



The Oz Vincent Review

Edition #78, August 2020

The Oz Vincent Review is an independent, non-profit, e-Zine about the classic British motorcycling scene with a focus all things Vincent. OVR, distributed free of charge to its readers, may be contacted by email at ozvinreview@gmail.com



Ian Boyd's "would have been, could have been" 1939-45 Series B Prototype.

Disclaimer: The editor does not necessarily agree with or endorse any of the opinions expressed in, nor the accuracy of content, in published articles or endorse products or services no matter how or where mentioned; likewise, hints, tips or modifications **must** be confirmed with a competent party before implementation.

Welcome to the latest edition of OVR.

Twelve years in the making, the front cover this edition depicts Ian Boyd's 1939-45 Series B Prototype – that would have been if it had ever been built. This magnificent bike uses a replica series A engine with post war heads grafted on. Engine components supplied by the magic duo of Neal Videan and Rodney Brown and assembled by master engineer Matt Daniels. Virtuoso Vincent mechanic and restorer Greg Brillus, using a Burman gearbox, Brampton forks, Series C RFM and UFM and Vincent Speet twin leading shoe front brake, built and tuned the bike for Ian in his workshop on the Gold Coast in Queensland, Australia.

Remember, to access the complete OVR archive from any device, just go to the OVR web site <https://ovr270.wixsite.com/ozvincentreview>

Martyn

Melbourne, Australia.

Letters to the Editor

Hello Martyn, I have enjoyed your OVR as I was an impressionable teenager in the 1950s when Vincent was the king. Unfortunately, I never owned one but I imagined my BSA Bantam was just as good, albeit a bit slower. Our heroes were the speedway riders and in particular the outfits, knowing Don Willison personally may have been an influence in this.

I hope my attached article is worthy of publication and stirs up some other stories of the mighty Vincent, in speedway guise.

Best Regards Jeff Schaefer, South Australia

Pictured is Jeff on his 1951 BSA Bantam Model D1. He says this machine is like grandfather's axe, 2 heads and 5 handles but still considered grandfather's old axe.



Hello Martyn

I don't have a Vincent (but do have a few other bikes. I thought that your reader s might like a short story about the All British Rally a couple of years ago , pre-covid 19 , just to warm their appetite for when we can go again.

Kind regards , Paul Whittaker , Queanbeyan , NSW, Australia.

A Number With a Tale to Tell

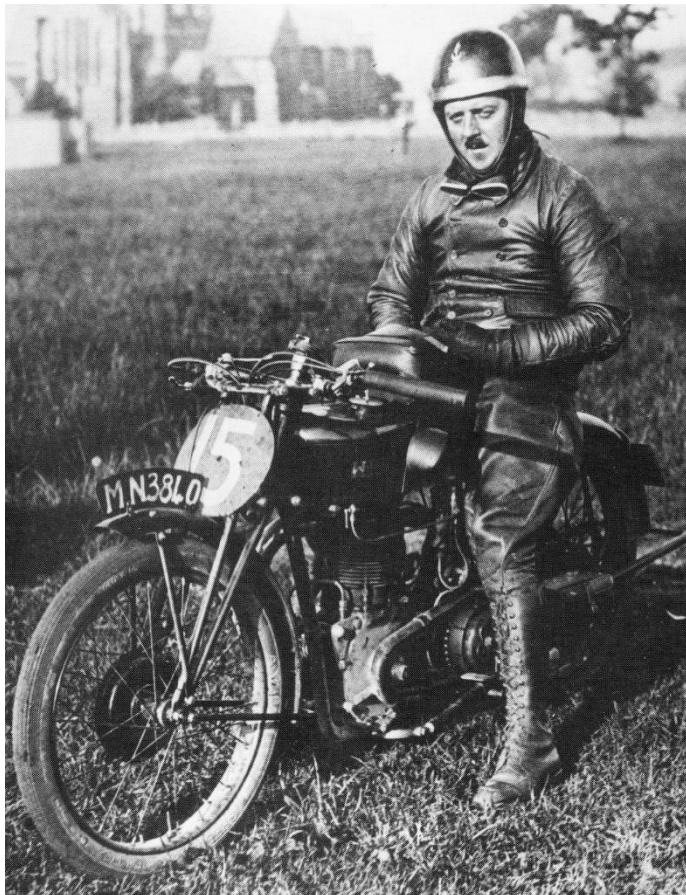
Another super contribution from David Wright, IOM.

The requirement for motor vehicles to be registered for use on the public highway has been in force for well over 100 years and millions of cars and motorcycles trundle around carrying bog standard numbers issued by their local registration authority. Occasionally there will be one that is out of the ordinary. In the UK it may take the form of a 'cherished number' which perhaps hints at the owner's name – JOE 100 – or, there again, it might be something with no obvious significance. My modern car comes into the latter category, carrying the registration MN 3840. It is a combination of letters and numbers that means something to me, but not to anyone else. However, there is a Vincent-related story attached.

Howard Raymond Davies was an early motorcycle racer who gained an enviable TT record. First competing on a Sunbeam in 1914 at the age of 18, he tied for second position in that year's Senior TT with 1911 winner, Oliver Godfrey. Going on to serve in the Royal Flying Corps in the first World War, Howard was shot down, reported as killed and was subject to a glowing obituary in the magazine *'Motor Cycling'* in May 1917. In fact, he escaped death, but was captured and became a prisoner of war in France.

With the peace he returned to work within the motorcycle trade and resumed his competition career, gaining victory in the 1921 Senior TT for 500cc machines on a 350cc (Junior) AJS. This earned him a place in TT history, for it is the only time such a feat has been achieved. After a period in the competition doldrums due to what he felt was inadequate machinery, in 1924 he resolved to deal with that problem by manufacturing his own motorcycles. Intending them for use on the road and in competition, he made use of his initials and named the new marque H.R.D.

Early in his career as a motorcycle manufacturer, Howard took four of his new machines to contest the toughest challenge of the day, the 1925 Isle of Man TT races. They were two 350's and two 500's, to be ridden by himself and employee Harry Harris in the Senior and Junior races.



The TT allowed competitors two weeks of early morning practice over the 37¾ mile Mountain Course in 1925, but the roads remained open to ordinary traffic during those sessions. Apart from the heart-stopping moments that must have generated, it meant that competitors machines had to be registered and taxed for use on the roads. Most carried UK registrations, but Howard Davies registered his four bikes on the Isle of Man and so they carried Manx numbers.

Howard Davies shown on his 500cc TT-winning machine carrying the Manx registration MN 3840. Taken on the Island in 1925, probably after an early morning practice session, the tower of St Ninians Church can be seen in the background.

The 1925 TT turned into a highly successful one for the H.R.D. marque with Davies taking second place in the Junior race, some four

minutes behind the winner, Wal Handley, having lost twelve minutes in repairing a puncture. Then in the Blue Riband Senior event, he vanquished the machines of some twenty other manufacturers to take victory at record-breaking speed. This moved *'The Motor Cycle and Cycle Trader'* to write: "In the annals of the trade there has probably been nothing so romantic nor any achievement so outstanding as that which may be placed to the credit of H.R.D."

Despite another TT victory gained on an H.R.D. by Freddie Dixon in the 1927 Junior event, trading conditions were against Howard's relatively expensive motorcycles and he was forced out of business later that year.

It happened that a young Philip Vincent was a great admirer of Howard Davies, saying in his autobiography: *'Howard Davies was the idol of my teenage years'*. Looking to set up as a motorcycle manufacturer in 1928, Philip acquired the H.R.D. name. He then added it to his own, creating the fledgling Vincent H.R.D. Company Limited at Stevenage.



Living on the Isle of Man and having great respect for Howard Davies achievements, a few years ago I found that the registration number MN 3840 had lapsed and was languishing with the local registration authority. This was at a time before it had worked out that there was money to be made from selling 'cherished numbers' and for a nominal transfer fee I was able to acquire MN 3840 for use on my car.

The number means nothing to anyone else, but it is my small tribute to Howard Davies as I drive the roads of the TT Course in my day to day life.

My 1980 Honda CB250RS adds a little twist to the numbers theme.



OVR Event Schedule, updated 29 July 2020

<i>Date</i>	<i>Details</i>	<i>More Info?</i>
2020	2020	
Sept 27	Bay to Birdwood Rally, South Australia	<u>Event still scheduled to proceed but the SA border is currently closed to people travelling from or through Victoria, New South Wales or Western Australia.</u>
Oct 9-11	OVR Bushfire Relief Ride – in Victoria, Australia. See OVR July 2020	There are just a small number of vacancies remaining at the 2 motels, so if you plan on taking part, act now

Who Called The File A Bastard?

as described by Colin Taylor, first published in *Classic Mechanics*, mid 1960's

As an apprentice the first tools I was allowed to use were the simple hand ones. 'A file, sonny, is a most rewarding tool to use and you are going to use one a lot for the next three months,' said Frank, the man who drew the short straw and had to try to teach me and the other know-all's just how to make things in metal. Now, eighteen years later, I still remember the golden rules he taught. Every time I pick up a file or a hacksaw, I think of him saying 'six strokes a minute not sixty!'

Whether you are using a file to take a sharp corner off a part or to shape an intricate component to suit a mating one, the rules for selecting and using the tool are much the same. Saws, however, are less of a problem, mainly because in engineering there are fewer types of saw than there are types of file. It is just as easy to misuse a saw, though, and the saw blade comes only a close second to a thread cutting tap as the most abused of all hand tools. Neither is replaced until it breaks.

Files come in all manner of shapes and sizes. There is but one constant, they are all designed to be hand held when being used. Before every toolmaker this side of Kathmandu picks up his pen to write to OVR, I do know about die filing machines but every one I've ever seen used had hand files clamped into them.

In saying that files are hand held tools it is obvious that they should be comfortable to hold. Now, back in the days of yore it became recognised practice for files to be sold without handles. In most cases the same applies today. You can buy some files with uncomfortable plastic handles fitted to them. My advice is to replace that item with a wooden one. Plastic has made some notable inroads into the traditional world of engineering but the handle of a file is one place where the stuff has no place at all. If you fancy a pair of hands with the best set of blisters and the sorest palms, use a file with a plastic handle!

