of this before but an excellent idea to make bikers aware of their vulnerability and how at the very least to minimise this.

So do I love my slash two? Not sure, I'll let you know later in the year...

John Latham

T.T. Start or Fitting the BT-H Ignition System- Part 2.

by Robert Freeman (The Jolly Jester)

Having fitted the B-TH Unit it was not until January 2009 when I was actually able to take the R50S out for a long run and pay attention to setting up the carbs etc.

What the new unit revealed was how much the original BMW plug caps leaked to earth. These are the caps with the alloy covers, I could feel the spark though the cap, enough to tingle. I would think a direct discharge would restart your heart! The spark now will jump almost an inch.

The adapted blanking plate on the camshaft is doing its job, keeping the oil in. As I had said the new set up made the carburettor imbalance more apparent. I suppose that over the years I had adjusted the setting to fit the uneven spark timing on both cylinders. The throttle cables had also been set to obtain an even running engine. Now with the cables slackened I could adjust the setting for even firing and pick-up on both cylinders.

Starting is first or second kick but the engine needs to run for a couple of minutes prior to driving off on these very cold days as there is no choke. Now however, the engine will start when hot, even if I kick it over with my left foot while in the saddle! It used to do that in 1963 !

I have changed the plugs to NGK B8HS's, and dropped the needle to the 1st notch. The engine runs leaner now, the plugs were rather sooty prior. The engine still has R50 pistons as these were fitted when I had the sidecar. A set of R50S pistons being at that time rather difficult to obtain. As I now don't go for high performance I will stay with these.

The ignition was not a cheap option but there is nothing to wear out. All sorts of ideas have been tried to limit the bob weights advance on the Magneto. I once had the misfortune of the small 'Z' shaped piece of metal that goes around the magneto cam snapping off. The only place it could go was of course into the voltage regulator burning it out!

The next 21st Century 'mod' for our Classic BMW's must be an electric starter. They are available for Vincent twins, BSA Goldstars etc. Circa £2000.

I'll keep everyone informed on how things go with the unit.

JUST FANCY THAT

'There is no word in English for the driver of all kinds of road vehicles; 'motorist' being restricted to private cars and 'driver' being unacceptable for motorcycles - a lexical gap which greatly worried the British Automobile Association in 1961.
It was felt that such a word would be useful and they therefore asked for suggestions. Among the 500 received were:-

Autoist; roadist; chassismover; mobilist; wheelist; autonaut; vehiclist; murderist; roadent; Vehicuwary; doice (driver of internal combustion engine); **pupamotor** (person using power-asisted means of travel on roads); **licentiat** (licensed internal combustion engine navigator trained in automobile tactics).

However, none of these ingenious ideas have survived.'

(From the Cambridge Encyclopedia of Language, C.U.P. 1987)

Thanks to the Cossack Owners Club for this info.

MANNHEIM 2009

by 'The Amateur Mechanic'

Anyone who has been observing the meteoric fall in value of the £ against the Euro (and almost every other currency) will appreciate that finding *any* bargain at Mannheim in 2009 was going to be very difficult, if not impossible. It didn't of course deter us from walking round for 3 days, covering about 35km in the process (according to information from the organisation) trying to find that illusive item! As we departed we were almost at parity with an exchange rate of 1.04 Euro to £1. At the time of writing the rate has slipped further, although lets hope by the time you are reading this rates are starting to improve.

I reported last year the sale of all Martin Kornhas' stock to Uli's. It was good to see Martin again at Mannheim this year, even if the terms and conditions of the sale to Uli prevent him from selling BMW parts. Martin has not been in the best of health over the last few years, having a problem that currently has still to be resolved, but he was in good spirits selling mainly Zundapp and non make-specific bits.

Out of the 'big' BMW dealers only Rudi Verholt, S. Meyer, Mark Huggett and Theofried Jeckel were present. Fortunately my shopping list for 'repro' items was very short….

I thought it might be of interest to mention some of the prices being asked this year for both new and second hand (sorry, in BMW speak, previously owned) items. I have used 1 Euro to £1 as 4 cents per pound makes very little difference.

R60/2 (1967) Restored well (cosmetically of course as we didn't hear it running) but with a few incorrect parts. £13300
R52 (1928) Probably assembled from repro parts but, as the antiques world would say, suitably distressed to make it appear more like a 'barn find'. £17500
R60/2 (Year unknown, new data plate) restored cosmetically but, once again, about 5% wrong parts £11500
R45 Pre 81 Model, average condition £4750
R51/3 Solo Bevels in half width hub housing, condition unknown, £850
R69S Carbs. 1/26/75 & 76 (New, old stock) £900
Hoske tanks Earles models (for restoration) £500 to £650
(restored) £950 to £1200
R69 Retard Lever (incomplete) £65
R68/69 Carbs 1/26/9 & 10 (Refurbished) £1000
R51/3 to R69S Pillion seats, the type that fits onto the rear carrier (for restoration) £95 to £195

And finally my favourite (unforgettable) item: 1955 Steib parts book covering all models in that years range. Fair condition. £100!!!
I didn't pick the items on my list because they were excessively expensive (except of course the Steib book!) but because they typify the prices being asked. How many actually sold I can't say but I can report that a German friend of mine sold a 1928-30

200mm front hub without bearings etc but with a brake plate and (worn out) shoes for £1200! As I said at the start it is largely the fall in the exchange rate that makes the price seem more exorbitant than it should be. Use the rate in force when the Euro was first introduced (from memory around £1 = 1.60 Euro) and see the difference that alone makes, without taking into account any inflation in prices over the last decade or so.

Will we be back next year? You bet! But this time we just might be selling our unwanted parts instead….

I end on a very sad note. Since returning from Mannheim Martin Kornhas has telephoned Bob Porecha to say that Hans Dieter Petersmeier had died. I believe he had been suffering from leukaemia for some time although he still continued with his business. I first met him well over a decade ago and each year took the opportunity to seek him out on the Friday afternoon of Veterama to get an up date on the latest new product he had developed. Even though he was invariably still trying to set up his stand he would always take time out to talk BMW to us. As I've repeated often in these reports, the quality of his workmanship was second to none. Sometimes castigated by one large BMW parts supplier for having 'a corner shop' attitude Hans, I believe, had no ambition to be the largest pre-69 parts supplier. His forte was simply to produce parts of a quality as good as, or in most cases better than, the originals. A real BMW enthusiast.

Hans Dieter Petersmeier, you will be missed.

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R26 – R100RT
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BOB PORECHA

‘BERTA’ RETURNS HOME
By Eddie Heitmann of Hamburg



EDDIE THE TRIUMPH ENTHUSIAST

Being a 100% motorcycle enthusiast I spend every minute I can get out of a day, in my little shed working on my bikes.

I’m definitely not a ‘new Kate Rowling’ so when Malcolm asked me to write down ‘our story’ I really had no idea how to manage the task, but here goes.

Being a ‘Triumph-Man’ for over thirty years with all the ups and downs that come with pre-1970 motorcycles plus... being a German as well, I was always ‘confronted by my fellow German motorcycle friends on their BMW’s. Statements like ‘ you should know better..... get yourself a BMW and forget your Trophies and Bonnies’ were the common remarks among my friends of the past 3½ decades.

And what did they all do to their **‘Bertas’? -** as we all nickname them in Hamburg ..... Fat sidecars for everyday haulage.... Huge ‘all weather’ fairings... No! that definitely was not my cup of tea, but, I do have a few friends amongst them who really know how to ‘style them right’ and who also race them!!

As a ‘Triumph-Man’ I never fancied fat and clumsy ‘haulage bikes’, I always thought it has to be a ‘Bonnie’ for the road and my ‘Thruxton Bonnie’ for the track. Don’t get me wrong my 650cc Triumphs were always maintained (obviously by myself!!) and they never ever did let me down on trips to Turkey, Africa or the Isle of Man. Even on track-days my good old 1965 Thruxton never missed a beat... ..but having told you all this I have to admit that I have always had ‘Bertas’ in my mind, hidden somewhere in the backyard of my brain.

My four best friends are all racers. Steffan and Dens are racing a ‘kneeler combo’ with just a slightly modified R100 engine and they are quite successful having won many races ‘leading from start to finish’. This R100 revs to 9500 with a standard crank, ‘unbelievable’ is always in my thoughts when I watch them. The same ‘unbelievable‘ thought is carried by 90% of the spectators when my friend Hans is racing his R50S and this brings me to the main point of interest now.

Hans and his R50S !! As far back as I can remember he has been riding his R50S under all conditions as he has never been bothered about the weather. ‘There’s no bad weather you have the wrong clothes or/and the wrong bike’ is always his statement. I’ve known his 50S for decades now and it has always been in brilliant condition but I’ve no idea how he manages that even though I love my Triumphs as well. Incredibly he rides his Berta ‘S’ 12 months a year including taking in race meetings even if they are 4-500 miles away. He will remove the air filter box, fit bigger main jets and velocity stacks and he’s off on the circuit! And do you know, there is not one race that he has not completed; the old Berta has never let him down. Sounds ridiculous I know!

