

VINTAGE & CLASSIC REGISTER



ISSUE 7/2002

VINTAGE DIARY

23rd – 26th August- National Camping Weekend, Siloth, Cumbria. The Register will be supplying awards for this meeting. 1st Place and Runner-up Trophies in the pre-1969 and 1970-1980 Classes. For more details of the weekend see The Journal or contact David Dalglish.

Saturday 14th September Gainsborough (Lincs.) Festival of Transport

If you are interested in showing your machine and attending this event for the day, please contact me for an exhibitors pass. An area will be allocated dependent on the number of machines. I will not be at this event myself, I'm banjo'ing at a Blue Grass Day.

CANCELLED

15th September Register Meet at Gainsborough, Lincolnshire.

PLEASE NOTE! THIS MEETING IS CANCELLED DUE TO UNFORESEEN CIRCUMSTANCES

ADVANCE NOTICE FOR 2003.

2nd VINTAGE & CLASSIC RALLY, LLWYNGWAIR MANOR HOLIDAY PARK, NEWPORT, PEMBS, S.WALES.

Book your time off for the new year. The Rally will take place over the 19th/20th/21st/22nd/23rd June 2003. Format as this year, but longer!

I hope that everyone finds something of interest in this issue of the newsletter. With the range of machines now covered by the Register, it can be difficult to suit all. I really would appreciate any contributions from those owners of the 1970-1980 machines. Let me have anything of interest, and in any format, letter, e-mail or disc. Thanks.

In issue 6/2002 of the n/letter I mentioned that I have a dossier of corrections to the Roland Slabon book entitled 'How to restore your BMW Motorcycle – Twins 1950 – 1969'. Well, hot on the heels of those corrections I have received from Mike Fishwick, the Club's technical man, a much larger dossier of corrections to Mick Walker's book 'BMW TWINS – All BMW flat twins, 1955 – 1985'.

The amount of corrections is quite mind boggling, 31 pages in fact, although I may be able to condense it a little. So, if you would like a copy please send an A4 size envelope and postage stamps to the value of 44p. The amendments to the Slabon book require an envelope and either a 1st or 2nd Class stamp.

At the Stafford Classic Motorcycle Show I managed to buy copies of the weekly 'Motorcycle' magazine for the year 1939. They contain a full report on the I.O.M. TT of that year, the significance being that BMW took first and second places in the Senior Race. I intend to include a copy of this report in a future newsletter. What is interesting is that the coverage is so detailed compared to present day. It shows how important, and popular, the TT races were, especially to the competing factories.

You will see in the Diary of events that a date has been set, and the venue booked, for next years Vintage & Classic Rally. The Rally will run from Thursday – Monday, so giving everyone a chance to attend either for the whole or part of the event. One thing is definite, the format will be the same as this year, laid back. Do your own thing or choose what to participate in with other Register members. Please watch the Journal or n/letter for more details.

Compiled & Edited by:-
Malcolm & Wendy Mc Nair
27, Syon Gardens,
Newport Pagnell,
Buckinghamshire,
MK16 0JU
Tel. 01908 216623

DISCLAIMER The BMW Club Vintage & Classic Register News accepts for publication articles and letters written in good faith; however, the views expressed in articles and letters, which are published, are not necessarily those of the Editor of the 'News' or those of the BMW Club or its officers or members. The information, including advice and suggested modifications published in the 'News' has not been approved, tested or otherwise checked by The BMW Club or the 'News'. Before acting on information, advice or suggested modifications published in the 'News' you should always obtain technical advice, and if appropriate have a professional motorcycle engineer carry out the work. The 'News' and The BMW Club cannot accept liability for any loss, damage or claims occurring as a result of any modifications or work or other action carried out on the advice or based on the suggestions given in any article or letter published in the 'News' and (save for death or personal injury arising from The BMW Club Vintage and Classic Register 'News's' negligence) all such liability is hereby excluded.

THE BMW R35 – Caveat Emptor

by 'The Amateur Mechanic'

At German Auto-jumbles these days the most common BMW seen for sale is always the R35. Factory records show that 15386 examples were manufactured between 1937 and 1940 and yet it is not unusual to see at least 30 for sale at a large jumble. So how come? Well the answer lies not pre-war but post-war. Between 1945 and 1956 the factory in Eisenach (formerly owned by BMW) produced no less than 92000 R35's! Although initially badged as BMW's, after a court case brought by the Munich based company in 1949, later machines carried the red and white EMW logo. Of some 50 plus examples seen for sale at a recent jumble only one had pre 1945 origins! So how do you tell the year of production? The following table gives all the information needed.

<u>MODEL</u>	<u>YEAR</u>	<u>ENGINE NUMBER</u>	<u>FRAME NUMBER</u>	<u>No. PRODUCED</u>	<u>CAPACITY</u>
R35	37 – 40	300001 – 315654	300001 - 315387	15386	342cc
SAG R35	45 – 51	200001 – 226000	200001 – 226000	26000	342cc
EMW R35/2	1952	226001 – 234000	226001 – 234000	8000	342cc
EMW R35/3	'52 – '56	234001 - 292000	234001 - 292000	58000	247cc

* Note. Later EMW's feature plunger rear suspension

Always check the engine and frame numbers before you buy. . Unlike post war BMW's, the Engine and Frame numbers of pre war machines do not match. Look for the BMW roundel stamped at both ends of the numbers. If these are missing proceed with caution! BMW were as protective of their logo then as they are now and always stamped the crankcase and frame. The roundels make any alterations obvious. Pre-war machines also have the engine number stamped on the cylinder head and sometimes on the barrel, just for good measure!

When an EMW is being passed off as a (more valuable) BMW the most obvious signs are the rim profile, Lack of the 5 cross indentations present in every BMW rim and the pressed steel front brake plate with its 4 strengthening ribs. On the BMW R35 the plate was a cast steel item. Its easy to change the tank badges and knee grips but more difficult (and expensive) to replace the other parts.

If you really desire to own a 350 (or 250) single of this type then please don't let the fact that the bike may have come out of Eisenach after the war put you off. Prices reflect origins and a reasonable restored Eisenach bike will cost about £1700 - £2000 (rigid rear) and £1500 - £1800 for the later plunger framed version. Models requiring restoration are actually more difficult to find but should you decide to rebuild one please remember where it originated. If it should be an EMW then build it as one, not only will it have more 'street-cred' but you can sleep easy knowing you did the right thing! Good Hunting!



MICK BARR *INDEPENDENT* **BMW SPECIALIST**

Factory Trained BMW Technician with over
20 years experience for Service, Repairs
and Renovation of all Twins from R51/3
4 Valve Twins. K-Series. Gearbox Specialist.

Scraptoft, Leicester
Tel. 01162 419316 Mobile 0378 629030
FAX: 01162 921840
E-mail: mick.barr.bmw.specialist@virgin.net

SHOW US YOURS - A LOOK AT REGISTER MEMBERS MACHINES

No. 1 - David Stevenson's R60/5

To start with I've shown a couple of photographs of my R60/5 taken on the Seafront at West Worthing. My Brother-in-Law, Matthew Parratt, kindly took the photos with his digital camera. The close up one shows the 'old-fashioned' headlamp shell with combined speedo and tacho and... they both work!