Engineering is, in the main, a place designed for a population which is right-handed. Files and saws have no qualms which hand holds them and one of the best exponents of the art of filing I have ever seen in action is completely at home with the file held in either hand.

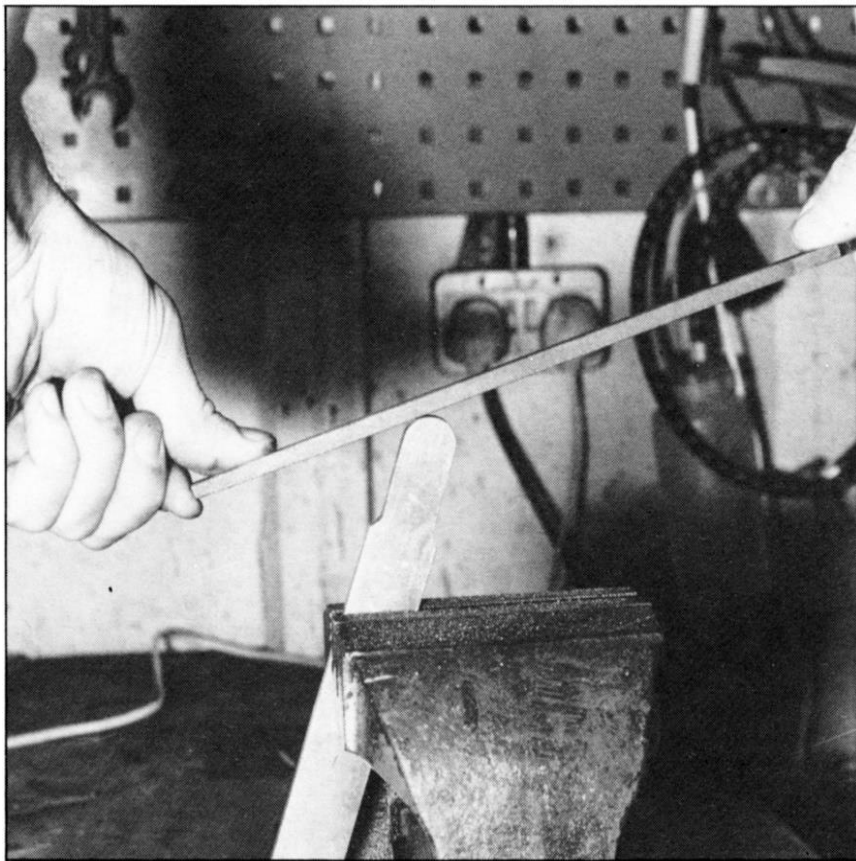
Accepting that the handle must be made of wood, the correct fitting method for that handle should also be established. Burning the handle on is the method. The ill-advised will try other methods but it's accepted that the best way is as follows: select the size of file handle which best suits both the file and the hand which is



Correct fitting of the file's handle is essential. The tang should be burned into the handle prior to final fitting.

going to hold it. You will find that good tool shops have a range of handles to suit each file they sell. Heat the tang of the file (the pointed end which has no cutting teeth) until it is a very dull red, then hold the file in the bench vice with some soft (preferably lead) clamps between the jaws and the file. Hold the handle to be fitted to the file with a damp cloth wrapped around it. Carefully push the handle onto the hot tang to burn the correct shape, the exact matching shape, of the file's tang into the handle. There will be a lot of smoke as the file burns into the wood and you will need some water to quench the handle, not the file. The handle should be gently pushed until the end of the tang is buried. Quickly pull the handle off and quench it in the water. Allow the file to cool down on its own.

When cool it is possible to complete the handle fitting operation. Place the handle onto the tang. You will, if you have done the job correctly so far, feel how close a match there is between the tang and the handle. The file can be taken from the vice and whilst holding it on its cutting area the handle can be driven into place with a soft faced mallet. Do not be tempted to have a selection of files and only a few handles. Once fitted the handle should be considered as part of the tool never to be removed. I know a man who now has only one hand, having lost his right hand when he was using a file without a handle. Worse still he was using a file without a handle on a lathe. The file hit the lathe's chuck and the tang was forced through the palm of his right hand. Need I say more?



The thumbs up method of holding a file allows excellent control of the tool and is very comfortable.

With the handle on the file, how do we hold it? Comfort is the main thing and my advice is simple. The handle of the file should be placed in the palm of the hand and the fingers clasped around it. Place the thumb of the hand which has the file's handle in its palm on the top of the file. How, you may ask, can a round file have a top? Quite easily! The top of the file will be opposite the area being filed and in general a file only cuts one way at a time, even a round one. The file will cut in the direction in which force is being applied. The other hand also has to hold the file, and I find it easiest and best to have the thumb of the other hand exactly opposing the thumb of the one with the file handle in its palm. That's the 'thumbs up' method. It's comfortable and allows good file control.

Now we know how to fit the handles and to hold them, how do we select the file for the job? The function of needle (Swiss) and riffler files is fairly obvious. They are employed for very fine work where access space is poor. It is all too easy to abuse these excellent tools. Far too often they are used too fast and with too much force. They are very delicate and demand the lightest of touch

You could be forgiven for thinking that a flat file is actually flat. It is designed for use when filing a flat surface, but is actually slightly tapered in thickness, being thinner at the end opposite the tang and tapers slightly in width at the same end. Flat files have cutting teeth on both sides and also on their edges. A bedding file is one of the best tools to use when trying to file a large flat

surface. They are generally half-rounded in cross section but only have cutting teeth on the lower, non-semi-circular surface. Viewed from the side they are bow shaped, the tang and front ends being higher than the mid-section.

A hand file is flat and is parallel in both thickness and width. Hand files are normally provided with cutting teeth on only one of their edges. The plain edge is known as the safe edge, and its purpose is to allow the file to be used with the safe edge against a surface which does not need to be filed. As the edge has no cutting teeth it will not mark that area

Square and three-square files are made in the same design as the flat file—they taper towards their front ends. The three-square file is actually triangular in cross section but is known as a three square in all the best filing circles! Both file types are normally used where access problems preclude the use of a flat file or where extra weight is a benefit and where the extra number of cutting edges provides a bonus. Extra weight may sound to be a strange advantage to a hand tool but where the force to remove the metal depends on downward force the advantage of weight becomes obvious. All the filer has to do is to push and pull the file and its weight removes the need to press downward too much.



Draw filing is an ideal method for removing sharp edges. It also allows excellent file control when filing narrow surfaces.

Round files are similarly tapered towards their front end, as are their half round counterparts. A half round file is often the only shape which can be employed to get into very tight spaces. The name implies that they are semi-circular in cross section, but this is very far from the truth. A sectional view would reveal that they are 'D' shaped, the back face being formed into a much larger radius than any round file. The reason is simple. To have a file suitable to cut a large radius would demand that the file be either hollow or that the person using it be a weight lifter. A half round file provides a sector of a much larger diameter circle than could be accommodated by a fully round file.

There are special function files for getting into very thin slots (Warding files) or for cutting very soft metal such as aluminium (Dreadnought files) — in fact for most jobs there is a file best suited. However, the fact is that in the main a file has to be fairly universal. One day it'll be given a lump of brass to cut and the next it will be expected to devour a piece of soft alloy with all the vigour of a hungry child.

With only one file you could not reasonably expect to do both jobs brilliantly but if you tackle both correctly it is quite possible to do both with the same tool and to get acceptable results. It all comes down to how you do the best you can with what you have at your disposal

The first basic thing is the action which has to be used to let the file work. A forward push of the file across the work will cut away some metal. Just as important is the return stroke, in fact it is almost as essential as the cutting one. When the file is pushed forward the teeth shave off small particles of metal. These shavings are not able to fall clear from the file until the teeth which have cut them are clear of the metal being cut. As soon as they are, the force of gravity acting on the shavings causes them to fall out of the file but only some will fall out. The rest of the small chippings of metal will be stuck to the teeth. All sorts of measures are taken to try to reduce its incidence but when filing it is one of the crosses which have to be carried. You can rub some chalk onto a file to try to reduce the problem but that's all you will do, reduce it, while the correct filing action should do as much as any amount of chalk.

The function of the return stroke is to dislodge those recalcitrant particles of filed metal which have stuck themselves to the cutting edges of the file. As the file is drawn back across the surface the action is twofold. Firstly, the effect of pulling the teeth across the surface rubs the particles stuck to the edges the way they are most likely to be dislodged; secondly, the effect of rubbing produces a low frequency resonance which also tends to loosen them from their hiding places. The effect of chalking is simple to appreciate. Chalk, being a very fine powder, acts as a barrier lubricant to the cutting teeth and to the faces of the teeth to which the particles of filed metal are most likely to stick.

The next essential is to file at the correct speed. The 'six strokes a minute, not sixty' maxim is, of course, not a factual speed guide but does illustrate the essential thought.

Filing, just like any other metal cutting process, is one which demands the cutting edge to be presented to the metal being cut at the correct speed. In general, the cutting action, although not optimum, will work if the speed is too low. If too high, it will drastically reduce the life of the cutting edges. A blunt file will, in the majority of cases, be the result of abuse through excessive stroke speed.

Filing a surface to the desired shape is in the main a matter of experience. It is possible to make the job easier by selecting the correct direction in which to file. If you are filing a narrow but long part the best way is to file along the length of it rather than across. It may seem to take longer but the total amount of material being removed is the same and by filing along the length the possibilities of deviance from the desired plane are reduced, there being more of the file's surface in contact with the work.