Although having ridden around 200,000 miles on my Triumphs over the the past decades I was always deeply impressed by this particular model of BMW, so, when I received my copy of Old Bike Mart (I subscribe to watch out for Triumph bits) I thought ‘well this is funny... A 50S Berta for sale!’

(#) Berta - a BMW built between 1955 - 1969)

After thinking for less than 10 seconds, and not mentioning it to my beloved wife Silvia, I had the telephone in my hand and was ringing the advertised telephone number. I was very happy because the gentleman who was answering the phone was very polite and a genuine enthusiast as well; the way it should be. As promised I received the photographs of the bike but to be honest I was not too impressed because I had the condition of Hans's 50S in mind. The poor think really looked a bit tired but the gentleman I learned is your Vintage Secretary, Malcolm from Newport Pagnell, and we agreed a deal.

A few days later I took the ferry from Esdeberg/Denmark to Harwich and travelled directly to Newport Pagnell. When I was with Wendy and Malcolm we talked about all my friends and their BMW's so Malcolm suggested I write a few lines for your Vintage & Classic News.....sorry..was not my idea. Ha Ha.

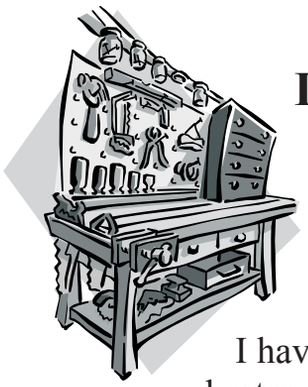
When I arrived back home I rolled the Berta into my shed. My intention was to rebuild it completely to 'concours' standard but being a bit nosey and impatient, plus all the 'statements' from Steffan, Hans, Dens and Georg of 'It'll free-up... It'll run..... Everything will be ok etc. We decided to give it a try and fitted an old used 6v battery, poured some petrol in the tank and replaced all the oils, plus fitting new spark plugs. Ooh... What a mess... all the petrol coming out of the old 'Everbest' tap. Anyway, having cleaned the floor we fitted a /5 tap, flooded the carbs and pushed down the 'nail' and do you know what, the good old Berta started first kick!! Happily it ticked over at a steady 3 - 400 revs, without missing a beat and without any mechanical noise. What an experience and even Hans was absolutely delighted, although obviously, he just can't admit that, saying 'Oh well... I expected that!' Ha Ha, I doubt it...
After we had started the engine several times I took it for a 10 mile spin. Everything worked perfectly. We changed the oils again and I did another 50 miles on it, then again changed the oils and continued. I did more than 300 miles in one day!
Well... so here we are now. Absolutely delighted and happy with the bike. Even my wife Silvia has forgiven me for the 'unplanned' investment. Being very much like Malcolm I am still thinking about restoring the Berta..... But all my friends keep telling me to leave it the way it is right now. I really don't know what to do now it's winter time. If I can't make my mind up now Spring will be here and it will be too late for the restoration. Goodness.... I fear all my friends would crucify me if I take it to bits from the state it is in now.



HANS ON HIS RACING BERTA R50S

So, what am I doing now..? Well, I am sneaking into my shed every day and now I've just started to polish her.. look at her.... thinking about the next year.... thinking about Han's face when it first fired up in my shed....and then I polish her again.
So there they stand now my 1960's Triumph in peaceful harmony with the 'S' Berta, the bike I always fancied most.. apart from her 600cc sister 69S and my Triumphs of course. Thinking about all that in my shed I go to the fridge and take out a bottle of Hamurgian brewed Astra beer and think, 'Cheerio Wendy and Malcolm... and thanks a lot for one of the best bikes I've ever owned.'

My thanks to Eddie for his contribution. I only wish my knowledge of German was as good as his of English! Hopefully we'll get an update when Eddie restores his Berta fully as I 'm sure he will eventually.



IN (and out of) THE WORKSHOP (7)

with 'The Amateur Mechanic'

1. CONRODS

I have often wondered why, in 1960 with the introduction of the R60/2, BMW shortened the R60 conrod length from 130mm to 125mm. If we look at the length of conrods used in BMW's from 1950 onwards we find the following variations:

R25, 25/2 25/3 - 135mm
R26, 27 - 125mm
R51/2, 51/3, 50, 50/2, 50S, 60/2 - 125mm
R67, 67/2, 67/3 68, 69, 60, 69S - 130mm

The other evening I picked up an old copy of 'The Classic Motorcycle' featuring an article about BSA's Goldstar development engineer Roland Pike. From this article it appears that the revered motor engineer Dr.Lanchester was responsible for early research into conrod lengths and, from his various experiments, came to the conclusion that the ideal length for the conrod is 2 x the cylinder bore diameter. Apparently this was later adopted as the industry standard. Experiments subsequently undertaken by Roland Pike on racing Goldstar engines proved that, in these single cylinder units, the ideal length of the rod was 1.86 times the bore diameter.

So, where do the BMW lengths fit into these figures? To save anyone still reading this reaching for a calculator I've done the maths for you!

RATIO

R25, 25/2, 25/3 - 68mm bore 135mm rod - 1.98
R26, 27 - 68mm bore 125mm rod - 1.84
R51/2, 51/3, 50, 50S, 50/2 - 68mm bore 125mm rod - 1.84
R60/2 - 72mm bore 125mm rod - 1.74
R67, 67/2, 67/3, 68, 60, 69, 69S - 72mm bore 130mm rod - 1.80

What can we draw from the above figures? If we believe the experiments undertaken by Dr. Lanchester then the R25, 25/2 and 25/3 engines have the nearest to an ideal ratio at 1.98. On the other hand if the much later work by Roland Pike is correct then the R26, 27 and all the post 1950 500cc engines have the best ratio at 1.84. Strangely the sports models at 1.80 are, with the exception of the R60/2, furthest from the supposed ideal. It seems unlikely that BMW would not have been aware of research carried out by others in this field and would surely have undertaken work in this area themselves? Unfortunately this is currently the extent of my research but I'm sure there must be someone out there on the Register who can shed further light on this subject?

Someone once told me that the longer the rod used the better the cylinder filling…perhaps that's the explanation for the retention of 130mm rods in sports engines?

2. STEERING HEAD BEARINGS.

These days it is becoming increasingly difficult to locate new FAG cup and cone head races as fitted to all models from 1923 to 1969. The only alternative as far as I am aware is to fit taper roller bearings available from all 'old-timer' suppliers. So I have used these in all my restorations to date without any problems…until recently.

The R50 was due for its MOT and so I gave it my usual pre-MOT check. I haven't ridden it for a few months and during the winter the front brake (front) arm, the one that should operate last, was sticking slightly on the return. The wheel therefore came out so that the brake could be stripped and re-assembled. With a jack under the sump I took the opportunity to test the head races and was somewhat surprised to find the steering not only 'self-centering' but decidedly rough in both directions. Having removed the forks and pulled the bearings out the reason for the roughness became obvious. What is perhaps more surprising is that the bearings have covered less than 15000 miles from new. There was no shortage of grease either although they were packed on assembly with some water resistant (marine) high temperature grease I had been given some time ago. This had solidified in places so maybe this was a contributory factor in the failure. All these new taper roller bearings appear to come from the same (Taiwanese?) source, despite being packaged differently by some suppliers. New taper roller bearings have been fitted so we'll see how long these last when packed with 'ordinary' (Castrol LM) grease.

3. REPLACEMENT IGNITION SYSTEMS.

There has been quite a bit of comment within these pages about replacement ignition/dynamo systems. All my machines are currently running on their original systems so the following is based purely on my observation of units fitted to other machines.
There are two systems on the market that I have looked at, the BTH unit and the MZ unit.

(a) The BTH Unit.

Robert Freeman covered the installation of this unit thoroughly in issue 22/ 2009 of this newsletter. Setting the timing by setting the 'F' (Fully Advanced) timing mark to the bottom of the hole in the bell housing is unlikely to be an accurate method of timing an engine. Why? Well, the scribed line in the left hand side of the hole is not in the same place in every crankcase. I have engines where the line is roughly in the centre, others towards the bottom and some towards the top! It begs the question why didn't BTH use the 'F' or 'S' mark and the scribed line to set the timing? The best way to check the timing is, of course, with a strobe. The original Norris or Bosch advance/retard unit gave 31 degrees of advance from full retard to full advance. When we checked the advance provided by the electronic unit on two BTH systems we found it was giving only 16 degrees. Setting up therefore becomes a compromise between easy starting (or the engine 'kicking back') and performance. If the engine is timed to the 'S' mark you will get wonderful starting but lousy performance, timing to the 'F' mark gives great performance but lousy starting. The engine will also sound as if it's just about to fall apart at tick over revs and just above. The units were sent to BTH for checking the amount of advance and returned as 'fit for purpose'…

(b) The MZ Unit

A company trading as MZ manufactures an alternative unit (although I imagine there must be a reason I suppose.)The MZ unit not only gives the full 31 degrees of advance but also offers alternative advance curves via dual in line (dil) switches. If the unit is to be used on a sidecar machine I can see some merit in having a slower advance curve. So far all reports on this unit have been very favourable.
So, the choice is yours… however BTH have said that they have had lots of 'problems' regarding units sold to BMW owners… and that they will therefore not be manufacturing any further units.