The history of this example of a /5 is somewhat vague. It was manufactured in the autumn of 1970 and exported to France, from where it was imported to Britain in 1991. Nothing is known for sure prior to 1991, but after that it has had three owners including myself. There is a lot of evidence that it has been maintained, during most of this time, by Bob Porecha in South East London. The frame and engine numbers do not match. Enquiries to the Historical Archive at BMW reveal that BMW NEVER shipped out bikes with non-matching numbers (*except on pre-war machines. Ed*), so the frame must have been changed later. The original frame number is on the plate attached to the frame and of course 'tallies' with the existing engine number. However, it is interesting that the frame number is off a R75/5 of exactly the same production period i.e. autumn 1970.

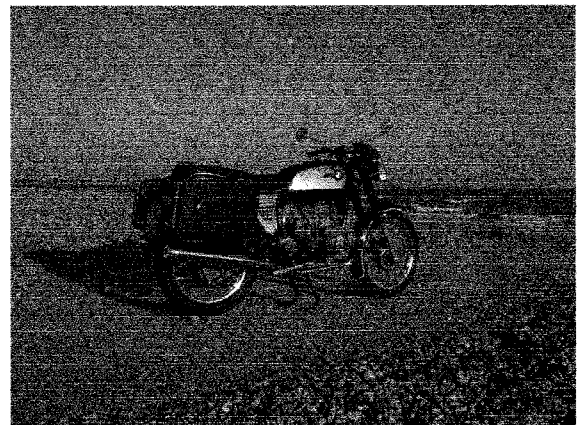
Another anomaly is that this bike has a chrome sided fuel tank. These tanks were not produced until September 1971, so it must have been added afterwards. The possible explanation for this is that the motorcycle was in a very bad accident where the frame and tank (and probably a lot of other parts) needed replacing. The fact that the production period of the engine and the frame are the same is probably a coincidence.

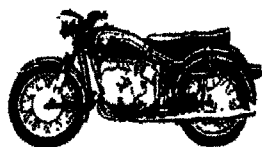
Secondly the machine could have been part of a 'pool' (e.g. a police bike), where parts were regularly swapped around. The third possibility is that the tank could have been installed because the owner preferred it to the standard 22 Litre one (but this doesn't explain the different engine/frame numbers). Finally it could have been a combination of all these possibilities. Whatever happened it does appear to be in a good state of repair. This is a short wheel base model; the long wheelbase was introduced in 1973.

The chrome battery covers were added recently to match the tank (the chrome sides elicited the nickname 'toaster' for these models). As these early models were produced without battery covers, there are no lugs to hold them in position; so, bespoke clips were used to secure the rear of the covers to the sub-frame, a (standard) rubber band securing the front.

Apart from this the bike appears standard. I've added Krauser K1 Starlet Panniers, which were selected because they seemed to suit the size and shape of the bike. There were no 'standard' panniers for the /5, but BMW sold some leather ones at the time, plus a suitable frame to attach them. They had no locks so were completely insecure. This was probably ok for those times, but definitely not now!

David Stevenson (W.Sussex)





J.M.S Motorcycles
Norland Road
Sowerby Bridge
W.Yorks.
HX6 3DE

Contact :- Roger Bennett
For all BMW services including Bevel
Box repairs, Rebores, Engine &
Gearbox o/hauls etc.
Tel. 01422 835566

ULTRA SEAL A CASE FOR ITS **USE IN THE WORLD OF CLASSICS** **& WITH A DISCOUNT FOR** **REGISTER MEMBERS TOO!**

When I read the report of this miracle puncture sealer in the June issue of the Journal I was very impressed. It was Cynthia Milton's experience that registered with me in particular. To remind you all, Cynthia returned home from a trip to the Middle East and Asia to find that unbeknown to her she had collected a total of 12 punctures in her tubed tyres. Obviously Ultra Seal had done its job, and very well! The manufacturers claim that their product is equally as effective in tubed as well as un-tubed tyres. This set me thinking. I've not long ago fitted a new pair of Continentals to my R50/2 so I took the plunge and ordered a bottle. It cost £25 plus postage, not an inconsiderable sum, especially as I have to watch the pennies very carefully. (seen the stock market sliding over the past year and you'll understand!)

Injecting the liquid was simple; let the air out of the tyre and squeeze in the required amount from the graduated container. Inflate tyres and take the bike for a short spin so that the 'goo' spreads evenly within the tube.

Now, from the time that Ultra Seal was advertised in the Journal there has been debate on the Club website. One area of contention, naturally, was the cost, but let's stop and consider this for a moment. Take two scenarios. Firstly, you get a rear wheel puncture when you're miles from home. You can bet it will be raining, it always is, and probably it's in the dark to make matters worse. Mending an inner

tube by the side of the road in those conditions is no joke.

The second situation is when you're loaded with luggage, the wife is on the pillion, and you've taken to the motorway to cut down on traveling time. You suffer a front tyre puncture. This time you're lucky, you were able to make it to the hard shoulder without losing complete control and without being hit by a 42 tonne truck. Mind you, your hearts in your mouth and you've probably knocked a couple of years off your life through the shock. Oh, and the wife is none to happy either!

Is the cost of £25 too great in these circumstances? I think not. Now, I know most of us have breakdown cover on our machines, but can the roadside repairers mend an inner tube? I doubt it. They will transport you to a garage that probably can't help either.

If we rode modern sports machines that consumed tyres every 2-3000 miles maybe there is a case for complaining about the cost. But, is there? £200 plus for a pair of tyres that may only last a few thousand miles is ludicrous anyway so that extra £25 is neither here nor there. Don't forget this 'goo' stops the tyre deflating completely, so may save the rider's neck in the event of a major puncture.

Peace of mind was the reason I opted for using Ultra Seal. Contrary to belief when the tyre valve is removed the fluid does not blow out, I had to deflate my rear tyre recently to take the wheel past the swinging arm when I wanted to remove the diff. (I use a 4.00 x 18 rear) No problem.

That's my case for this product, and **no**, I've got no financial interest in the product. The good news is the price. I've got us a £5 reduction so it will now cost **£20 plus postage**. Interested? Contact Ken Hartley at :-

ULTRA SEAL-HARTLEY
2, BELVERDERE ROAD
WOODVILLE
SWADLINGCOTE
DERBYSHIRE
DE11 7EQ

TEL. 01283 217320

Mention that you are a member of the BMW Club Vintage & Classic Register to get the discount.