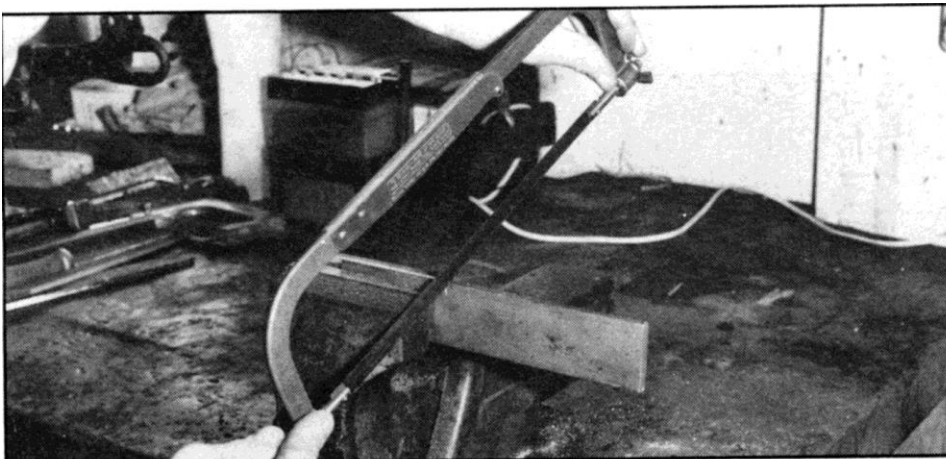
The selection of the number of teeth on the file is another factor which will affect both file clogging and metal removal rates. Files are made in various grades of roughness. The coarser the tooth spacing the rougher the file. The roughness is designated in various ways. Rough, second cut, smooth, dead smooth, bastard and so on. The terms are fairly self-explanatory in the main. (The bastard cut is a cross between fine (smooth) and rough). The quality of surface finish will, in part, be influenced by the grade of file. A smooth file should give a finer finish than a second cut.

If we had lots of money then our tool box would be overflowing with all the types of file, but that's just not the way to keep a file. It should never, never be put in the tool box for if one file rubs against the hard teeth of another, its edge will be lost. Files should either be stored in a rack, individually separated from any other or else should be hung up on the wall. I've got a couple of dead smooth flat files and various grades of different shaped ones. The bastard is one of the more popular grades and is a compromise which works well.

Correct support for the part being filed is almost as important a consideration to the life of a file as correct stowage. If the part being filed can flex about then the teeth will be unevenly loaded and will be at risk from overloading. The area being filed should be as close as possible to the jaws of the vice, where a vice is being used.

Sometimes it is very difficult to support the part being filed and then it may be necessary to file in a direction other than the optimum in order that the minimum vibration be set up. It is often possible to use vice jaw extensions made from angle iron to give better support to parts which do not fit the vice ideally.

Where a particularly thin part has to be filed or when sharp edges have to be removed or when geometric accuracy demands the best of filing practice, draw filing can be employed. Instead of being held thumbs up the file is gripped by its cutting surface, the only time that it is accepted as safe practice to hold a file in this manner. The thumbs are placed against the safe edge of the file and instead of being pushed and pulled across the surface to be cut, the file is moved in a direction ninety degrees opposed to the normal. It is just as important to push and pull the file across the surface as the tooth cleaning action is just as essential. The cutting action which results from the about turn of the file is more of a slicing one, and the file acts as if it were a finer toothed item than it actually is. Thus draw filing with a dead smooth file results in a surface finish much finer than one would expect from a file at all. It is thus possible, where the shape of the surface allows, to make a file cut a better finish than it normally would by draw filing to finish off rather than by the normal filing action.



Cutting through the thinnest section might seem logical but it is less precise than ...



... cutting this way which has more teeth in contact with the work and is a more accurate method.

Sawing metal by hand usually means hacksawing. There are other types of hand saws but in the main today metal sawing in the vice means hacksawing.

The hacksaw can be likened to a file which is very narrow. The cutting action is very similar and as such the rules which apply to the return stroke in filing are as important to the hacksaw. In filing it is not really practical to use any cutting lubricant, other than chalk, but sawing does allow the use of a coolant, wherever possible. The hacksaw blade is very narrow and all the work being done by it results in a high build-up of heat in the blade and more especially on the tips of the teeth. The result is that the chip welding (clogging)

tendency of the blade is increased and the teeth subjected to a temperature which reduces their hardness and strength. An oil can is quite often used as a means of lubricating and cooling, but it is far from the best - an aqueous solution of cutting oil would be far better. The build-up of heat

can also be reduced by reducing the speed at which the saw is used There is always a great temptation to saw through thin tubes at speed. This should not be done as you are more likely to break the blade by sawing fast

In the same way that files are available in various grades of roughness, so are hacksaw blades. The coarser the tooth spacing the lower the teeth per inch number. Finer toothed blades should be employed to cut through thin material and light gauged tubes. Thicker sectioned material needs fewer teeth and soft metal such as aluminium can best be cut with coarse toothed blades.

It is essential to clearly mark out the line to be cut when sawing. With care and experience you will be able to cut very accurately. To cut some shapes it is possible to use a saw blade which is actually a round file with attachments at either end to allow fitment to a hacksaw frame. The blade will cut in any direction and usually succeeds in cutting in several at the same time in my experience! The design allows the most complex of shapes to be cut out and even allows insertion through a pre-drilled hole.

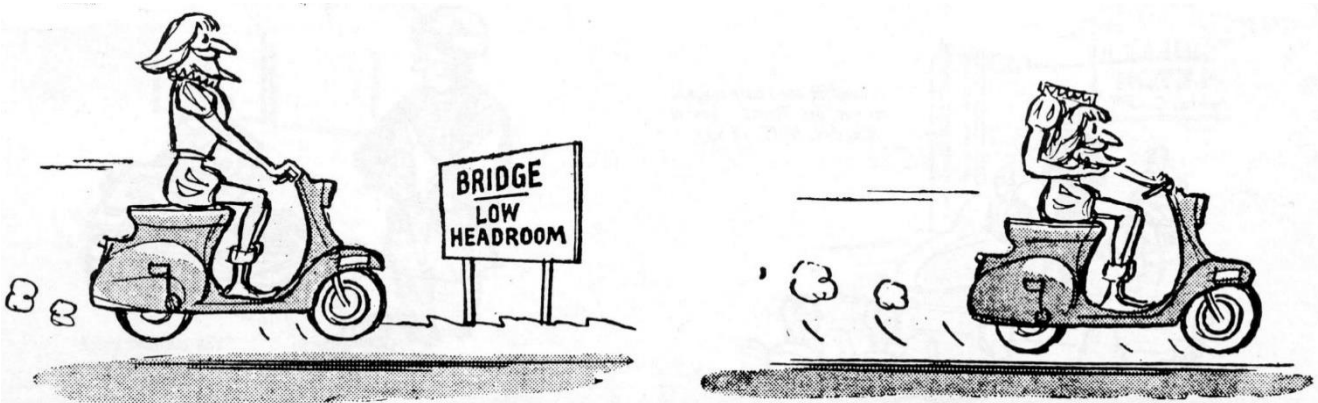
Most hacksaws have provision for turning the blade through ninety degrees in either direction. This facility allows cuts deeper than the blade-to-frame dimension to be taken.

Tensioning the blade is an essential setting if accurate sawing and optimum blade life are to be expected. Engineer's hacksaws, the type made from flat strip steel, require less tensioning than some of the tubular plumbers/electricians' tools, the frames of the latter types being more prone to bending. As a guide, it is normally expedient to tension the blade by turning the tension adjuster to remove all the slack from the blade and then to turn the tensioner between two and three full turns. The exact amount depends upon the pitch of the screw thread on the tensioner, of course, but as a guide a couple of full turns should be enough. Too loose or too slack will cause premature blade failure.

The whole essence of good sawing is to have a smooth sawing action. The full length of the saw blade should be used —far too often people using a hacksaw will use three or four inch strokes when eight inch ones are possible.

A very useful tip when cutting tube is to wrap a length of masking tape around the tube to act as the guide for saw cut position.

It should be possible, with experience, to cut with a saw and file with the correct file to get exactly the desired shape. Just remember hold the correct file with the correctly fitted handle in the approved way, file at the correct speed with the essential back stroke action and you will find a file a useful tool



Don Willison

An OVR original contribution from Jeff Schaefer, Australia

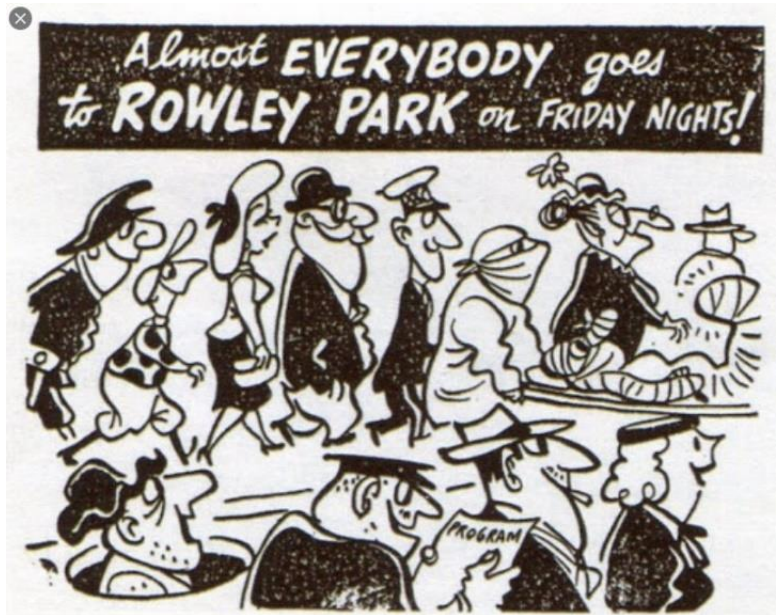
Rowley Park Speedway was in an old brick clay pit located in Brompton, near Adelaide. When they stopped making bricks from the clay it was to be developed and used as a soccer ground, but with a high water table and rainfall draining down the sloping sides, the grass would not grow successfully.

It was then developed as a speedway by Wal Watson; it had a capacity of 15,000 people and opened in November 1949. Kym Bonython promoted it from 1954 to 1973, changing it from clay to a dolomite track. Kym coined the phrase, "The Place where the Champions gather." Sadly it closed in April 1979 and after being filled in is now covered with houses.

Friday night was Speedway night.!!!

In the late 1950's my father, Ross Schaefer ran a welding business in Woodville North, repairing and modifying semi-trailers and one of his customers was Don Willison. Don had two semi-trailers, a Leyland and later an A B 184 International V8. He was hauling freight between Adelaide and Darwin.

Don would often have Dad repair bits on his trucks and if it was a Friday Don would tune his Vincent speedway outfit in either Dad's yard or in the street, ready for Rowley Park. Volunteers were "recruited" to be his sidecar passengers and as a result I had several very quick trips up and down our street, while hanging on for dear life.