Please see the additional information at the end of this article

(4) Flywheels (Pre 69)

When you've stripped a few twin cylinder engines over the years you tend to develop a 'system'. For many years now my 'system' has always been to check two things before I begin a strip down.

Firstly I check that the conrods are central to the bore in the crankcase. I normally use a telescopic gauge for this but a steel rule would be quite adequate. Obviously there is a certain amount of side-play in the rod but for this exercise the rod can be pushed first to one side then the other. If the rods *don't* lie central then the chances are someone has either changed the spacers behind the main bearings or (in some models) swapped them front to rear. Either way you can easily work out the offset and correct this on the rebuild.
My second check is to measure the flywheel run-out with a dial gauge. Experience has shown that whatever figure you get on this test is unlikely to be improved upon when the engine is reassembled. I have seldom seen flywheel run out improved on reassembly and began to wonder if perhaps not all engines were that accurately set when they left the factory. I recently rebuilt the bottom end of one of my R69S'. This had 8 thou run out when stripped and, lo and behold, 8 thou when it had been reassembled! Try as I might I couldn't improve this. At the same time my precision engineer friend (who advertises his many services within these pages) was having a similar problem with one of his engines. We put our heads together on this one and came to the conclusion that if the flywheel had *ever* been misaligned (for example by someone leaving the crankshaft key a bit 'high') and then torqued up to the factory specification, it would never run true again. Why? Well our conclusion was that the material of the taper on the crankshaft is tougher than the material used for the flywheel, which therefore distorts. To test this theory he put a flywheel up on the faceplate of his lathe, trued it accurately to the unused portion of the ground face where the oil seal runs, and then checked the flywheel taper. It ran almost 1.5 thou eccentric, that figure of course would be magnified on the circumference of the flywheel. Having ascertained the taper angle (from Mark Huggett) my friend then re-ground the internal flywheel taper, removing the minimum material required to ensure concentricity. When the flywheel was re-fitted there was an immediate improvement from just over 8 thou run-out to just under 2. (Factory tolerance on an R50/60/69/69S is 4 thou). Since then he has reground a number of flywheels (including my R69S!) all of which immediately met the required tolerance.

Result: a smooth running engine and a flywheel 'recovered' for far less cost than a service exchange unit from a European source.

Editorial Note - Electronic Ignition.

A few points concerning the situation with the electronic ignition systems.
For those who are running with the BT-H System, which is no longer being produced, a Register Member is in contact with a different manufacturer altogether and between them they are looking at the situation concerning the advance/retard anomaly. As soon as any information is available the Register will be informed.

The other point concerns the German firm who produce the other systems. It is no longer MZ but a company called PowerDynamo who have a web site called www.powerdynamo.biz
I have mentioned before that there is a British supplier called Western Road and Race Ignitions based in Somerset who will give BMW Club Members a discount. They can be contacted on 01278 438289. Their web site is www.roadandraceignitions.co.uk Incidentally, I am now fitting one of their systems, rather than a BT-H, to the R69S instead of replacing some of the worn original items. With replacement coils costing £135, and not always being reliable, and new advance/return units being much the same price (plus tax and postage etc) it makes a complete unit from PowerDynamo seem reasonable. I will let everyone know, eventually, how the unit performs.

Old Friend's Reunited or 'The Horror' Returns by Robert Freeman



Robert's Grand children astride his R25 & R50S

Some of you may recall an article I wrote about an R25/2 (MXA 247) in Issue 19/2007 that I'd owned from 1966 until 1985. The engine was treated to the advice offered in 'Tuning For Speed' by Phil Irving.

My Mother christened the bike 'The Little Horror' and it has stuck to this day.

Late in 1985 my wife and I were buying our own first house in the 'golden days' of M.I.R.A.S. and interest rates nudging 16 %. As our new home did not have a garage, and we needed the money, the R25/2 and R5 had to go while the R50S was kept and lodged at my parents.

I sold the R25 to Clarke's Motorcycles in London Road, St Albans, and Tony Clarke put it in a small museum they had in an adjoining shop. It was in good company with machines ranging from a 1903 Premier, through to Rudge, BSA Gold Star, Velo Thruxton, and several other 'classics'. Tony said I could have first refusal if ever he wished to sell.

With the passage of time Tony's father, Ron, passed away, but he continued to run the business, his mother helping out in the shop and providing cups of tea etc. She 'rode to work' every day on her bicycle but eventually the business ceased trading and Tony took several museum exhibits to his home near Stevenage, including 'The Horror'.

There it sat for many years and I would see Tony at the Knebworth Classic Show every year, and ask him 'Do you wish to sell?'

BARRY WILSON

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'No, I'm going to do something with it soon' he would always say. Years passed and I had pursued my career in entertainment with some success to the point that I was performing up to 365 gigs a year, but not on Christmas Day; finances were good.

My wife and I had been to visit relatives in Oz and on our return in March '01 we were greeted with the news that my widowed mother had died a few days prior. So, the R50S returned to our home in Hatfield. That spurred me on to get it road worthy again; just an exhaust system and rear mudguard and... also nearly £900.

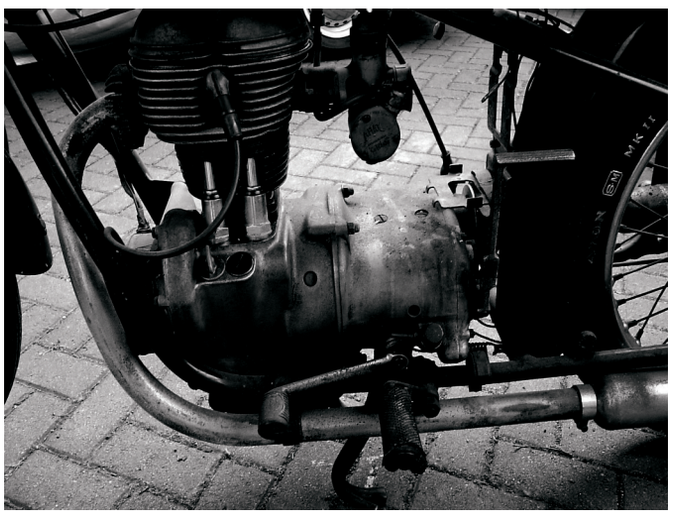
By mid 2006 we decided it was time to ease up on work and leave Hatfield in Hertfordshire so we emigrated to 'The Fens' with at last, a detached home and enough garden to give us back ache, plus a garage. The 50S was now getting regular outings, about 50 miles a week, and I felt the need for another project other than DIY; a second bike perhaps. I thought about a late 30's 350 Velo MAC; my Dad owned one, as he did an R5, but Velo's of this period were circa 3 ½ K much more than I wanted to pay. In the end I settled for a 1954 AJS, 500 twin, the Spring Twin Model 20, with original engine, g/box, frame, & magneto. Unfortunately the original registration number had been 'sold' but one positive is it starts 1st kick. That was in September 2008.

Usual Christmas card to and from Tony Clarke, usual answer, then in late January '09 a phone call, and short talk. He was going to enter some machines in the auction at the Stafford Classic Show in April '09 and was I interested in the 25/2 before he put it up for auction? A price had been quoted by Bonhams, but he had to take it to Stafford and pay the commission etc. I offered what I felt I wanted to pay if he delivered. The bike came ten days later.

So, after twenty four years MXA 247 returned into my possession. In that time it had stood in his Museum and garage. He had never even run the engine, albeit, turning it over from time to time. A look at the old buff log book, a continuation book, reveals it was registered 5th February 1952, Engine / Frame 237141. However, the crankcase on this machine is stamped 279287.

An e-mail to BMW Archives, who are very helpful, bought this rather surprising answer:
"The BMW R 25 VIN 237141 was manufactured on May 23rd, 1951 and delivered on June 5th, 1951 to A.F.N. Falcon Works, Isleworth. The engine No. 279287 belongs to a BMW R 25/2 which was built on July 3rd, 1953 and delivered the same day to the BMW dealer Weinhof in Koblenz"

Obviously R25's didn't sell like 'hot cakes'. As to the 239287 crankcase, how did that come into my possession? The only thing I can recall is going into Pride & Clark's at Stockwell one time and rummaging through the few BMW second hand spares they had, presumable from bikes they had broken up. I may have got the engine case from there. One can speculate that maybe a British Service Man bought the bike in Koblenz and brought it back to the U.K.