FOR SALE

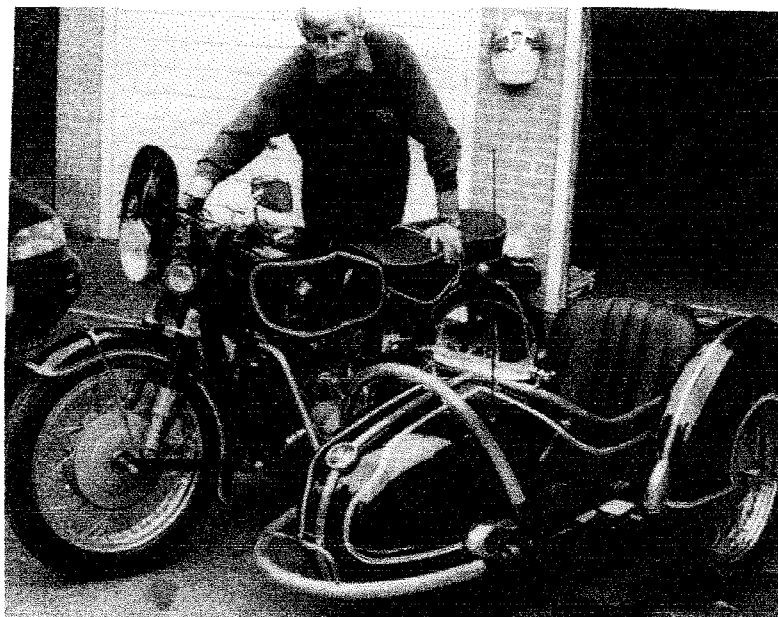
**L.H. /7 SILENCER - NEW, SMALL DENT.
USED /5 SILENCER - NO CORROSION OR
RUST OBVIOUS.
USED REAR HUB /7 - NEEDS BLAST
CLEANING. NO BEARINGS.
2 - SIDE PANELS /6 /7 - DARK RED,
UNDAMAGED.
WHITE AVON TOURING FAIRING
COMPLETE WITH FITTINGS & CRASH
BAR FOR /5 - /7, UNDAMAGED.
NEW S/S HUB PLATE FOR /5
2 CARB TO AIR CLEANER INLET TUBES-
USED.
ALL AT A VERY REASONABLE PRICE!**

**TEL. TONY ELDRIGE (020 8550 3021)
ILFORD**

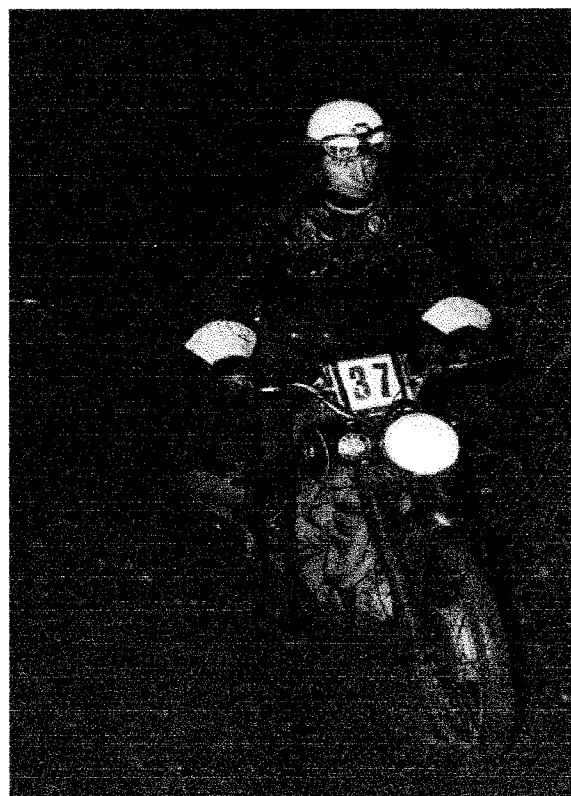
For all work on pre-oil
head boxers
Contact:-

**ERIC KRAHE,
2, Park Lane Cottage
Park Lane, Carleton,
Nr. Skipton, Yorks.**

Tel. 01756 700597 (w/shop)
01756 796390 (home)
Servicing, Re-builds,
Paintwork, chrome plating
etc. etc.



Eric Rance is seen here with his recently restored Steib S250. This is one of the rarer models to be manufactured by Steib. The BMW it is attached to is an R50.



Bruce Preston in the 1962 Exeter Trial. The machine is the 1954 ISDT R25 Spezial.

TOOLS – A few suggestions for working on pre 1969 machines from a Dutch enthusiast Kees van de Heiden. *(Please note, I have not checked the measurements of any tools or their suitability for the job. Ed.)*



Question:

When I want to overhaul the engine, gearbox etc, do I need a lot of special tools?

Answer:

It all depends on your workshop. It will be very helpful if you have a lathe. You can make the nicest tools with a lathe and a standing drill. But you can also improvise lots of tools with rough lumps of steel and welding equipment. Most gears and bearings have a tight press fit so you need very sturdy tools. You should buy an exhaust nut wrench. There are two types, one for the finned exhaust nuts of the R69, R50S, R69S and one for the collar nut with the holes on the circumference on the R50 and R60. Both are not extremely expensive, but invaluable. Another thing is a heating device. A blowtorch is too hot. It will melt the aluminium castings. I always use a large electrical cooking plate.

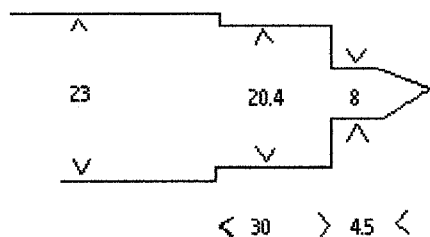
Ed Korn has an excellent array of tools for sale for these purposes. Look at his web page- www.cycleworks.net

Some tools for engine (dis)assembly:

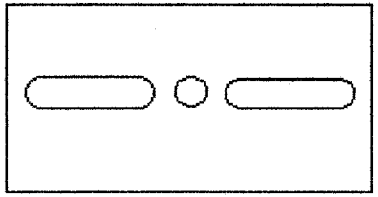
All sizes in millimeters

- To release the clutch spring pressure you need two, or preferably three M8x1 fine threaded screws 40mm long with nuts and some. The cardan housing is fastened to the differential casting with studs that have M8x1 and a normal M8 thread. When you use these, you can screw the fine thread in the clutch and use the course thread to release the spring.

Clutch centre tool:

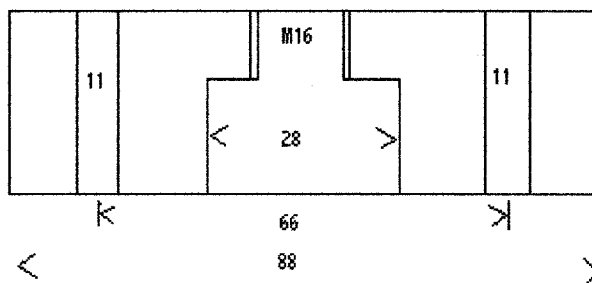


- To pull the dynamo and the magnet from the crankshaft and the camshaft, use a strong steel rod of 60x6mm. This should be strong. If it bends, you have a big problem. Put the rod in the appropriate opening and push with an M8 bolt.