Don Willison seated on IC/7304 with friends, 1951

Left to right - unknown, Tommy Davies, Don Willison, Joe "Tubby" Francis, and Malcolm Bunny

Don had spoked a car rim to the Vincent hub and had "Bandag" vulcanise a thick layer of rubber around the tyre, this was then carved to form cleats across the wheel. The added traction was too much for the Vincent axle as it promptly bent. I remember we turned up a new one from a piece of spring steel.

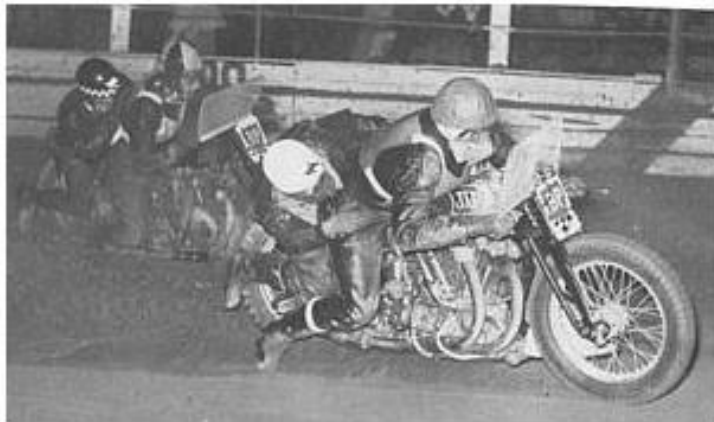
Such was the power of the Vincent, that when Don launched the outfit from the starting gate the front wheel was in the air until nearly half way round the first turn of the Rowley Park track. He would "steer" it by dragging his steel capped right boot.

Don holds the side car track record for 4 laps clutch start of 75 seconds, the track circumference being 402 metres.

Don also raced at Bagot Park Speedway in Darwin and at the Port Pirie Speedway, on the old aerodrome site. Port Pirie was a one

mile track and the meetings were held at Easter each year. One tale that Don told was that after every win with a much modified Ariel "Red Hunter" (he was racing in the 750 class) the stewards had him take the head off so they could measure it. Don got upset with their persistence so he had a Vincent twin sleeved to take 350 cc BSA Gold Star pistons. I don't recall how Don said the stewards carried on, but Don thought it was a huge joke

He claimed that this bike was faster off the mark than the 1000 as the 1000 always dug a hole for the back wheel to drop in, first.



Don Willison

"Willo" as he was known, won the South Australian Speedway Championship in 1953, 1954, & 1957 and won the Australian Sidecar Championship in 1959.

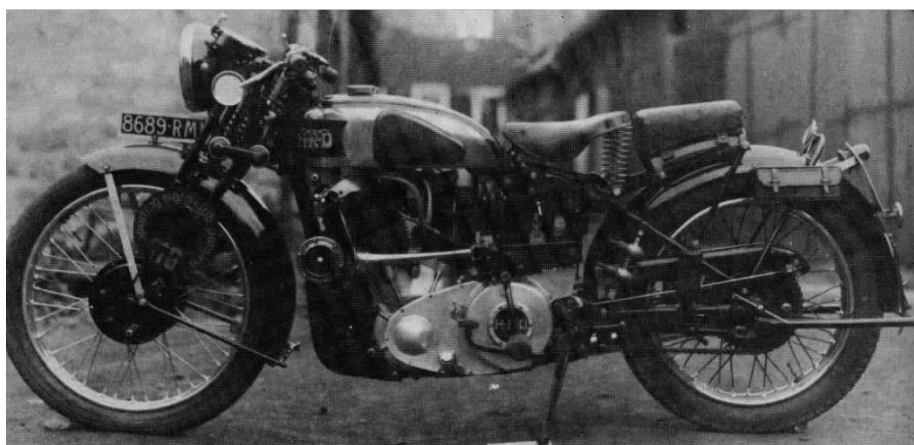
I believe he was born in 1926 at Gawler, but when we knew him he resided in Albert Park, and of course, Darwin.

He was killed in a truck rollover about 10 miles North of Alice Springs in 1973. He was cremated at the Centennial Park Cemetery in Adelaide. (We never found out whether he was driving or if it was his truck, there were several stories around). He was 47 years old.

As I type these words I can still hear the roar of that gutsy big Vincent as it charged around the Rowley Park stadium. Great Memories.

HOW THINGS HAVE CHANGED

When the Vincent H.R.D. Company launched its 998cc Series 'A' model at the 1936 Motorcycle Show the world of motorcycling found it difficult to believe the talk of easy 100 mph performance from the new V-twin. Subsequent road tests showed a genuine top speed of 108 mph, which was enough to put it well ahead of any other motorcycle that it would meet on the road.



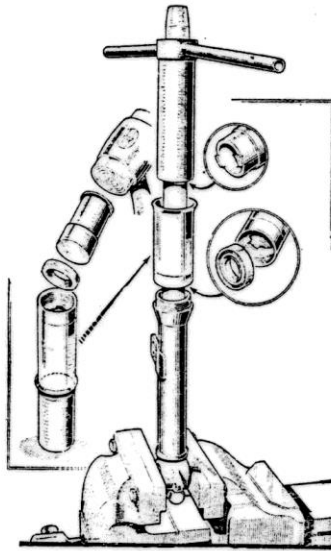
A perhaps less desirable area where it was ahead of others was in its factory-predicted oil consumption of about 200 miles to a pint. Fortunately oil was very much cheaper than today!

In another contrast with today's motorcycles, the Series 'A' twin's handbook contained the recommendation: 'After a new machine has covered about 1,000 miles, it is advisable to dismantle the engine and make sure that everything is in good order. It is almost certain to require decarbonising . . . '.

Thanks to David Wright for this item

SOLE surviving representative in this country of the 1,000 c.c. capacity class of motorcycle and the only "four" of its type to have set a style and retained the original basic specification features over a period of some two decades, the current Ariel 4G Mk. II model naturally enjoys a considerable following. In its present form, the 4G engine features a light-alloy cylinder-block casting with iron sleeves; a light-alloy head casting, carrying valve-seat inserts; and detachable manifolds providing a separate exhaust outlet for each cylinder. This arrangement provides greater cooling efficiency than that possessed by the earlier alloy head with manifolds resembling those of the original "iron engine" design.

An S.U. carburetter is now standard and car-type Lucas coil ignition, operating in conjunction with a special Lucas 70-watt dynamo and a 20-amp battery, is specified. Despite the generous output of this generator,



Fork leg assembly is simplified by (left) a special driving-in tool employed to press home the oil seal ring and (centre) a fitting tool shown with detail inserts.

however, it became desirable early in 1956 to provide for a higher rate of dynamo r.p.m. on 4Gs used by police forces abroad, where patrol work is not necessarily strenuous but where, none the less, heavy demand on the electrical system is continuous. For ease of production, the modification, which involved an altered dynamo-drive gearing with incidental adjustments, giving an earlier cut-in phase, has been made applicable to the standard machine, too. Consequently, certain information in the previous 4G instruction book is no longer current, and acknowledgment is due to Ariel Motors, Ltd., for permission to publish the new details in this article.

The modification is not one which can necessarily be carried out on earlier Mk. II "Square Fours" because—while, admittedly, the new sprockets could easily be fitted in place of old ones without skilled assistance—a certain amount of machining on the boss-profiles is necessary in order to obtain the

The 997 c.c. o.h.v. Four-cylinder Model 4G

ARIEL

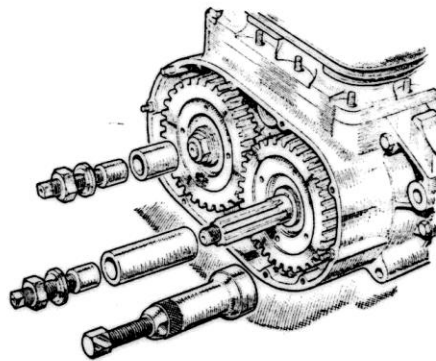
Maintenance and Workshop Data for the Mk. II "Alloy"-engined "Square Four"

clearance required by the larger mainshaft and timing sprockets; also, on account of this clearance problem, the new timing chain is now shallower in depth, but is of the endless duplex type so that strength is not impaired.

Subsidiary 1956 modifications include the superseding of the Weller spring-loaded chain tensioner by a hardened steel adjustable shoe. Secondly, the introduction of the duplex chain gave rise to a lubrication development. The oil "dredging" effect of the new chain was such that it picked up greater quantities of timing-case lubricant than did the old type, and, unfortunately, threw it into the breather orifice causing flooding and waste. The cure has been to supply an extension pipe to the orifice, away from the oil-fling area. These features are all illustrated in one of the drawings and will receive further comment in due course.

Special Tools

Ariels advise the use of an extractor for the removal of the coupling gears. This work, in fact, calls for a two-purpose gadget, with short and, alternatively, long-distance



Withdrawal and assembly of the coupling gears is facilitated by this special equipment.

sleeves to suit the forward coupling shaft and that at the rear, which extends to carry the engine sprocket. The application is obvious from reference to the sketch, wherein is shown also an Ariel-recommended tool for pressing the gears into position on the shafts. These tools are available on a deposit-and-loan arrangement. The gears are a tight press fit and keyed and must be dismantled before proceeding with a major overhaul.

On the timing side, the three new sprockets, too, are Woodruff-keyed, and for those on

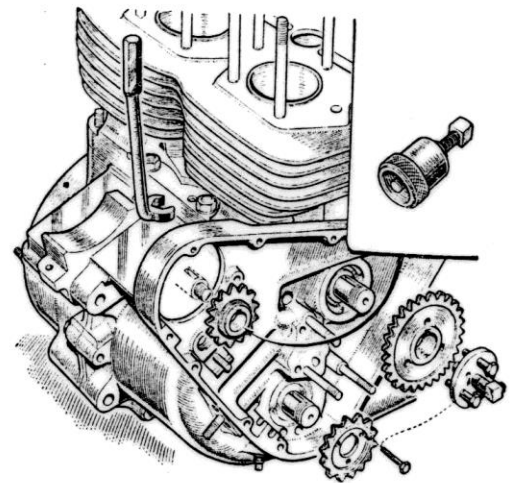
the main and camshafts a new tool with double application has just been introduced. It is a bolt-type extractor with the body plate drilled and tapped to take two sizes of anchorage bolts—suitable for use on both the mainshaft and half-speed cam-sprockets. The long-established Ariel screw-on extractor for the dynamo pinion is continued.