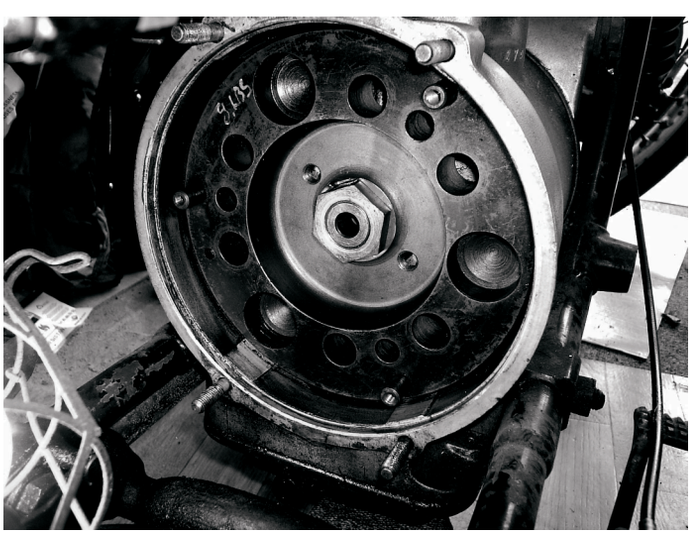
I had another R25/2 at one time, JSF 953, but the engine was 250119. That I sold to a chap who lived at Wheathamstead, near Hatfield, who wanted a project. Looking at www.mycarcheck.com showed that the number is not listed, so if he ever made a go of it, who knows?

Names in the log book start at Rowland Smith (Motors Ltd) Hampstead. NW2. 27/6/61. Thinking about it, I am fairly sure my brother bought an R26 (1553 PO) from this dealer in the mid - late 1960's.(The frame broke by the kick start rubber stop!)

August '61 the R25 went to Hounslow, May '63 to Harrow and 5th April '66 to myself at Hatfield. I suppose if I found a copy of 'The Motor Cycle' circa May / June 1961 there could be an advertisement from Rowland Smith for this bike. This dealer was quite a large concern not on the scale of Pride & Clark's but it was Hampstead and there would be rows of bikes out side.

What do you do first when you get a former bike back after over 20 years? Well, I just stood and looked, and looked again, recalling the many hours in 'the shed' I put into it. The Norton Dominator 19 inch front wheel had gone replaced by the BMW original wheel which I had changed as it was not up to the speed. There was also a box of bits containing the Bing carburettor and air filter, a pair of tank badges and the old, in need of restoration, pear shape rear light. These lights are circa £75.00 on ebay Germany. Finally the hard-back hand book.

Later that week I decided to see if the engine would run. Oil enough, rather black, gearbox OK. Clutch freed. Removing the plug the spark was strong so I pushed in top gear several times around and up and down my drive to get the oil circulating. Couple of litres of petrol in the tank, and after about a ½ dozen kicks the engine fired and ran really rather well. No smoke, just a steady chuff chuff. As the bike was in working order when I sold it I suppose there was no reason why it should not. Didn't rev the engine, just let it warm a little. After a few minutes there was the 'odd scream' from the gear box or clutch. With that I felt I would look inside before anything nasty happened.



Removing the gearbox is relatively simple: first the rear wheel, then the bevel drive, shaft and right hand suspension unit as one, gear box only secured by four nuts, and there is the clutch plate, secured by 3 bolts. Simple yes, but that does not take into account rust. The bevel unit slides up and down a long tube secured at top and bottom in the frame by a pinch fit. Between the pinch fit of the top frame is a part that threads into the suspension spring, again secured by the pinch fit. This had rusted to the slider tube, preventing its withdrawal. Plenty of WD 40 and a home made extractor - a

long threaded rod inside the slider tube, sockets of suitable size at the base (15 mm) and a larger one at the top - then tighten the nuts and it pulled out the tube. After that the rest came away quickly. Gear box turned OK on the bench and after removing the clutch, again nothing looked wrong, the rear main oil seal still doing its job. All was dry and clean. From the photo you will see the holes that were drilled to lighten the flywheel. NB. I had painted 8 lb. on the flywheel but what the original weight was I failed to note.

With the clutch and the spark plug removed the crank spun easily, the pressure of the valve springs and weight of the crankshaft web was sufficient to cause the engine to turn back to a balance point if I moved the flywheel almost 180 degrees from balance

The exhaust rocker looked a little 'blued' on the shaft r/h side, oil is supplied by a metal tube from the cylinder head. There seemed to be plenty of oil there so I left well alone, after all I had ridden the bike for a few year with no problem.

I turned the gearbox in many different directions to ensure oil coated all parts, my feelings being that the 'noise' was the selector dogs rather dry on the shaft.

Reassembled, the engine started fine, hunting a little due to either throttle sticking or the carburettor jets needing cleaning but after ½ an hour no noises. Engine oil was changed and although black the magnetic drain plug only held the usual metal fur, no lumps! Vibration is there but the R26's did the same and R27's had a semi rubber mount for the engine. Design feature! Didn't I read a comment from Vic Doswell who asked BMW how to cure the vibration, and the answer was... "Buy a twin!"

So one has to ask just how many BMW's in the R25 range were imported into Britain. That I am pursuing but to give an idea I can offer the following. A year or two back I compiled for my own interest an Index on BMW models, Registration Numbers and Owners between 1963 & 1970 from back issues of the BMW Club Journal. It was then a circa 30 page A4 Roneo or Gestetner printed effort. Those who, month in, month out, by hand, with only typewriters and carbon paper produced this 'archive' deserve a Gold Medal. Monthly it would list New Members, Old Members Renewing, their address, the machines and usually the Registration Number. Of course this was only as good as the typed entry and I have come across consecutive years entries for the same person, but with perhaps the Registration Number or name slightly at odds. This is no criticism for it was a labour of love; no computers, word processors or spell checkers.

My 'database' runs to circa 900 entries. Allowing for duplicates the true figure is about 600. Of this number 118 have no model listed but nine of those do have a registration number. I say true, but unfortunately, a couple of years Journals went up in smoke in the process of clearing my late mother's home. A few months later there was a request in the now multi-colour, bells and whistles Journal, for back issues of the early Club Journals. What I had, about 8 years worth, I donated, dumped(?) on Malcolm Mc Nair for the Club. I understood these were going to be scanned for C.D.s
(Yep, scanned by a team of volunteers and now available from the Club web site.)

However, back to my Index which is listed here:
Two R25 models, FYP 40C, JJT 822.
R25/2; six. 297 BMY, MXA 247, CLH 98B, JSF 953, WPD 797, XNH 402.
R25/3, seven, 297 BMX, 303 BMX, 340 BMG, 541 BMU, 719 BHK, WPB 793, YUC 800, and one with no number owned by a Mr R.Jones of Halstead, 1963. Of the R25/2's MXA & JSF were mine. Total sixteen.

However, you may have spotted 297 BMY & 297 BMX, checking my index, one is owned by a V.Baker in Salisbury, the other by W.G. Baker in Salisbury, Brother's or typing errors?
If any one wishes me to check a number or name do contact me, my e-mail is the jollyjester@onetel.com Incidentally the Earles fork models I have listed are as follows;

R50 = 158 R60 = 269 R69 = 74 R69S = 220 R50S = 12.

Remember though, apart from the R50S, which is a true number, the others contain duplicates, but it gives an idea on the spread.

Where do I go from here, I think a restoration of the cycle parts is justified, not exhibition, but former glory. The engine will stay as it is, the bike as a whole deserves to be seen. There won't be any more.

AUCTIONS: Recent BMW Sales
by 'The Amateur Mechanic'

This article was prompted by the recent sale held at the BMW Museum in Munich consisting almost entirely of the BMW machines amassed over many years by well-known Dutch collector Willy Neutkens.
I've attended a good many auctions over the past 40 odd years, even on one occasion buying two machines at the same sale (a Francis Barnett and a James, both 197cc, but that's another story…) People say there are often bargains to be had, but when I look at the published results of recent sales at both Bonham's and H&H auction houses I am finding that increasingly hard to believe. Since the downturn in the world economy it strikes me that, much as in the early 90's, people would rather have a vehicle in the garage than money in the bank. After all a gain of say, 5-6% in value each year is currently possible on the right machine a somewhat better return on investment than most can achieve by tying money up for several years. Prices at auction *are* rising, of that there is no doubt.

H and H Auctions.