Universal puller plate 200 x 80x 8 with one hole in the centre of 8.5 mm diameter and two slots of 8.5 x 45 on both sides of the hole with 15mm in between:

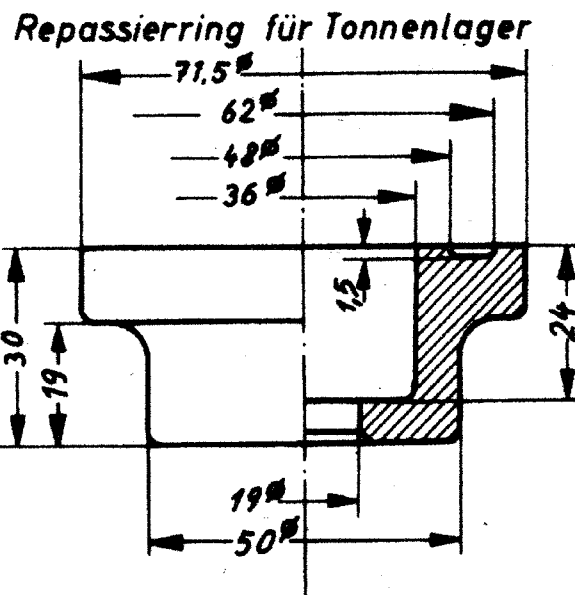
To be used together with M6 and M8 studs to pull of the large timing gear housing on front of the engine. And together with a steel bush of 48 outer diameter and 35.5 inner and some 100 long (you should take some measurements to see how precise this is, but you should get both ends true parallel), and a M8 stud to press the front crankshaft bearing and the crankshaft gearwheel.



The flywheel puller

You need an M16 bolt to press and two M10x1 fine threaded bolts to attach the puller to the flywheel. Also you must put a strong steel disk of 27 mm outer diameter between the M16 bolt and the crankshaft to protect the threads. The front suspension units are fastened with M10x1 x 48 bolts. A simplified version could consist of a piece of U profile, with a 18mm hole, and a M16 nut welded over this hole. When this nut is fixed, measure the positions of the 11mm holes and drill them.

- The R69 and the R69S have a special rear crankshaft bearing. This bearing can cope with the flexing of the crankshaft, but during assembly it needs to be fixed in place. You really need a lathe for this tool.
Dimensions:

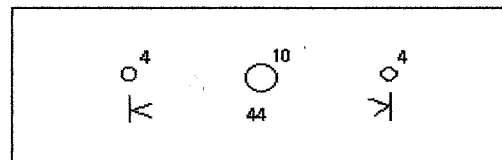
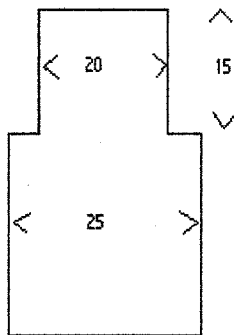


To be fitted with the large flywheel bolt

- To fit the crankshaft in the rear bearing house you should use enough heat to let it slide in. But sometimes you have to use some extra force. Don't smash with a hammer on the front of the crankshaft, but you can use this trick: get an old flywheel nut (M18x1.5) and drill a hole in the middle with M8 thread. Together with a stud and the universal plate and some lumber, you can pull the crankshaft in to place. - You can remove the camshaft with the universal plate, two 70mm wooden bars and a M8 thread. Put the lumbers under the plate and pull the complete camshaft together with gearwheel and all the front bearings out. (The R69 is the only one with two front bearings). The rear bearing can be pulled out with some hooks, and a rope, when the whole engine casting is being heated to remove the crankshaft. For (dis)assembly of the camshaft wheels and bearings, you can also use the universal plate.

- Pulling the crankshaft gear wheel is done with a normal two-arm puller. Maybe you must grind it down on some places to make it fit. Use a clamp to press the two arms together. Protect the crankshaft with a bolt.

Drift to remove the wheel bearings from the brake side:



Key to remove the special big wheel nuts

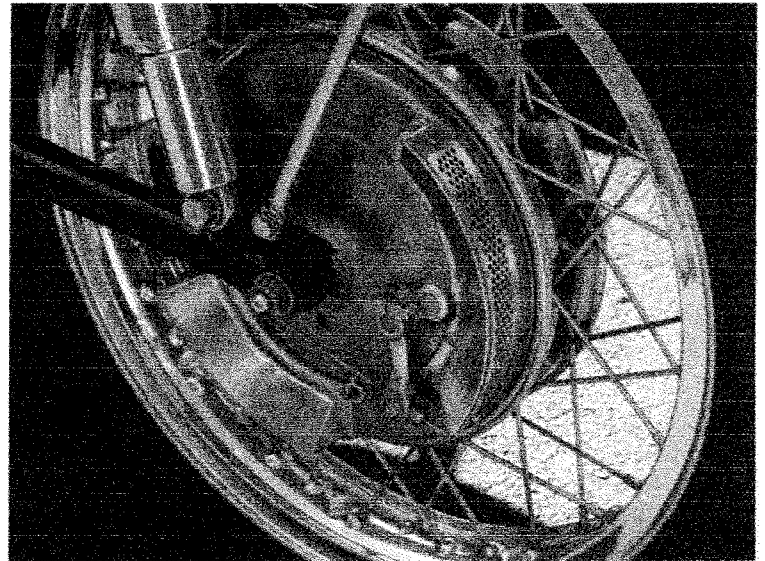
Make one 10 mm hole in the middle and place two 4 mm pins on 44 mm. For the pins, I used M5 bolts, turned down to 4 mm. With the remaining thread, you can attach them to the steel plate. The joke is, to put the steel plate with the pins on your wheel. Put an M10 stud through the 10mm hole and the wheel, and fix everything with some nuts and rings together. Now you can put a lot of force on this tool, without the risk of damaged keyholes.

- A setup to disassemble the front suspension units is easy to make. The goal is to reach the shock absorber arm with a 9 mm spanner. Make from plywood two plates one with a dimple to hold the underside of the unit in place, the other with a 58 mm hole to go over the upper aluminium part and on to the black cover. Now make some extra holes in the plywood for two long M6 studs alongside the suspension unit. You can press the unit together now, but most probably the upper aluminium part will be oxidized together with the black cover. So you must put a steel rod through the upper aluminium part, and attach it to the studs with some nuts, steel plates and wire. Now you can screw down the plywood with two nuts on the studs.

NEW PRODUCTS

The picture to the right shows a prototype front brake air scoop that has been produced by Register Member, David Stephenson, for his R69S. The design is based on the scoops fitted to the very successful M.L.G. production race bikes of the early sixties.

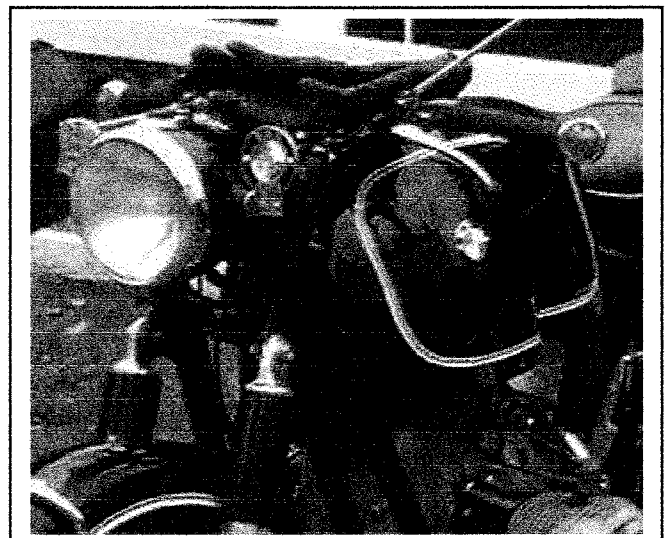
The inlet and the exit scoops are cast in alloy then fettled and polished. The grill guard is fabricated from alloy sheet and all fixings are in stainless steel.