Dismantling Procedure

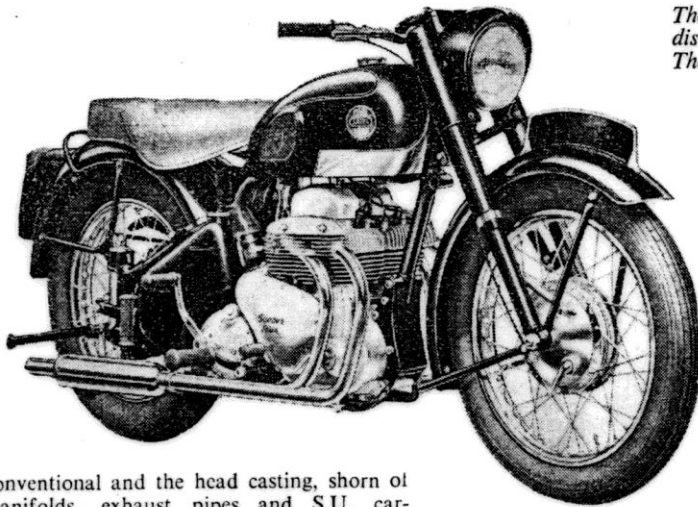
Access to the timing gear necessitates initial removal of the modified breather extension (see main engine drawing), the oil pump, complete with spiral-driven gear, and the corresponding driving gear, integral with the left-hand threaded camshaft retaining nut.

Note two points at this stage. They are (1) the need for a self-adjusting rubber oil-seal ring, fitted over the extractor threads of the rear coupling gear and (2) that the bore dimension of the outrigger roller-type bearing in the gear cover is very slightly different from that of the "mains" and, therefore, accidental interchange should be guarded against. The bearing may stick on the shaft and have to be withdrawn by means of a special claw-type puller after pre-heating. Seemingly premature, mention of this end of the job is dealt with early so that the owner may not be held up later for lack of special tools.

"Top-half" dismantling methods for the rocker covers and cylinder head are



A close-up of the timing side, indicating the application of two special extractor tools and a modified form of cylinder base spanner.



The sleek headlamp cowl and the extra-large oil tank readily distinguish the 1956 Ariel "Four" from the earlier versions. The full width light alloy front brake is another recently introduced refinement.

conventional and the head casting, shorn of manifolds, exhaust pipes and S.U. carburettor can be lifted away, leaving the eight pushrods intact. The rockers run in detachable housings with plain bores, positively lubricated, and have a .001 in. clearance. The rocker spindles are circlip-retained and dowelled with 10g. brass rod material which must be drilled out before removal and, of course, replaced later. Spindle end-float is controlled by springs and there are oil feed holes which must line up. Valve guides for the 4G are now knife-edge finished and shrouded by thimbles to prevent oil passing down into the combustion chambers.

The smaller of the two V-cutaway recesses in the cylinder block finning should be to the front. Note this before lifting the block. When it is removed you have access to the pistons, each of which is of the split skirt type and has a chrome-finished top ring.

The "Bottom End"

Stripped of all fittings and with the front timing-side bearing cap, lock-nut and oil seal taken away, the crankcase halves, which are located by dowels fore-and-aft and bolted up with two bolts transversely at the top centre bridge section, can now be parted, and the camshaft withdrawn. Probably neither the cams nor the tappets, which are retained in the guides by circlips, will need attention. The guides are pressed in and strapped across with a locking plate.

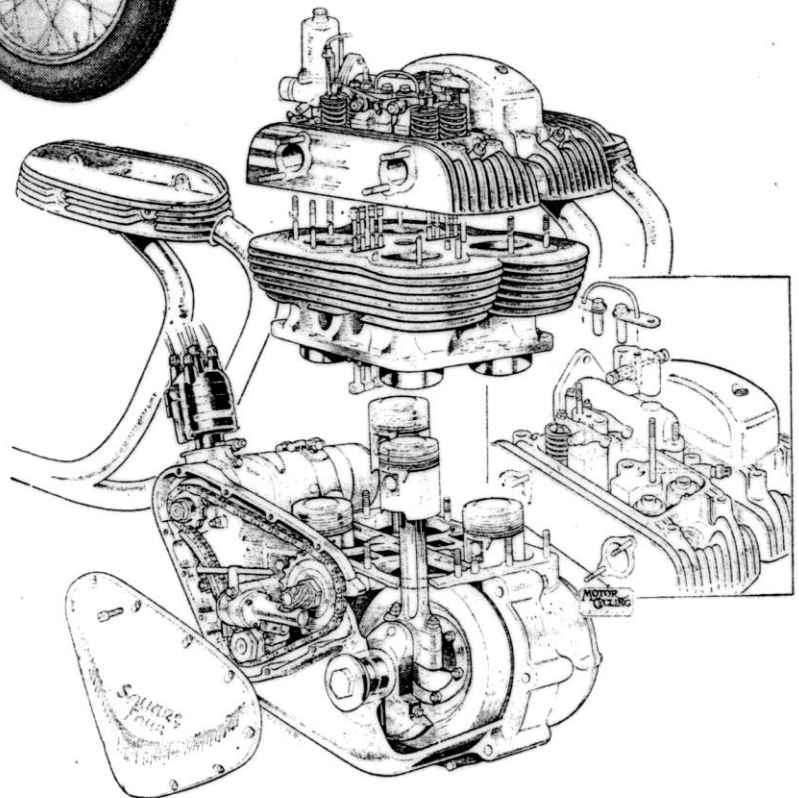
Both drive side "mains" are standard-size proprietary components and they, and also the timing-side bushes and big-end white-metal shell assemblies, are easily removed. Line up the oil holes properly in the case of the plain bearings and note that the drive side bearings are retained by circlips.

Beware of fitting new shells to oval-worn big-end journals. Much-used journals should be ground down .010 in. and under-size-diameter liners fitted. There should not be more than .003-in. play in the reassembled bearing with the self-locking pinnacle nut fully tightened. Clean the crankshaft oil ways by extracting the plug screws and injecting paraffin.

Assembly

Both crankshafts are located by facing up directly on to the two timing-side bushes and end-clearance is adjusted by shims fitted on the other side between the journal face and the thrust washer. Shaft movement should not exceed .002/.004 in. Assembly of the coupling gears should be

(Below) A general arrangement drawing of the 4G power unit showing the new sprockets and duplex timing chain, the extended breather pipe and car-type distributor. The method of lubricating the overhead valve rockers is shown in detail on the right. Both crankshafts are geared together, a well-established practice on the largest Ariels, and by this arrangement, coupled with 180° crankshafts, there is a power impulse every 180° of engine rotation.



carried out in the following sequence:—

1. Position both the shafts at T.D.C., i.e., with keyways at the 12 o'clock position.
2. Fit the keys; heat the front gear wheel and drop it over the shaft into position.
3. Rotate a ¼-turn clockwise to bring the single marking on the wheel into the three o'clock position.
4. Repeat process with second gear wheel.

This drill should bring the single marked tooth on one gear between two similar marks on the second gear. Press the gears home and finally tighten the front shaft nut. Replace the oil seal and packing washer assembly on the rear shaft and continue building up and fitting the pistons—with split skirts on the thrust side in each case—and cylinder block and push-rods.

Whereas the earlier instruction-book method advocated the lining-up of marks on the mainshaft and cam-drive sprockets, this is discontinued, and for valve and ignition timing Ariels now advise direct measurement of piston movement by means of a short rule inserted through the plug hole. For this reason, degree and linear

valve timing dimensions are provided in the Reference Data.

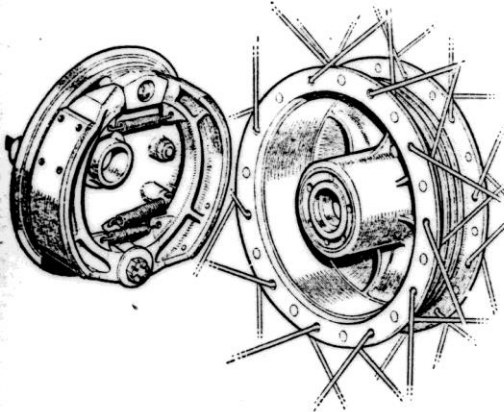
Now fit the pump, making sure the abutting faces are perfectly clean, tightening down the nuts gently and evenly, and then add the new breather-pipe extension.

Transmission

The primary chain drive to the GB7-type Burman gearbox requires periodic adjustment and the top lug of the gearbox case is slotted to allow movement for this purpose. A three-insert-plate clutch is used, this component being carried on an extended mainshaft with the body housed in a chain-case compartment separate from the primary drive. No special tools are required.

Details of replacement bearings and bushes are included in the Reference Data. A point worth noting is that manufacturer's replacement bushes do not require reaming; there is a .001/.005-in. close-up after fitting and this is allowed for during manufacture. Bushes supporting the layshaft are of differing length, the longer of the two being situated at the clutch end.

(Continued on page 615)



Suspension
Dismantling of the front forks can be carried out on each leg separately, if required, by removing the headlamp cowl unit, slackening the appropriate pinch-bolt in the yoke, taking out the fork crown bolt and pressing the leg assembly free in a downward direction. Maintenance work involves, chiefly, the checking of the oil level in the hydraulic damping mechanism and the replacement at very long intervals of oil seals, for which work several special tools have been devised.