Several months ago H&H held a sale in Buxton. About half a dozen motorcycles were included in an auction that consisted mainly of classic cars. The bike that caught my eye in this sale was an R17 fitted with a non-period Steib sidecar and an estimated sale price of £4000 to £6000.Now I've only learnt recently that if a reserve is set on a lot it must, by law, be lower than the low estimate, in this case it was therefore set at *less* than £4000. I vaguely recalled the registration number, which seemed quite familiar. Now there are relatively few R17's in the UK (after all they only made 434 in total) and a little research revealed that it was formerly the property one Les Pinfield. Les was a member of the Midland Section in the late 60's/early 70's and, as I knew him in those days, I gave him a call.

The story behind this R17 particular is quite interesting…
In the late 60's Les placed an advert in the 'Barters Bible' (at least that's what my mates and I knew it as), a publication more commonly known as 'Exchange & Mart'. His advert was simply a request for a pre-war BMW 'in any condition'. Amazingly it turned up two machines, an R12 and an R17, both owned by the same person and located only a few streets away from where Les was living in Birmingham! Les bought both, restored the R17, took it to the BMW International Assembly at Witches Mill on the Isle of Man and came away with the Vintage concourse award. Returning from one of his Isle of Man trips he 'T boned' a car, damaging the frame, tank, front mudguard and forks. Rather than repair the original parts he decided to rebuild the R17 using suitable components from the R12 before subsequently selling the bike in the mid-70's. Until my call that day he had heard nothing more of the whereabouts of the R17 since he sold it.
I decided that although I wasn't particularly looking for another project, if the auctioneer's guide price was anything like realistic, then here was a possible bargain. Unable to travel to Buxton myself because of prior commitments a friend offered to go and bid on my behalf. I set a maximum bid of £12000 including buyer's premium and VAT. The catalogue showed the R17 frame number and original registration number whilst we already knew the frame number was that of the R12 and therefore the bike was technically a 'ringer'. My friend pointed this out to the auction staff all of whom were singularly disinterested until he also pointed out (truthfully) that he was a lawyer…. They announced the frame change (having been told who executed the change and why, then confirming the facts by ringing Les) before the bidding started to both the assembled potential bidders and those bidding by phone. We were both quietly confident £12000 would be more than enough to beat everyone. In the event my friend had one

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bid at £7500 before the bidding really took off, the hammer eventually coming down at £21000 …..plus buyers premium and VAT (c. £24000). How the mighty are fallen! The bike hadn't run in years and required a ground up restoration. The successful bid came from someone in Germany at a time when 1 Euro would virtually buy £1 so it probably seemed quite a reasonable price to him.

Bonhams.

On 28th November 2009 Bonhams held a sale of 'Important BMW Motorcycles', the Willy Neutkens collection consisting of 92 lots, mainly BMW bikes but with a BMW stationary engine, a couple of EMW's, an AWO, a Russian Ural sidecar and a wooden model of an R1100RS thrown in for good measure. As has been widely reported every lot was sold and the sale raised no less than 1,038,400 Euro's (£944,191) against the pre-sale estimate of 590,000 – 780,000 Euro's from the 1000+ people who attended in person and telephone bidders. I had a call from a member of Bonham's staff almost as soon as the auction became public knowledge, asking if I was interested in acting as an advisor to an American enthusiast (in fact a Brough Superior collector). He was interested in buying 5 or 6 pre-69 BMW's from this collection but had no real detailed knowledge of the marque. Sensing the chance for an all expenses paid trip to Munich what would you say? I asked for a catalogue and details of exactly which '5 or 6' machines! The catalogue arrived in the post within a few days but the list of machines he was interested in wasn't immediately forthcoming. In its absence I decided to analyse every pre/5 machine making comments on each one, all the time thinking that perhaps I should get a life…..

My analysis proved quite revealing. There was an R52 with R62 engine number, a 1961 R60/2 with a 1967 engine, many post-war machines with non-matching engine and frame numbers, a 1936 R5 with a 1937 gearbox and matching numbers (pre-war engine and frame numbers *don't* match), pre-war bikes with the white lines on the tank the wrong way round and mudguards lined on models that never had lines, lots of engine and frame numbers 'to be advised' etc etc. In all, out of lots num-

-bered between 40 to 92 (machines made between 1924 and 1969) I counted less than 20 bikes that were, in my opinion, from their photo's and description, completely correct in all respects. That didn't deter the buyers. The 1924 R32 (199th Engine made fitted in the 539th Frame…) was the subject of a five way bid from three continents and went under the hammer at 109,250 Euro's including buyers premium and VAT.

One of the most interesting bikes to me, the 1953 ISDT R67/2 made 26450 Euro's and was bought by BMW. This machine, authenticated by Mobile Tradition as one of three prepared by the competition shop for the 1953 ISDT held in Czechoslovakia has returned home, albeit without a number of its original parts. My interest? Well for the last 14 years or so I've been trying to complete a replica of a 1953 ISDT machine and the photos in the catalogue were quite detailed.

Were there actually any bargains to be had? In a word no! I estimate that extensive worldwide advertising, locating the sale in BMW's Museum and some frenzied buying to secure something from what was advertised as (but in fact wasn't) the largest collection of privately owned BMW's in the world, added at least 20-25% to the prices these machines would normally be expected to fetch.

And my all expenses paid trip to Germany? Well, I rather shot myself in the foot on that one by telling the American of my findings and offering him a piece of *free* advice, 'don't bother, the prices will almost certainly be inflated and you may well end up disappointed with what you buy'

The advice was heeded and, needless to say, I didn't attend the Auction

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The R90S: 35 Years on…

1970's 'Superbike' *or* a Sheep in Wolf's Clothing ?

A Road Report by 'The Amateur Mechanic'

In the beginning…

Although it had been common knowledge in some circles that BMW engineers had been working on an increase in the capacity of the new 750cc engine even before the launch of the /5 series, the announcement of 900cc engines still came as a surprise to many. It wasn't very long before the 900's launch that some senior engineers at BMW had expressed the view that the optimum capacity for the 'new' series of engines was 750cc. Then Kawasaki upped the ante by launching the 900cc Z1 and, of course, everyone who wanted to continue as a player in the 'large' capacity market almost immediately followed suit.

The British press launch for both the R90S and the 'touring' R90/6 took place in France in late 1973. Among the launch party was former BMW Club Vice President (and Register member) Bruce Preston, there to represent *Motorcycle Sport* in those far off days when the *Sport* really lived up to its subtitle 'The Quality Monthly' and long before it eventually fell (like almost every other motorcycling magazine) into the clutches of Morton's Media Group.

The increase in capacity from 745cc (R75/5) to 898cc (R90/6 & R90S) was achieved by increasing the bore to 90mm from 82mm, a method used again three years later when the bore



increased to 94mm producing the 980cc (or to BMW 1000cc) engine. Stroke remained constant throughout these changes at 70.6mm as the engine became more and more 'over square'. The initial effect of the new bore/stroke ratio was to increase the maximum revs permissible from 6400rpm on the R75/5 (the very first R75/5's were red lined at 6200) to 7200rpm on the R90S. Contrary to the belief of many the R90S wasn't fitted with a 'hotter' camshaft as standard, the cam fitted being identical to that used in the R75/5. Any doubting Thomas should, at this stage, refer to a relevant parts book…however the size of the inlet valve increased from 38mm in the 750cc and 900cc engines to 40mm in the R90S. The claimed output of 67bhp@ 7000 revs, 7bhp up on the R90/6 was achieved by this change, an increase in the compression ratio on the 'S' to 9.5: 1 (9.0: 1 on the R90/6) and fitting Dell'Orto carburettors with accelerator pumps.

It wasn't only in the engine department where BMW really rang the changes. Gone was the 200mm twin leading shoe front brake that had been standard on all twin cylinder machines in some form or another since 1952. (In fact BMW standardised on 200mm brakes for their twin cylinder models in 1928) This was replaced by twin discs with floating calipers (R90S) or single disc, again with floating caliper, on all models other than the R60/6, which became the last production BMW machine to use the 200mm TLS front brake. The German company ATE (Alfred Tewes GmbH) manufactured the brake calipers exclusively for BMW to a joint design.

All the handlebar controls were initially identical to those used on the /5 range, even down to the throttle assembly which retained a front brake cable. This cable was incorporated in the new hydraulic system and connected to the under (petrol) tank master cylinder. BMW were one of the few companies to use a cable in a hydraulic braking system but the adverts of the time assured us this was to prevent tampering with the hydraulic fluid, minimise damage if the bike fell over and gave better balance to the steering…Of course by 1978 (R45 & R65)

and 1981 (all other models) BMW were fitting handlebar mounted master cylinders, something most other manufacturers had been doing from day one….
The justification for this original set up through their advertising campaigns was, I believe, the first of many explanations for the seemingly inexplicable that have followed over the last 35 years!

A new tank and seat design set the R90S apart from other machines in the range but it was really the Helmut Muth designed cockpit fairing and Silver Smoke paintwork that made the bike stand out from the crowd. The fairing contained both a clock and a voltmeter; items previously found to be pretty unreliable in the harsh environment of motorcycling and that had, thus far, only been available as aftermarket accessories. Now these were standard, designed to complement the individual speedometer and rev. counter that superseded the combined instrument fitted to the /5 range.