Such has been the interest in this project that David has been persuaded to produce a small batch for sale. Already Eric Rance and a number of the Yorkshire area members have ordered. These scoops not only look attractive but they are very effective in cooling the brakes. The amount of handwork required in manufacture is immense and the cost of small batch casting not cheap but the finished items are of fine quality. If there is sufficient demand a batch may be produced to suit the /5 and /6 models in addition to the 1955-1969 models.

If you are interested give David a call for more information on **01484 605616**. The kit will come with all fixings and a detailed instruction sheet. Price is yet to be finalized as further refinements are being made to the castings. A small percentage of the sale price will go to the Club.

Picture 2 shows my own R50/2 fitted with a copy of the German Heinrich tank. A manufacturer has been in contact with me with a view to producing a GRP copy for the 1955-1969 machines. The tanks would be manufactured to the very highest safety standard and, feature 'Monza' type flip-up caps and provision for fitting BMW petrol taps. The finish would be impregnated in either black or white gell but lining would need to be applied by the purchaser. (Not a bad thing as everyone seems to have their own interpretation of what it should look like!)



Price would be in the region of £250 but this could come down if the response is sufficient. Half a dozen orders initially would get the production going. With the price of a new standard tank from Mobile Tradition being over a £1000, if you can live with the big sports tank it makes sense to consider it. No commitment is necessary at this time but if you are interested in purchasing one of these tanks please call me. I can provide additional photos of this tank and details of the mountings etc **Tel. 01908 216623**

OF OIL AND OIL SLINGERS by 'The Amateur Mechanic'

The system of lubricating the big end bearings on BMW machines by use of crankshaft oil slingers was a feature that lasted for almost 40 years. This fact alone must prove it worked reasonably well! A brief description of how the engine is lubricated might be appropriate.

The oil pump feeds oil to the front and rear main bearings, the camshaft drive (by a jet onto the chain or gears depending on drive method) and to one or (on late engines) both cylinders. Single cylinder engines also had a feed to the valve gear (rockers). Oil to the main bearings also feeds the big ends. The main bearings sit inside the lip of the oil slingers, which are screwed to the outside of the crankshaft front and rear webs. These slingers are a piece of thin steel turned over at the outer edge to form a lip. The lips vary in width depending on the model and year. Oil caught in the slinger lips is then centrifuged into holes in the crankpins to lubricate the roller bearings on the pins (Big Ends). All other internal components are splash fed, except twin valve gear, which has either self-contained lubrication (as on the R5, R51 etc) or is gravity fed through the pushrods. Put quite simply - it works!

As the system was designed long before full flow filtration became a feature of motorcycle engines, the low-pressure system only has a mesh on the pump pick up to take out the bigger debris. Most other contamination is centrifuged out (very efficiently) in to the oil slingers. Once they fill with 'sludge' their ability to effectively 'sling' oil is lost. In time, this build up can reach the crankpin and block the feed holes to the crank rollers then a big end fails.

So, how long does it take for this situation to occur? Well, how long is a piece of string? There are so many variables. How often is the oil changed? What type of oil is used? What sort of use does the bike get i.e. short or long journeys? How hard is it ridden? What sort of fuel is used?

It used to be said in the 60's (when the bikes were in regular use) that 30000 to 40000 miles was the normal safe mileage between engine strips. Unfortunately the engine design is such that only a complete strip down can reveal the state of the slingers. However, these mileages are not sacrosanct. I well remember in the 60's a Midland Section member who, having bought his R50 when a serviceman in Germany in 1955, covered over 120,000 miles without a bottom end strip. The consensus of opinion at the time was that he should leave well alone! That bike is probably still running out there somewhere! I've known others with full slingers causing big end failure within 25000 miles from new. So how long IS a piece of string?

I would suggest that 30000 miles would be a reasonable mileage between strips. For most machines this is likely to be more than they will cover in our lifetimes!

Problems can be reduced in the following ways:-

1. Always use a good quality oil (I personally prefer a Mono-grade, but Multi-grades are also OK) IF the slingers have just been cleaned then consider using an HD oil. High Detergent oil is not always easy to obtain but was recommended by BMW into the 70's and beyond. **DON'T** use HD oil in old (un-rebuilt) engines. The high detergent content will probably shift all the dirt in the crankcase and may cause problems.
2. Change the oil frequently. Oil is cheap, engine rebuilds are not! Change intervals were gradually increased by BMW over the years as oil quality improved. I still try to stick to a maximum of 1000 miles between changes on pre 69 machines.
3. The disappearance of leaded fuel from the garage forecourt may help us in the long term. When analysed some years ago, the contamination in the oil slingers was found to have a high lead content. So, unleaded with additive may improve the life of the bottom end. I say, may, because no one yet knows the effects of prolonged additive use. Many 50's and earlier BM's were fitted with phosphor bronze valve seats and will run on unleaded without any modifications. Unfortunately the only way to find out if your engine can do this is to strip the heads and have a look at the exhaust seats!

So there you have it, food for thought, I hope! Good BMing!

FIFTY YEARS

- STILL SMOOTH
- STILL RELAXING
- STILL SUPERB



While other manufacturers chase themselves round in circles searching for the next "bigger and better" gimmick for the next generation of super duper bikes, BMW have been happy to stay with their well-proven range.

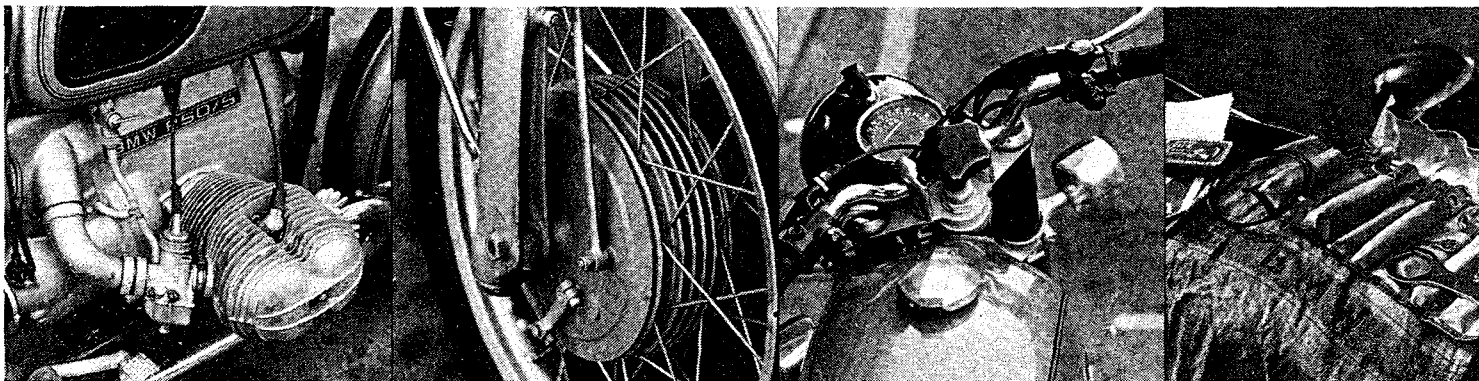
OK, so they did a little detail redesign and restyling a short while ago, and as far as price goes BMW were in the super bike bracket long before the phrase was even invented. But for sheer performance their machines just aren't as rapid as most others and they have three models which are very, very similar to one another.