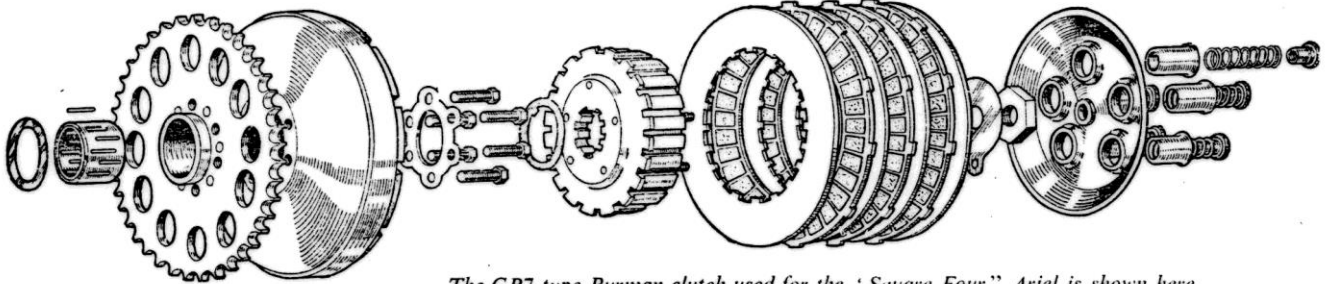
This up-to-the-minute full-width hub is used on the front wheel of the 1956 four-cylinder Ariel. The 7-in. brake is centrally positioned in the light-alloy shell, giving equal loading on both fork legs when the brake is applied.

In standard trim, with the machine unladen, the oil level in each fork leg should be 17-18 in. below the top bracket. Heavier springs and oil of a greater viscosity are recommended for sidecar work.

Ariel rear suspension is of the short-link swinging-fork type, with movement controlled by compression and rebound springs. There is no hydraulic damping system and maintenance, therefore, is limited to routine greasing via the nipples provided.

Lubrication

Gravity-fed from an eight-pint tank, oil is distributed via a double gear pump, skew-gear driven, with direct distribution to the main and big-end bearings and o.h.v. rocker mechanism. It is not recommended that the private owner takes the pump to pieces as the gears, working under ideal conditions, very rarely call for attention.



The GB7-type Burman clutch used for the 'Square Four' Ariel is shown here in exploded form; a similar type is employed on the smaller models in the range.

"MOTOR CYCLING'S" EXCURSION

Details of Our Trip to See the Senior Race

THIS year for the first time ever *Motor Cycling* extends its famous annual Excursion to see the Senior T.T., which is to be held on June 8, to Scotland. In addition to the usual trains from London, Birmingham, Leicester and Leeds and intermediate stations en route, a new train with full restaurant car facilities will operate from Glasgow (Central) with suitable connections from other Scottish Areas.

Bookings should be made as usual through Thos. Cook and Son and not sent to *Motor Cycling*, please.

RAIL FARES

Below are given return, inclusive fares from London, Scotland, Coventry, Birmingham and Wolverhampton. These include restaurant-car meals on both the outward and homeward journeys, but dining accommodation is limited on the South Midlands train, meal boxes being provided for the remainder at a reduced fare:

	£	s.	d.
LONDON (dining car)	4	2	0
COVENTRY (dining car)	3	3	6
COVENTRY (meal box)	2	11	6
BIRMINGHAM (dining car)	2	19	6
BIRMINGHAM (meal box)	2	7	6
WOLVERHAMPTON (dining car)	2	16	9
WOLVERHAMPTON (meal box)	2	4	9
LEICESTER	2	12	6
NOTTINGHAM	2	10	6
DERBY (meal box)	2	7	3
LEEDS	2	4	9
BRADFORD	2	4	0
MANCHESTER	1	15	9
GLASGOW	4	1	6
EDINBURGH	4	1	6
MOTHERWELL	4	1	6
DUNDEE (dining car)	4	16	0
ABERDEEN	5	7	0
INVERNESS	5	8	6
CARLISLE	3	6	6

Passengers from Airdrie, Ardrossan and Saltcoats travel via Glasgow at the Glasgow fare;

passengers from Gorebridge travel via Edinburgh at the Edinburgh fare.

TRAIN TIMES

June 7	Outward	
LONDON (Euston) ..	dep.	7.50 p.m.
June 8		
LIVERPOOL (Riverside) ..	arr.	12.22 a.m.
June 8	Return	
LIVERPOOL (Riverside) ..	dep.	11.40 p.m.
June 9		
LONDON (Euston) ..	arr.	4.10 a.m.
June 7	Outward	
COVENTRY ..	dep.	8.00 p.m.
BIRMINGHAM (New St.) ..	dep.	8.45 p.m.
WOLVERHAMPTON ..	dep.	9.10 p.m.
LIVERPOOL (Riverside) ..	arr.	11.15 p.m.
June 9	Return	
LIVERPOOL (Riverside) ..	dep.	12.05 a.m.
WOLVERHAMPTON ..	arr.	2.11 a.m.
BIRMINGHAM (New St.) ..	arr.	2.39 a.m.
COVENTRY ..	arr.	3.07 a.m.
June 7	Outward	
LEICESTER (Midland) ..	dep.	9.50 p.m.
NOTTINGHAM (Midland) ..	dep.	9.46 p.m.*
DERBY (Midland) ..	dep.	10.38 p.m.
June 8		
LIVERPOOL (Riverside) ..	arr.	2.00 a.m.
* Change at Derby.		
June 9	Return	
LIVERPOOL (Riverside) ..	dep.	12.55 a.m.
DERBY (Midland) ..	arr.	4.12 a.m.
NOTTINGHAM (Midland) ..	arr.	4.37 a.m.*
LEICESTER (Midland) ..	arr.	4.57 a.m.
* Change at Derby.		
June 7	Outward	
LEEDS (Central) ..	dep.	9.57 p.m.
BRADFORD (Exchange) ..	dep.	10.30 p.m.
MANCHESTER (Victoria) ..	dep.	11.50 p.m.
June 8		
LIVERPOOL (Riverside) ..	arr.	1.10 a.m.

June 8	Return	
LIVERPOOL (Riverside) ..	dep.	11.20 p.m.
June 9		
MANCHESTER (Victoria) ..	arr.	12.34 a.m.
BRADFORD (Exchange) ..	arr.	1.56 a.m.
LEEDS (Central) ..	arr.	2.15 a.m.

June 7	Outward	
GLASGOW (Central) ..	dep.	6.45 p.m.
MOTHERWELL ..	dep.	7.05 p.m.
CARSTAIRS ..	dep.	7.40 p.m.
CARLISLE ..	dep.	9.15 p.m.

June 8		
LIVERPOOL (Riverside) ..	arr.	12.44 a.m.

June 9	Return	
LIVERPOOL (Riverside) ..	dep.	1.15 a.m.
CARLISLE ..	arr.	4.56 a.m.
CARSTAIRS ..	arr.	6.54 a.m.
MOTHERWELL ..	arr.	7.25 a.m.
GLASGOW (Central) ..	arr.	7.52 a.m.

Applications for tickets and all inquiries should be made to any of the following branches of Thos. Cook and Son, Ltd.—not to "Motor Cycling."

LONDON	45 Berkeley Street, Piccadilly, London, W.1.
	378 Strand, London, W.C.2.
	108 Fleet Street, London, E.C.4.
	Euston Road (front of St. Pancras Station).
ABERDEEN	BIRMINGHAM
212 Union Street.	123 New Street.
BRADFORD	3 Victoria Square.
19 Market Street.	DUNDEE
EDINBURGH	13 Nethergate.
126 Princes Street.	GLASGOW
LEEDS	15/17 Gordon Street,
55 Boar Lane, Leeds, 1.	Glasgow, C.1.
LEICESTER	
3 Gallowtree Gate.	
MANCHESTER	
79 Market Street, Manchester, 1.	
14 Oxford Street, Manchester, 1.	
c/o Kendal Milne & Co., Ltd., Deansgate,	
Manchester, 3.	
NOTTINGHAM	WOLVERHAMPTON
47 Clumber Street.	32 Lichfield Street.

REFERENCE DATA

CYLINDER—PISTON GROUP

Bore, 65 mm.; stroke, 75 mm.
 Swept volume: 997 c.c.
 Rebore to .010 in. O.S. when maximum wear exceeds .005 in.
 Piston clearances:
 At top land } .015 in.
 At bottom land }
 At top skirt, .0015 in.
 At bottom skirt, .0005 in.
 Piston ring gap: .012/.017 in.
 Permissible vertical play: .003 in.
 Gudgeon-pin diameter: .6875 in.
 Small-end bush diameter: .6875; .0005 in. clearance in rod eye.
 Compression ratio: 7.2 : 1

VALVES AND VALVE GEAR

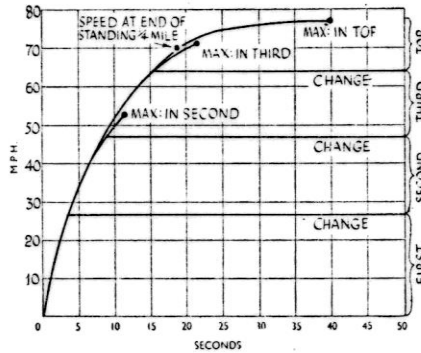
Valve-stem diameter: .3125 in.
 Bore of valve guides: Inlet, .3145 in.; exhaust, .3155 in.
 Seat angle: 45°.
 Free valve-spring length: Inner, 1 1/2 in.; outer, 1 1/8 in.
 Rocker spindle diameter: 1/2 in.
 Rocker bore: .501 in.
 Timing-wheel shaft: Ball race 3/4 in. by 1 1/8 in. by 9/16 in.
 Valve timing (with tappets set at .006 inlet, .008 exhaust):
 Inlet opens before T.D.C., 25° (3/16 in.).
 Inlet closes after B.D.C., 55° (1/2 in.).
 Exhaust opens before B.D.C., 60° (19/32 in.).
 Exhaust closes after T.D.C., 20° (1/2 in.).
 Normal tappet clearances: .006 in. inlet; .008 in. exhaust.

CRANKSHAFT GROUP

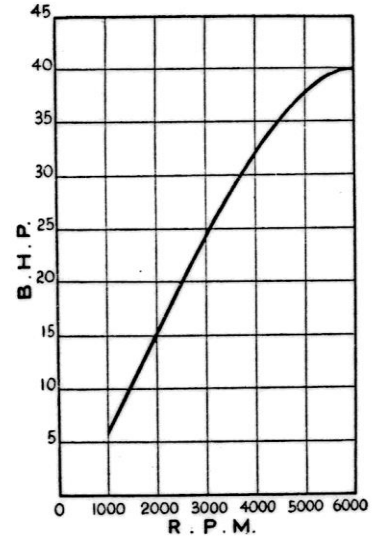
Crank journal diameter: 1.375 in.
 Con-rod big-end eye diameter: 1.500 in.
 Permissible side play: .005 in./0.010 in.
 Type of big-end bearing: White metal shells.
 Main bearings, drive side: Roller, 1 1/2 in. bore by 2 1/2 in. O.D. by 3/8 in.
 Main bearings, timing side: Bronze white-metal, lined, 1 1/2 in. bore.
 Mainshaft end-play: .002/.004 in. Adjusted by shims.
 Location of contact-breaker: mounted on dynamo on offside of engine.
 Left-hand thread on engine: Oil pump drive gear nut.