The increase of 2 inches in the wheelbase of the later /5 series enabled the fitting of a 25a/h battery, still a bit marginal for starting in cold winter conditions, the long wheelbase swinging arm being gusseted for extra rigidity. There were now two containers for tools and other items under the seat. A standard toolbox with its rubber seal, behind the tank as on previous models and a further tray bolted to the rear mudguard under the tail section. A piece of shaped foam stuck to the underside of the seat tail served to seal the top of this tray against the elements. The hand pump still had its place on the nearside top rail of the rear sub-frame alongside the mudguard, a cable lock fitted neatly in the top frame tube under the tank, whilst the on-board tool kit contained enough tools to undertake most roadside repairs and all routine maintenance tasks. (As against my 2006 K1200GT that has just 2 torx spanners as a so called ‘tool kit’!)

Modifications

Perhaps I should start off by admitting that I have never been a great fan of any of BMW’s ‘S’ models. In fact I’d go as far as to say I didn’t really enjoy my test rides on the R90S in the mid 70’s. When I rode an R90S from Swindon to Blandford Forum one day it managed to keep vibrating my feet off the end of the footrests, something that had occurred to me only once before, on a Triumph Bonneville, not a machine particularly renowned for its ultra smoothness! To me, the R90S had always seemed very overrated therefore quite why it had achieved ‘cult’ status was something of a mystery to me. So, partly on the basis of don’t knock it ‘till you’ve really tried it’, but mainly because it came at the ‘right’ price, I bought one.

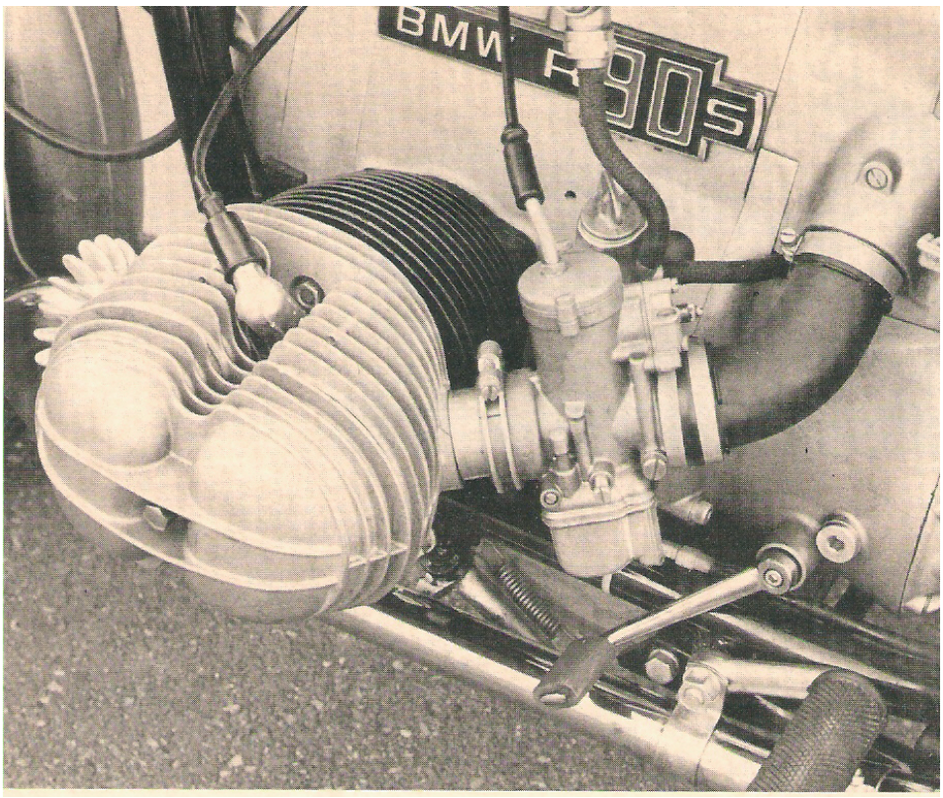
The example I acquired in October 2007 is an early model in Silver Smoke, manufactured in March 1974 but not registered until August 1975. Unfortunately the shipment records for these early R90S models were apparently destroyed in a fire at BMW (Germany) so whether this bike sat in a showroom somewhere in Hampshire (it has a CR registration) for some 17 months, who knows? Given the premium price of the model at the time (around £200 more than an R90/6) this is possible. I can’t honestly recall if these bikes were slow movers in 1974/5 but it is quite likely they weren’t exactly leaving British showroom floors in droves.

There are, in my experience, few advantages in having an early production model from BMW. Inevitably no matter how much testing is undertaken by the factory (and they *did* actually undertake road, as against computer simulated, testing back in the 70's) once the machines get into the hands of 'Joe Public' the faults start to show themselves. By the time my particular bike was registered in the autumn of '75 a whole raft of changes had been made, none of which of course feature on mine!

Previous owners modifications included fitting Krauser crash bars, Krauser hand-guard extensions on the cockpit fairing, 'Classic' panniers and frames, Koni rear suspension units, 15mm handlebar mounted master cylinder, later switchgear and a neat stainless steel rack to the tail of the seat. A Lucas Rita ignition system had also been fitted but as I intended to use the bike a lot, at least in the first in the first 12 months, the original points set up has been re-installed. OK, so electronic ignition is probably more accurately mapped than the original auto advance unit but if it goes wrong I have no way of faulting it by the roadside. With the old system fitted I can simply carry a spare set of points and a condenser that should see me out of any trouble. In my experience the Bosch 6v coils give few problems although, to be honest, I do carry a spare in the tank bag… Since owning the machine I have fitted stainless steel braided brake hoses and Lucas-TRW brake pads (said by one German magazine to increase braking efficiency 'by 33%') in an effort to improve the previously poor braking (by 'modern' standards). The effect of these changes certainly improved the brakes but also revealed minor shortcomings in the front suspension. If the improved front brake was applied hard then the forks dived excessively. BMW fitted modified damper valves in the forks (from R90S Chassis No.4081153) however I decided to go another route and fit progressive fork springs to solve the problem. Later machines were fitted with 40mm pistons in the ATE calipers whilst mine still has the original 38mm so if I really can't live with the brakes there is still one further avenue to explore before changing the front end to a Brembo callipered set up.

The throttle action was initially very heavy caused no doubt in some part by the curved tubes feeding the cables into the carburettor tops. Once again BMW were aware of the problems associated with these cable guides (including increased wear on the inner Bowden cable) so straight guides were fitted from chassis No 4092101 onwards and I have subsequently undertaken this modification, which also necessitated changing the throttle cables. Although the action could never be described by modern standards as 'light' it is much better.

The initial impression of my latest acquisition was not at all favourable as it didn't run at all well. To get it to run 'off choke' at least 10 minutes of warm up time seemed to be needed. Early R90S engines had the 'S' mark (fully retarded) on the flywheel timed at 9 degrees before TDC but in the 3rd quarter of 1975 this was changed to 6 degrees before TDC (to cater for poorer quality fuel?) This equates to a mark 6mm closer to the 'OT' mark on the periphery of the flywheel. Having removed the Rita system I re-timed the engine to 6 degrees before TDC. Whilst this change in itself did not affect the warm up time it did improve the tractability of the engine, which is now happy to potter along in 5th gear at little more than 30mph.



Next came the carbs. Dell'Orto carburettors have a reputation for going out of tune for a pastime, but is this justified? Unsure of exactly what to expect in the way of performance a fellow R90S owner rode the bike to give an assessment. His verdict? Far more tractable than his own machine but seriously lacking in the 'get up and go' department. 'Are the accelerator pumps in the carbs working' he asked. Frankly, I had no idea so the following day the air tubes were removed to show that only the nearside accelerator jet squirted fuel when the throttle was opened quickly. Having removed and cleaned the offside jet both worked but not with equal pressure. I decided that as the pump diaphragms had probably seen 32 years (and 45000 miles) use, the simplest solution would be to replace them. At the same time checking the slides (after hosing the bike down) revealed that they had water in them as the 'O' rings sealing the tops to the bodies were worn out. Having found these faulty items it seemed eminently sensible to order a complete set of 'O' rings and seals, then to clean and rebuild the carburettors. Once this had been done it was possible to take the choke off almost immediately and the 'S' would tick over cleanly, albeit at reduced revs. I have to say that I found setting the pilot air screws and throttle slide screws to get decent running far more time consuming than on Bing CV carbs but then I've had 38 years of experience with them!

Other than the jobs listed above and a precautionary oil and filter change I have done little more to the R90S but ride it at every possible opportunity.