The 500 cc subject of this test is around 12 lb. lighter than the 750 we tested last year and some 10 to 15 mph slower. Most of the time you did not need to know whether it was the 500, 600 or 750 you were riding.

Obviously BMW aren't counting on performance to sell their machines, their strong point has to be reliability, longevity and comfort—"driveability", if you like. I'd go along with that and add that any of the BMW range make the best long-distance tourers going. It still doesn't explain why they make three models which are so similar to one another, unless

On!

BMW R50/5 TEST



BMW's flat twin motor—a smooth flexible lump that doesn't like to be hurried too much

It doesn't look too impressive but the brake is powerful and matches the handling nicely

The controls are just right, and easy to operate, but the instruments could be better placed

This excellent toolkit typical of the thorough attention to detail around the machine

on the German home market there is a greater price differential. If the 500 could be considered an economy version, the set-up would make more sense. Well, it does have a lower compression ratio...

We found that riding the R50/5 under everyday commuting conditions didn't tell us a lot about the machine. It compares reasonably well with other models of the same size; on the credit side it is docile and quiet, on the debit side the gearshift made louder clunks than any Bee-Em I've ridden yet.

It wasn't until the machine was headed out for a long run that it began to show its real value. On one occasion a minor crisis forced me to ride a hundred miles or so one dark, cold, very wet night, without adequate waterproof clothing. I was thankful we had the BMW; the journey still wasn't exactly pleasant, but on most other machines it would have been downright painful.

Even as I write this, Chas Deane has just got back from the Island, having taken part in BMW's attempt at the Maudes Trophy. The weather conditions there were pretty grim, but his woe-begotten tales confirm all I was saying about the BMW's driveability:

First, the machine is comfortable—the riding position is

just right and the seat supports you in a relaxing way. Second, the handling is very good. On wet or dry roads the BMW will cope easily with all kinds of surface, and you can put it just where you want it. Ridges, grooves or white lines which upset a lot of other machines, leave the BMW ploughing steadily along.

The longer you ride the machine, the more you realise how effortless it all is—what BMW give away in terms of performance they more than make up for in their easy handling.

On the 500 acceleration and top speed are below average, under fairly neutral conditions it will pull a maximum of just over 90 mph. If you can coax it up to peak revs in top, it is geared to reach something approaching 100 mph. This isn't particularly astounding, but it will hold a steady 80 mph or so no matter what—and it gives the impression of being able to keep this speed up all day.

We found that the fuel consumption varied little from motorway cruising to town riding, ranging from the mid-fifties to a shade over 60 mpg.

Before you even get down to details, this adds up to a fine tourer. When you do start looking at the details, the picture gets better and better.

In my opinion the machine is one of the finest looking motorcycles ever built and the standard of finish matches its rugged good looks. Details around the machine have been carefully thought out and designed for the rider who uses his motorcycle. The comprehensive, high quality toolkit, for example sits in a tray under the seat which can be locked down. A cloth and a puncture repair outfit are provided and there is still enough room to carry a spare set of light bulbs, plugs, points, etc.

On the subject of carrying things, I was disappointed that no carrier or pannier is fitted as original equipment. If this is a machine intended above all else for long distance riding, then it needs carriers more than most others. When one has laid out all that cash one shouldn't have the extra outlay and trouble involved in fitting carriers. Also, now that the appalling crash helmet law has become fact, machines need stowing space more than ever.

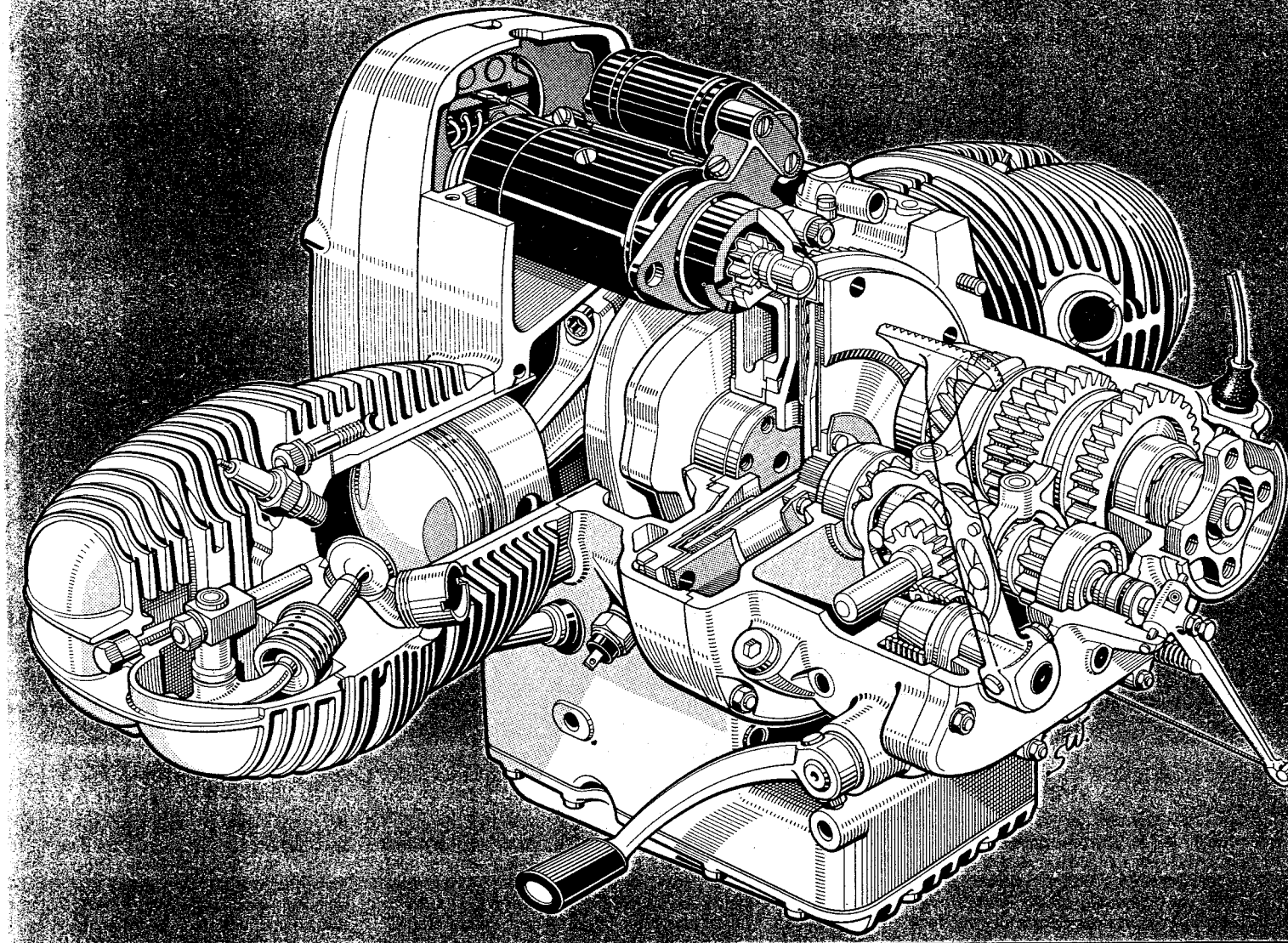
Another detail which is basically a good idea is the fly-up propstand. This is spring-loaded, so that when the weight is taken off the stand it automatically folds away. In practice it didn't work too well, being unreliable if the machine was on any kind of a slope and tending to lift