GEARBOX

Sleeve-gear bearing: 1 5/16 in. bore by O/D 2 1/2 in. by 3/8 in.
 Mainshaft bearing at clutch end: 11/16 in. bore by O/D 1 9/16 in. by 15/32 in.
 Layshaft supported by bronze bushes, .796 in. O/D by .6125 in. I/D (longer of the two at clutch end).
 Internal reductions: 1.1, 1.308, 1.7, 2.65.



"Motor Cycling" road test performance chart for an Ariel 4G with full two-seater sidecar (from August 19, 1954, issue).



Manufacturer's output curve for the 997 c.c. 4G power unit (with air filter fitted to standard S.U. carburetter and bench silencer equipment).

TRANSMISSION

Sprocket sizes:
 Engine (solo) 25T.
 Engine (sidecar) 22T.
 Clutch 44T.
 Final drive, 19T.
 Rear wheel, 47T.
 Ratios: Solo, 4.36, 5.7, 7.4 and 11.55 : 1; sidecar, 4.95, 6.5, 8.42 and 13.1.
 Primary chain: 1/2 in. by .305 in., 72 pitches solo, 71 sidecar.
 Secondary chain: 3/8 in. by 3/4 in., 92 pitches.

FRONT WHEELS

Rim size: WM2—19.
 Brake diameter: 7 in.
 Spokes: 6 1/2 in. long both sides, 10g butted 8g, 40 off.
 Hub bearings: 1 in. bore by 2 1/4 in. by 3/8 in.

REAR WHEELS

Rim size: WM 3—18.
 Brake diameter: 8 in.
 Spokes: Brake side, 6 1/2 in. long, 10g butted 8g, 20 off; plain side, 8 1/2 in. long, 10g butted 8g, 20 off.
 Hub bearings: 2 in. bore by 2 in. by 11/16 in.

FRONT SUSPENSION

Telescopic forks, hydraulically damped and carried on cup-and-cone-type head bearings each comprising 40 1/2-in. balls with 1 11/16 in. diameter pitch circle.
 Compression springs 32 lb./in.
 Fork angle: 28°.
 Trail: 3 1/4 in.
 Damper fluid content: 1/3 pint of 30 S.A.E. oil.
 Bush dimensions: Slider bush (bottom), 1 1/2 in. O/D by 1 1/4 in. long; slider bush (top), 1 1/2 in. O/D by 2 in. long.

REAR SUSPENSION

Springs: Compression, 306 lb./in.
 Free length, 6 5/16 in./6 1/8 in.
 Spindle diameter, .8740/.8745 in.
 Bush diameter, .8745/.8765 in. (finished size).
 Stirrup arm bolt: .6235/.624 in. (finished size).
 Stirrup arm bush: .6245/.625 in. (finished size).

CARBURATION

MC 2 S.U. carburetter. Important components are piston spring, Part No. 1167, yellow spot code, and the blank oil cap, Part No. 4920.

LUBRICATION

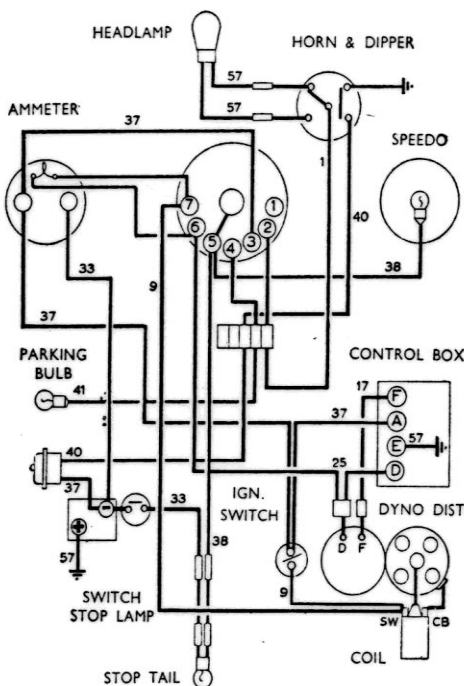
For engine: summer grade, S.A.E. 40; winter, S.A.E. 30. Gearbox, S.A.E. 50.

ELECTRICAL EQUIPMENT

Lucas C35SD generator; D.C. output controlled by Lucas RB107 c.v.c. unit.
 Generator output:
 Cutting-in speed: 1,000/1,150 r.p.m. at 6.5 generator volts.
 Output test: 10 amps at 1,700/1,850 r.p.m. at 7 volts.
 Total field resistance: 2.6/2.8 ohms.
 Brush spring tension 16/20 oz.

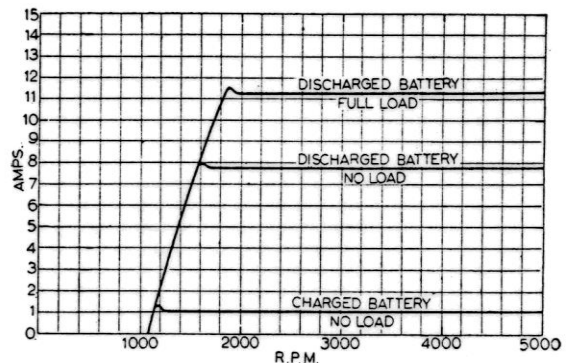
C.V.C.

C.V.C. settings.
 Cut-out:
 Cut-in voltage, 6.3/6.7 volts.
 Drop-off voltage, 4.8/5.3 volts.
 Reverse current, 3.0-5.0 amps.
 Regulator:
 10°C. (50°F.) 7.7/8.1 volts.
 20°C. (68°F.) 7.6/8.0 volts.
 30°C. (86°F.) 7.5/7.9 volts.
 40°C. (104°F.) 7.4/7.8 volts.



(Left) Wiring diagram for the 4G. Colour code: 1=Blue. 9=White. 17=Green. 25=Yellow. 33=Brown. 37=Brown and White. 38=Brown and Green. 40=Brown and Black. 41=Red. 57=Black.

(Right) Output graph for the Lucas C35SD dynamo with RB107 regulator, shown for three conditions of battery and load.



The All-British; 36 Years On

For several months I had noticed a flyer in the classic motorcycle press extolling the efforts of the BSA Owners Club of Victoria. The club has been hosting a rally for British motorcycles for some 36 years and the 37th was rapidly approaching. Its modern claim to fame was that it was the largest rally for British bikes in the southern hemisphere, quite a big claim. My interest was sparked because also in recent time was the Australian Moto trials championships held in Maldon, a town close to the rally site. The trial championships were widely reported and I the old gold mining town was situate under the peak of a dramatic and towering mountain. Mount Tarrengower hosted a spectacular event, one I only wish I had the knees for myself.

So as Anzac Day approached, I decided to enter the rally and test my mettle on a longish ride, one I haven't done for some time. In fact, the last ride of that length was to Phillip Island in the early 2000's. Lots of promises and wishful thinking since then, but alas no trips.

The main qualifications for the All British Rally was twofold, a British bike and a ticket to participate.

It just so happened that my Triumph, despite some purists' protests is actually British and being a 2003 model Bonneville, I had no qualms about its ability to make the distance. My abilities however were to be tested. My knees have little cartilage remaining, my shoulder requires surgery when I can make the time and my resolve to spend time away from loved ones and on the bike was in need of a challenge.

So embarrassingly, in the shadow of the Anzac, my little expedition began.

My early start began a week before, in preparation for the ride. I had, some years ago, imported some 'Badapple' panniers from Canada, initially with the intention of being that company's agent. The costs were too high so I saved a pair for the Triumph and fabricated some old-fashioned triangulated brackets to make them fit. Not as pretty as the properly designed racks, but very very strong and having made them I knew I could repair or modify if I needed to.

A change of oil, tyres and chain checked and adjusted and the bike was ready. This really is the beauty of the modern era Triumphs. Somehow this modern manufacturer has managed to keep some of the old T140 DNA.



I know it sounds strange but having owned and loved several over the years, this twin still feels like a Triumph; inexplicable.

My personal preparations however were not so simple. The rules of the rally dictate that only British bike are allowed in the camping ground and that was a requirement to win the famous rally gate prize. This year it was a 2005 Triumph Speed Triple. Nice and a worthy addition to the collection.

So the real challenge was the camping. A couple of hundred dollars at the new Anaconda store in Fyshwick had me well equipped with a two-man tent, a sleeping mat and warm sleeping bag.

A change of clothes, some borrowed wet weather gear and an early start on Anzac Day had me rumbling south. I was unsure of how far I might get before my various frailties made themselves known so I began with the swing through the suburbs to the Barton Highway. As you might expect this road was well policed for this weekend so I simply revelled in the sound and feel of the lovely twin cylinder engine, a pleasure little changed from the old days when British bikes really did sound the business.

Yass to Gundagai. Well we have all lamented the loss of the secondary road systems and we all moan about the Hume, but the Hume really is a very great road for covering the miles in a short time, hence the large number of travellers and trucks using it for efficiency. So as I was a bit unsure about how far I might get before dark, I took the Hume, stopping at Gundagai for fuel and food. My recommendation is not to buy coffee in the coffee shop at the Dog on the Tuckerbox servo. Dreadful.

I pushed on to Albury, which increasingly impresses me as a regional city. It's clean, big enough to have some critical mass and beautifully situated on the border and the Murray River. This gives it a unique feel and the forefathers clearly intended it to be an important city. Despite the controversies and complaints about water use, the river is fantastic and maintains its status as the lifeline to the region.

Some few hours later I turned off the droning highway towards Shepparton. This is strange country for an eastern NSW lad, dead flat, miles of seemingly featureless farmland punctuated with raised channels full to the brim with flowing water. Strangely, the paddocks themselves still seem brown and droughty.