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19th September The Vintage Aircraft Club and Turweston Aerodrome Wings and Wheels Day

In addition to the events listed on the cover this event should be of interest to Register Members. It is held at Turweston Aerodrome near Brackley in Northamptonshire. There are hundreds of vintage and classic cars, aircraft, tractors, stationary engines, commercial vehicles and of course motorcycles to see and this event is supported by many clubs. Good food is always available as well as some interesting stalls selling everything from home produced food to those rare books people find so fascinating.

There will be a small entry fee, which is used to assist with the upkeep of the aerodrome. Contact Tanya Coles for further information on 01280 705400 or tanya@turwestonflight.com or BMW Club Member, John Broad, on 01869 3214008 or johnbroad@hotmail.com

Old Friend's Reunited or 'The Horror' Returns -Part 2
by Robert Freeman

Having written in part 1 about the R25's return my puzzlement over it's history carried on so I decided to enquire, via Jane Skayman at Morton Media Group Archives, (01507 529529) if she could find a Roland Smith advertisement in the May / June period 1961. A week or so later I received a call, from the said, Jane, who had had drawn a blank. So that was that. However, as I have remarked in other articles for this journal, it doesn't end there and an amazing stroke of luck. Over Easter, and having nothing to read at lunch time, I pulled out a copy of The Motor Cycle, one of only four I have kept. It was the TT Issue, June 1961. Have you guessed? Browsing through the Classified Adds, Page 48, 22 June 1961. BMW, was the following:

> 49 gns. BMW 1951 250cc ohv. sprung frame, free tax and insurance. terms, exchanges (etc etc)
> Roland Smith. Hampstead N.W. 3

This has got to be my bike, so I had the information all the time, but it was only when I got the old buff log book with Roland Smith's name and date, it meant anything. What a turn up! 49 gns in 1961 works out to circa ; £825.00 using the retail price index. £1860.00 using average earnings. I have not as yet found the cost of a new R25 in 1951 but a 25/3 was £220/16/0 in 1955. That equates to £4146.00 on Retail Price and £11012.00 on wages. Nothing changes!

This has got to be my bike, so I had the information all the time, but it was only when I got the old buff log book with the dealer's name and date it meant anything. What a turn up!

So why had Morton's Archive missed it? Jane's answer was ;

''*I've learned a lesson from that and its not to use the office set (these don't have the covers etc.) The next time that I get asked for something like this I will use the full issues when searching.'*

Since I re acquired my 1951 R25, the non availability of either new or used parts in this Country has become apparent. This applies to all models of BMW that are pre-1956. Brand new factory items are plentiful at a price, but, if for instance a good used part, say a mudguard, that could be renovated, is required, then due to very low numbers of actually BMW's imported, one needs to look in Germany. That is not to say that specialist dealers such as John Lawes at BEMW don't have items tucked away, and are certainly an initial enquiry. They can also be relied upon to do their best to obtain new factory or repro items. My bike needs, or needed, a front mudguard, control levers, switches and saddle to bring it back to the 1951 specifications, so I started to look at the German ebay site. Once on the web site click on Auto & Motorrad: Teile. (Auto & Motorcycle : Parts) Enter the search term BMW R25 or R50, 69 etc. but do put in BMW, for if you search in Alle Katagorien (All Categories) anything with R 50, for example, in its description will be listed. I am not going to tell you about bidding for items my son in law does that for me but I found an original R25 front mudguard with no rust, splits, or holes, just a little bent, for 71 Euro + postage.
Below is a list of recent items, and prices they went for. All are for the R25 and used. All in Euros:-

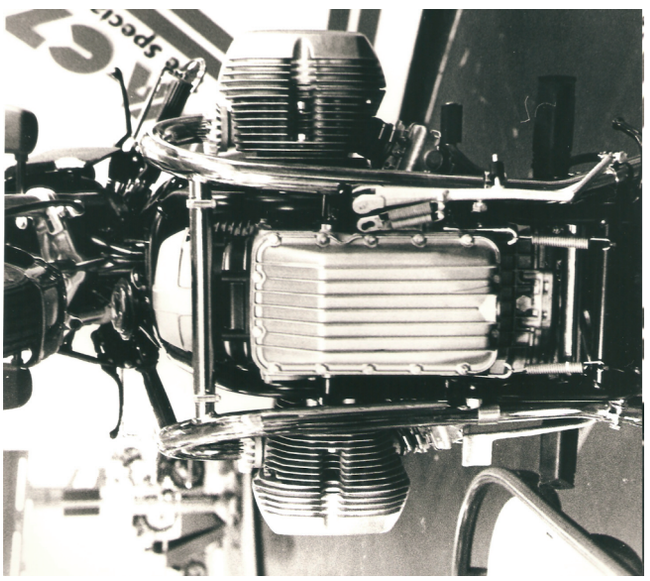
Head lamp Shell 137
Cylinder Head 136
Rear Bevel Drive & a Cylinder Head 351
Front Guard 71
Bing Carb 134
New Frame 750
Side Car Rear Bevel 400
Lamp Holder 120
Throttle Twist Grip & Clutch Lever Assy, about 100 each. Things such as rear lights, the Eber make, are plentiful and look like Far East repros. It also seems that some Germany Dealers put items on ebay as well. New speedos at circa 100 Euros, but in kilometres.



Saddles from 165. The line 'Sofort-Kaufen' means buy now and is a good indication that it is a dealer selling. Today I tracked a bare 1953, R25/2 Head Lamp Shell. It was on sale for 7 days and in the last minute went from 64 to 81, then 82 Euros. If you get stuck with the German description try, http://translate.google.com/ where you can translate more or less any language, at least enough to understand what is meant. Do look carefully at an item, don't rely upon the Vendor's description. They may well say it's a R25, when it is actually an R26 or /3

Good hunting from 'The Jolly Jester'!!

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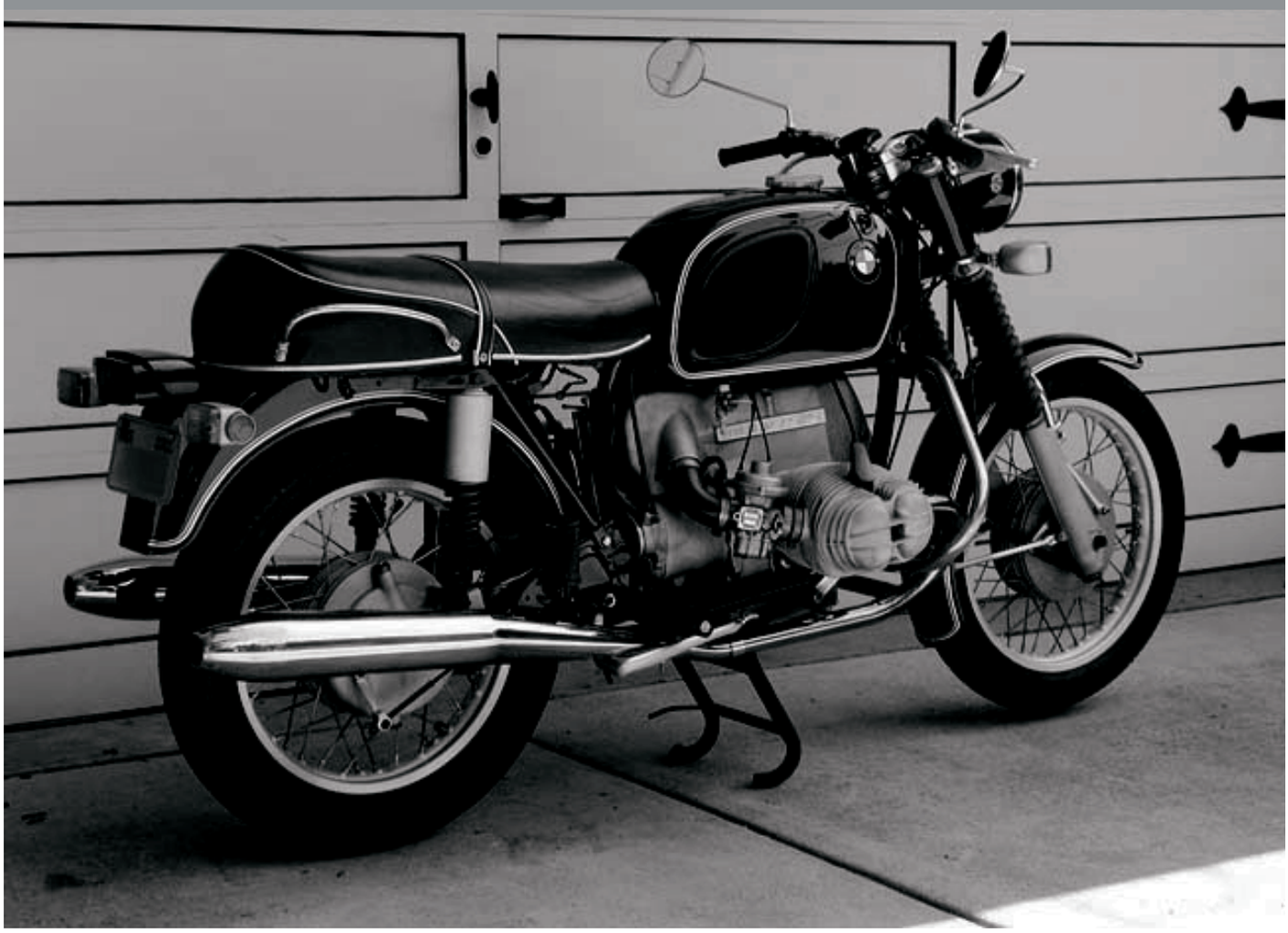


Competition Time

What Model of BMW is this?