if one leaned against the machine.

All of the controls and switches were well placed and easy to work, even in bad riding conditions, and the electrics are powerful enough to be compatible with the machine's performance. A headlamp flasher, which I regard as more of a necessity than a luxury, is fitted, but there is no ignition kill switch. The composite tach/speedo spoils the arrangement up front, it doesn't look too good and it isn't particularly easy to read. And they still fit that idiotic ignition switch.

The electric starter is quite powerful, and I never had any problems starting the BMW. No choke is fitted, and from cold both carbs have to be tickled and the engine spun for three or four seconds on a tiny amount of throttle. If the motor didn't pick up, I found it better to give the starter several short bursts rather than keeping it spinning. Usually on the second or third go, one cylinder would fire up and by gently touching the throttle the other would chip in. Then it needed about thirty seconds running around the 2000 rpm mark before it would give good throttle response.

Once under way the motor is smooth and flexible, with plenty



BMW TEST

of low down torque and no noticeable "cam" effect. It gives that confident, long-legged feel which tempts you to hang on to top gear and rely on the engine's smooth pulling power.

This is fortunate, because the BMW gearbox doesn't encourage enthusiastic cog-swapping. All of the BMWs I have ridden have had clunky gearchanges, although with a little concentration a silent shift is possible. This 500, however, seemed to have a mind of its own and clunked no matter what. Then, just when I'd given up trying to make silent changes, it would occasionally slip into the next gear with barely a click, as if to remind me that it *could* be done.

As with other BMWs we've ridden, this one developed a clappity tappet—it would usually start clattering after a long fast run, and then it was only intermittent. That was the sole fault which showed up during the test—there was no vibration, no oil leaks, nothing to get upset about at all.

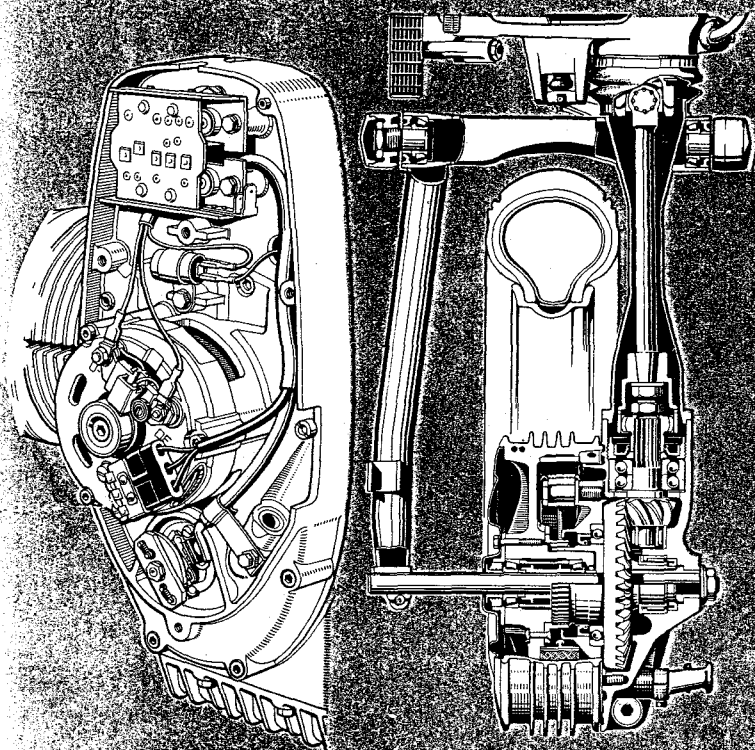
The roadholding is excellent, and I've already gone on at great length about the nice handling. The BMW doesn't like being thrown about, but it will go where you point it and stay on line without any nervous twitching or shaking of the head. Ground clearance is very good. The stands will graze the floor, but you ought to start looking for a soft spot in the hedgerow before you need worry about anything else touching. Unfortunately with all that engine hanging over the side, the dire consequences of a terminal slide are always in the back of one's mind and this, along with the general character of the machine, damps down any tendency to scratch around corners.

The Metzeler tyres have been criticised by other testers, but I have no complaints at all. I like the feel to the handling which is given by fat tyres and on wet roads I felt more confident on the BMW than on any other roadster I've ridden.

Braking on the BMW presented no problems. The twin-

leading-shoe job at the front goes about its work with no fuss and even a lot of hard work didn't prompt it to fade. When the back brake was adjusted up to suit my foot position it was a little too keen. Backing it off some took the edge off its sharpness, but made it that much more uncomfortable to operate.

Two-up riding doesn't give the 500 any trouble and it is comfortable enough for the passenger even over long distances. The pillion footrest gives the passenger a comfortable position, but it is too close to the main footrest, and the passenger has to ride with the ball of the foot on the rest. It would make things a lot better if the footrest were moved back a couple of inches. On the subject of footrests, a word of warning—don't wear flared trousers outside your boots! The reason is that as the machine comes to rest and you're about to put a foot down, the said trouser neatly hooks itself over the tickler on the carburettor; I leave you to imagine the rest.



Cutaway drawings show the workings of BMW's now classic engine and transmission layout. Far left: The engine and gearbox, showing the single plate diaphragm clutch, with the starter motor sitting on top of the crankcase. The gearbox is the crossover type. Above left: At the front of the motor is the three-phase Bosch alternator, rectifying and regulating system and the camshaft-driven contact-breaker. Above right: The gearbox output shaft couples through a UJ on to a shaft running inside the swinging arm. The final reduction is made through a spiral bevel crown wheel and pinion.

The BMW, although it is the "baby" of the family, is only really at home on long main roads. Then you can feel the true concept of the machine, whistling quietly and smoothly along and shrinking the miles as easily as machines with far greater performance. Just as the engine is understressed and never seems to be working hard, so the chassis is equally smooth, giving a beautiful compromise between comfort and predictable roadholding. That, despite the GT labels on other machinery is what *gran turismo* is all about.

There have been few machines which have been able to compare with BMW's smooth, silent power and comfortable, easy handling. The only real point against the machines are their high cost and the cost of parts—but there seem to be plenty of people who are prepared to pay for their motorcycling.

Then, again, the BMW concept could be considered old-fashioned: the layout of the BMW has been with us for a long time

now, the 1923 side-valve R32 500 bears very strong resemblance to today's machines, and BMW have always kept the flat-twin, shaft-drive concept.

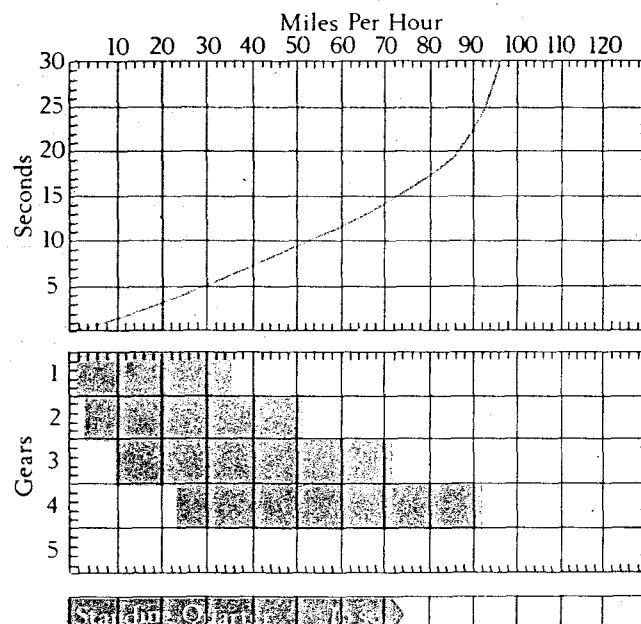
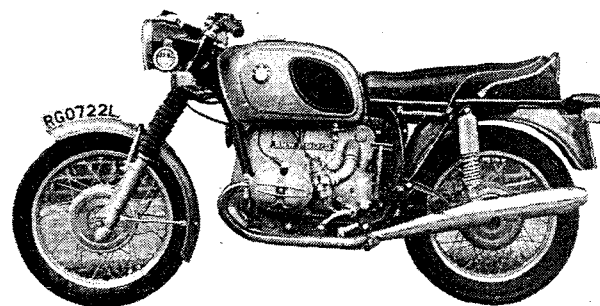
Where do they go from here, though? Fifty years is a lot of detail redesign, and there can't be a lot left for them to do to their twins. The layout doesn't lend itself to the addition of extra cylinders, and as BMW don't seem interested in all-out performance, a bigger or more powerful motor wouldn't be achieving anything.

So they appear to be left with a range of three very similar machines. One alternative does spring to mind—the chassis and transmission of the BMW seems eminently suitable for a rotary engine. A two or three rotor unit could be installed, as without a space-consuming crankshaft there would also be room for a liquid coolant system. Maybe we will see some changes from BMW...

JOHN ROBINSON

ROAD TEST

BMW R50/5



Fuel consumption (average)
Braking from 30 mph

57 mpg
29 ft

SPECIFICATION

Engine: Horizontally opposed OHV twin. Bore x stroke 67 x 70.6 mm, capacity 498 cc. Compression ratio 8.6:1. Carburetors, twin 26 mm Bing concentric float type. High pressure oil feed to bearing surfaces from Eaton pump. Claimed output 36 bhp at 6600 rpm.

Transmission: Single plate clutch with diaphragm spring, four-speed crossover gearbox. Final drive by shaft and spiral bevel gear, overall ratios: 13.84, 9.18, 6.68 and 5.35:1.

Electrics: Bosch 12 volt ac/dc lighting, supplied from crankshaft-mounted alternator, feeding battery via rectifier and

voltage regulator. Ignition by twin coil and contact breaker. Indicators and starter motor fitted as OE.

Wheels: Welled rims, 1.85B x 19 front, 1.85B x 18 rear Metzeler tyres, 3.25 x 19 front and 4.00 x 18 rear. 7.9 in brakes, with 2ls front.

Suspension: Front, telescopic forks, rear, swinging arm with adjustable damper units.

Dimensions: Seat height 33 in., wheelbase 54.5 in., ground clearance (with 165 lb. payload) 6.5 in., kerb weight 408 lb.

Price: £899.98.

Importers: BMW, Great Western Road, Brentford, Middlesex.

Classic Brake Services

Racing Brake Specialists

Oversize linings machined to size
Linings all riveted

Tel/Fax: 01663 732025

Mobile: 07855 008636

e-mail: classicbrake@aol.com

web: www.classicbrakeservice.com

Ian Campbell

P.O. BOX 5

Whaley

Bridge

High Peak

SK23 7LL

LETTERS

From the 'Amateur Mechanic' -

Further to the recent info. on the ex-Tim Reid R51. I have recently purchased the Mobile Tradition two volume set 'The Engines that Made History' by Dr

Karlheinz Lange and what he has to say on page 248 makes interesting reading. I quote:-

'BMW introduced the R5 motorcycle with the M254/1 engine in 1935 as a series built sports model. From 1937 a higher performance variant of the R5 was also made available; the 498cc R5SS (Super Sport) which was suitable for entry by customers in competition.

Many components and systems of the basic engine were modified to create the M254/2 engine of the R5SS; it had polished ports, stiffer valve springs and a modified carburetor. No air filter or silencer was fitted. Power output was increased thereby from the 24 bhp of the production engine to between 28 and 30 bhp. With the launch of the R51 production motorcycle, a Super Sport version continued to be offered as the R51SS. However, as far as the engine was concerned this motorcycle was identical to the R51.

In 1939, for selected private riders, BMW

built a limited run of just over 20 examples of motorcycles much more substantially modified for racing purposes. This customer model, the R51RS (Race Sport) resembled the works racing machines in many respects.

The engine still had pushrod valve gear although the two camshafts in the crankcase were now gear driven. The cylinder finning was extended in order to cope with the higher output of 36bhp. The ports, carburetors, ignition system and so on were subject to continual improvement.

Many prominent riders helped BMW gain a large number of International motorcycle competition successes'

Perhaps this explodes one R51SS myth. It would appear the engines were standard spec.

Well, that's all for this newsletter, any correspondence is welcome. If you would like to give other members the privilege of reading about your machine or if you have an article for inclusion, please feel free to contact me.

My thanks to those who supplied information for this issue. In the meantime, ride safe. Keep those Vintage & Classics on the road; that's what they were built for.

Malcolm Mc Nair

LOOK NO FURTHER! for competitive prices on EVERYTHING YOU EVER NEEDED FOR YOUR BMW

Over 30 years of experience with BMW's
Restoration and repairs including British M/C's
Spares New & Secondhand from 1935
Machine tools for the small & home workshop including
Chester multi-functional lathe/mil/drill
Parts made to pattern or drawing. S.A.E. for lists of services
and machine tools available.

2, Forman Street, Derby. DE1 1JQ
Tel/Fax: 01332 298523 Evenings W/E 01332 2824334

B.E.M.W.