Not the easiest question but I can see members on the garage floor trying to make a final decision!!
The first correct answer out of the hat wins.
The prize – all the back issues of the Vintage & Classic News on discs.

Road Report:
Comparison of the R90S with the R75/5



The following comparison is between the R90S and the 'top of the range' R75/5. Both machines are my own and are hopefully typical examples of the models.

The first thing that strikes you when you sit on the machines is the riding position.. The relationship between the handlebars, seat and footrests, that is so critical to a comfortable long distance ride, is different. Not that either of them are uncomfortable although the shorter seat on my short wheelbase /5 offers effectively 2 inches less space to the rider/ pillion passenger. The /5 seat definitely had the better padding when new. I say 'when new' because 85k plus miles and 38 years on the /5 and 55k+ (now) in 35 years on the 'S' has not improved the foam in either seat! Both lack the firmness required for a 400+ mile day in the saddle. The shortness of the /5 seat and the metal tail section on the 'S', if the passenger sits near the sharp unpadded extremities on the back of the seat give rise to complaints. Unable to cope with the lack of decent padding on the 'S' seat I have already had it converted to a BMW 'comfort' seat by P&P Seating of Kitts Green, Birmingham (Tel. 0121 784 4001) who have made a good job of it, albeit at a price (£140.00). Still that's cheaper than some alternatives on offer.

Starting procedure is much the same on both bikes. On with the petrol taps, push down the choke levers (90 degrees on the /5, 45 degrees on the 'S') and press the starter button. Both are fitted with Hawker Odyssey batteries and both fire up easily, the extra power of the 'S' starter motor shows up here as the 75/5 turns a

bit slower before picking up. They then settle down to an even if somewhat lower than when fully warm, tick over.

Pulling the clutch lever on either machine reveals a pressure that these days would probably be unacceptable to the majority of purchasers in an age of hydraulic clutches. BMW tried to do something about this on the 'S' when they altered the pivot position of the clutch lever (from chassis No. 4 090 001). Pushing the gear pedal down for first gear reveals that the gear-change mechanism fitted in this 5-speed box was a definite improvement over the earlier Earles derived 4-speed version.

Pulling away reveals the much higher 1st gear ratio fitted in the /5, in fact the change from 4 to 5 speed gearboxes left the top gear ratio (in the box) exactly the same, lowered bottom gear and inserted 3 other suitable ratio's between them. However, in spite of a change to the rear bevel ratio, from 3.2: 1 on the /5 to 3.00: 1 on the 'S', and the extra 800rpm available, the maximum speed in first gear is still fractionally higher on the /5. Changing up the gearbox is certainly a much smoother operation on the later machine. Below 3000 revs there is a certain 'harshness' in the 'S' that's not present in the /5. The roughest area to ride my /5 is around 3000rpm about 50mph in top gear. Once the 'S' rises above these revs it smoothes out, only becoming 'harsh' for a couple of hundred revs around 5000/5200 but after that it's reasonably smooth right up to the upper limit of 7200.

On the open road there *is* a difference in the handling. Any short wheelbase chassis is really in its element on twisty roads, remember that both Helmut Dahne and Hans Otto Butenuth used the shorter swinging arm on their racing R90S's long after the extra 2inches had been added to the rear swinging arm increasing the wheelbase from 56.7 to 58.7inches.

There is no denying the increase in performance from the extra 17bhp available with the 'S' motor. Acceleration is far brisker all the way up the rev range but this is at a cost.

Whilst the 75/5 will return around 50mpg on average and 55+ on a good long run the '90S' struggles to better 45mpg under any conditions. Mechanically, although the /5 has covered virtually twice the mileage of the 'S and hasn't the benefit (?) of needle rollers in the rockers, the level of mechanical noise, cold or hot, is almost identical. Oil consumption is such that no top-up is required between oil changes, which are (conservatively) undertaken every 2000 miles. As I've no doubt mentioned before oil is cheap and engine rebuilds are inevitably expensive. Both machines run on Morris 20/50, a grade used in my /5 since it was new, and the fuel additive (Morris Zero Lead 2005) currently seems to be holding any valve seat erosion at bay. I judge its effectiveness by the fact that the tappet clearances remain virtually unchanged between services.



As reported earlier, the gear-change on the 5-speed box is far superior to that on the 4-speed, in fact the 'S' has one of the best BMW gearboxes I've ever used but there may be a good reason for that. Long before I bought the bike I was asked to sort out a problem with one of the gears that had a 'dog' broken off. To keep the owner on the road I lent him the gearbox re-built by me for my 'short-stroke' engine. In this gearbox the white 'nylon' roller that locates in the selector plate was re-

placed by a locally made 'Tuffnel' item. The diameter of this roller being changed to give a more positive gear selection at the expense of making neutral slightly more difficult to find. Having rebuilt the R90S gearbox, some 4 years later I bought the bike still with 'my' box fitted. As it works so well that there seems little point in swapping back to the original.

In the early days of the /5 the splines on the rear drive unit were quite prone to wear. Quite why BMW didn't choose materials such that the splines in the wheel, which could be relatively easily changed, wore before the splines on the output from the bevel remains another of life's mysteries. I replaced the whole drive unit on the /5 some time ago but both machines still have some backlash on the splines, a situation which will inevitably become worse as the mileage piles on.

I mentioned brakes earlier in this piece. I believe that the greatest improvements in motorcycling over the past decade or so have been in the areas of brakes and tyres. Frankly neither of these machines has half the retardation that is available with a modern machine. That doesn't imply that the brakes don't work as intended, merely that in order to be safe in modern traffic more space is needed, along with a very strong grip in the right hand! The original brake linings fitted to the front of my /5 become really effective when there's damp in the air. In fact far too effective in that the wheel is easily locked on relatively light lever pressure, which I'm afraid, still catches me out from time to time. Early disc brakes on BMW's were notorious for their poor wet weather performance. Later pad materials have, by and large, cured this problem. The rear brakes on both machines work well, although I do find some difficulty getting my right boot between the bottom of the Dell'Orto and the brake pedal. Others have complained of the air intake tubes sticking into their shins but this is not a problem I've had with either machine.

The lights on both machines are effective, the /5 having a 160mm headlamp unit as against the 180 fitted in the 90S. Until the advent of the Zenon lamp in the current range of 'K' series machines these were the last decent lights I'd ridden behind since I sold my R100 in 1983 and started riding 'K's. Although I always liked the /5 switchgear (perhaps because it reminded me of a smaller version of the switches used on the last Earles bikes) the later switches fitted to my 90S are an improvement. Rear light and indicators are, of course common to both machines although fitting the cockpit fairing to the 90S did mean lengthening the front indicator stalks. Probably no bad thing to space indicators further apart.



Instrument wise the combined speedo/rev counter on the /5 now looks quite dated. The rev counter is quite difficult to read quickly and can be partially obscured by the control cables. The 90S is much easier to read and has the advantage off the additional instruments.

After riding both for a fair mileage I would say that the extra performance of the 90S gives it the edge on fast open A roads. When it comes to twisty B roads then the short wheelbase /5 really comes into its own. Don't believe BMW when they say that high-speed stability was the only reason for the increase in the wheelbase. Both machines are stable at speed. But you can't fit a 25-ampere battery to a short wheelbase machine to improve the

starting in winter.

Finally, which is best? Fortunately I don't have to make that decision and anyway if I did I'd be biased, having owned the /5 from new…

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17th - 20th June
The 9th Vintage & Classic Rally at Llwyngwair Manor Holiday Park, Newport, Pembrokeshire.



The 7th National Bike Clubs Show at Stanford Hall, Nr. Lutterworth, Leics. Is on Sunday the 30th May. This is a laid back day with a Club stand. If you would like to exhibit your machine please get in touch with the Vintage & Classic Register Secretary.

The 9th Vintage & Classic Rally takes place over the 17th - 20th June. A beautiful area with Ride-outs, Quiz, 'Best Bike' Awards, Charity Raffle etc. Sit-down meal on the Saturday. Only camping/ caravan bays now available. For more information contact Malcolm Mc Nair on 01908 216623 or email malcolm-1_@tiscali.co.uk