The other difference in part of Victoria to touring in eastern NSW is the distances between towns. In NSW very rarely would you go 50 klm without finding a village or town. In this area it seems to be about 75 klm between anything and those town and villages are often very small and without much commerce. This is important because with 17 litres as the max in the Triumph's tank I needed to find petrol about every 250 klm. So if you're travelling in this part of Victoria, plan your distances.

The other challenge here is the Kangaroo. My god, whatever has caused the incredible increase in their numbers really has changed the country. It is now almost far too dangerous to travel near dark or at night by motorcycle in country Australia. So, in post daylight saving time, anything past 4pm is risking death and damage. With say 60 klm stints, failing light, low petrol and suicidal roos, the reality of touring in central Victoria is 'anxiety'.





So with relief I happened upon a town called Rushworth. Mostly famous for its old goldfields, more recently for its VFL or AFL legends. The faces of whom are plastered on every pole and shop window in the town strip. The small but clean Rushworth Budget Motel (\$85) was a welcome rest and just in time to avoid the perils of the night.

The next morning a cool and clear day beckoned. I was keen to get to Newstead and the largest British Bike Rally in the southern hemisphere.

Newstead is a lovely heritage town, quiet and clean and a step back to late colonial times. The townsfolk were very welcoming of the hordes of bikers, no doubt enjoyed the influx of business and activity.

I arrived at the rally site, the old Newstead racetrack, basically a natural amphitheatre overlooking a grass paddock. The place was filling fast. I found a spot amongst the already settled campsites and set about making camp. Now, for a fan of British Bikes this was an interrupted process, stopping every few seconds to glare at some wonderful Norton arriving or cruising, glancing longingly at the several Vincents, a lustful pause to admire a passing Brough Superior.

Eventually the tent was up and I set about meeting some new friends. Almost instantly I was invited to share the fire and chat about the bikes. As the afternoon lengthened the parade of bikes was simply stunning. By nightfall the regulars estimated that the camp now held 900 British bikes and that more were expected.

The Newstead Racetrack Committee needs to be commended for their efforts. They, over the years have built and maintained several facilities, clean and functioning toilets, showers, catering shed, bars and other shelters. The BSA Club of Victoria had co-opted the local school tuckshops into catering, great variety of meals, great service and available from 6am to about midnight. Brilliant.

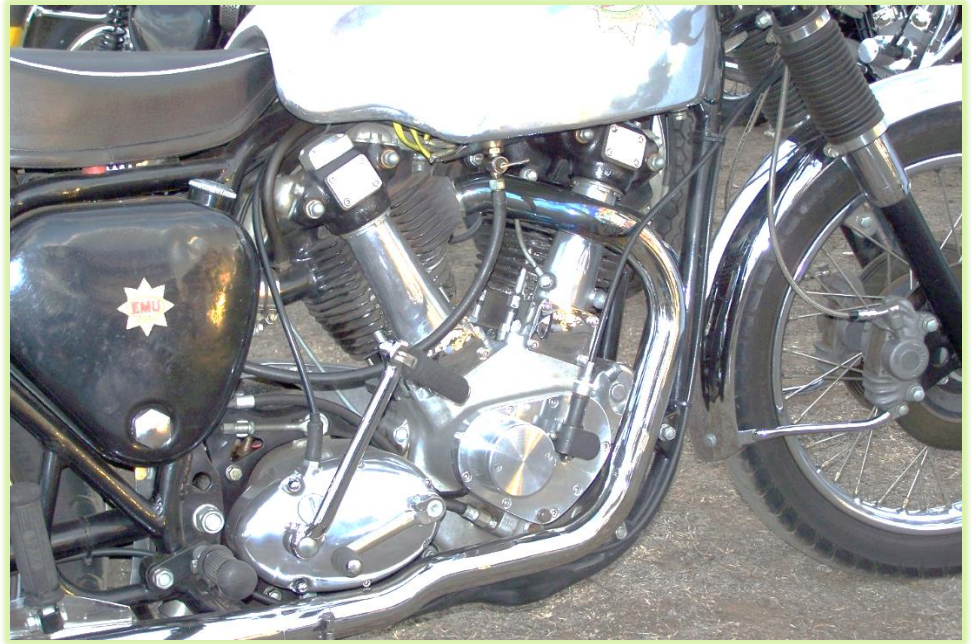
I learnt that modern dome shaped two person tents actually fit one only. Buy the 4 or 6 man if you're shopping for one.

As the night wore on the site filled to capacity, the fires glowed, the food smelt and tasted good and the drinks flowed. By 2 am most of my neighbours had fallen asleep and the night took on a strange sound of competing snorers punctuated with the odd laugh or chuckle from those still sitting around the fires.

By early Saturday morning the dew had settled on everything and the day was fresh and clear. A lovely atmosphere reminiscent of Bathurst's Mount Panorama in the 70's, cathartic, relaxing. Thought provoking. The Canberra VVCMCC has its rally each January in Canberra and this year I attended and marvelled at the 300 bikes entered for the rides and the judging. This rally had about a thousand bikes.

The variety, the quality and the sheer number of British machines was astounding. My photos just can't do it justice. My nearest neighbour rode his Vincent special from Adelaide, a minimalist masterpiece. Some of the anti-Harley conversations were a bit fruity as most rally goers were vehemently Pro-English bikes.

One of the BSA club members is a talented engineer and has designed and built three remarkable specials. One a 30's V twin which he built himself, yes the crankcases and all. His most recent creation is a 2012 interpretation of what BSA might have built if they still made V twins.



Of course I spent a lot of time wandering about talking to other riders, the rally atmosphere was fantastic, and the camaraderie and the machinery was inspiring.

Many clubs were represented and many had great marquees and banners. I didn't see anyone from Canberra, I must get a small ACT club banner to put on the tent next time.



This is a group of B50S who whose owners lined them up for a photo op. The B50 club seems like a good one with some great fellas and bikes.

Like all good rallies the organisers had planned some activities, movies in the marquee, trade stands, and the long and short rides. Each ride ended up in Maldon. Maldon is an old gold mining town as well and is worthy of its heritage status. The streets are all original with the shops and homes all as they were in the late 1880's. Maldon is so enamoured with motorcycles and the All British Rally that for many years now the whole

town celebrates the event. The streets are closed and the 1000 or so rally goes all converge on the main street to join in the celebration. If only all towns reacted like this to motorcycles.

A beautiful BS, which according to recent British press reports is worth 250,000 pounds.



The spectacle was superb and amounted to an exciting social movement, motorcycles in control and in their proper place. Added to the rally bikes there were perhaps another 1,000 (yes I said another thousand) or so riders who had made the trip from Melbourne and surrounds. In the end the streets were packed solid with 2000 bikes. All the shops and cafes were open and trading and the bakery provided a great lunch gratis to the rally entrants. Homemade pies, coffee and cakes, shared sitting in the street with literally thousands of the most beautiful motorcycles and their riders in the world.



This photo was taken about a third of the way down the street.

This really was a spectacular event, easy and friendly, welcoming and professionally managed. I would recommend that a contingent from the ACT club go next year and make a stand for those travellers who venture south. The trip is worth the pleasure of the journey and the destination is inspiring for its depth of variety in all things British Bikes.

Paul Whittaker VVCMCC Member #5

[Regretably, the 2020 All British was cancelled as a consequence of the Covid-19 crisis Ed.]

Buy, Swap n' Sell

If you have anything that you want to buy, swap or sell you can now do so, free of cost, in this section of OVR. All you need do is send a email to the editor of OVR with the text of your advertisement. OVR will NOT be providing any editorial or corrections. Of course OVR cannot accept any responsibility for anything to do with the items advertised – that's a buyer/seller matter.

Amal Mk1 Concentric Carburettor Shim Kits, provides for twelve 0.016" incremental needle adjustments to allow precise mixture tuning in the critical mid-range. Also suitable for Wassell carbs. A\$15 per kit including postage world-wide. Additional kits just A\$10 each. Email ozvinreview@gmail.com

Service Providers

The Service Providers listed have been used with a degree of satisfaction by OVR readers in the past. Just because they are listed does not imply an endorsement of them by OVR. Service providers are not charged a fee for this service nor can service providers themselves request that their information be included, though they may request that an entry referring to them be removed.

Spares:

V3 Products, Australia: (aka Neal Videan) has an extensive range of top quality Vincent Spares including multiplate clutches for twins, oil leak eliminator kits, socket head tappet adjusters, paper element oil filters and lots lots more. Ships worldwide. Email for a price list to nvidean@outlook.com

VOC Spares Company Ltd, UK: Full range of Vincent Spares. Ships Worldwide. Visit their web site for more information <http://www.vincentspares.co.uk>.

Maughan & Sons, UK Taking pride in producing the highest quality spares, Maughan & sons stock over 1300 parts and produce over 800 for the Vincent Twin and Comet. Ships worldwide. More info here <http://www.maughanandsons.co.uk>

Coventry Spares Ltd, USA: Fantastic service and deep product knowledge plus extensive range of excellent Vincent Spares and tools. Ships Worldwide. See website for more information <http://www.thevincentparts.com>

Conway Motors Ltd, UK: Anti-Sumping Valves, Multi-Plate clutch conversions for Comets plus an extensive range of excellent Vincent Spares. Ships Worldwide. Email for more information steve@conway-motors.co.uk

Tri-Spark Ignition, based in Adelaide, Australia. Modern electronic ignition systems with models for all classic (and modern) bikes and the current system of choice by Godet Motorcycles (France) for installation in their superb Godet-Vincent machines. For info go to www.trispark.com.au

Fastline Spokes, based in Broadford, Victoria, can supply Australian made spokes for just about any bike. Owner Bruce Lotherington manufactures spokes to order with a turn around time of less than 1 week. For more info see www.fastlinespokes.com.au or phone (+61) 0411 844 169

Union Jack Motorcycles, Australia: Full range of Triumph, Lucas, Amal and Venhill control cables. Ships worldwide. More info at the website www.unionjack.com.au or phone +61 3 9499 6428

VSM, Holland: 2x2 leading shoe brake kits for Vincents; high quality 30mm wide 4 leading shoe system. Email vspeet@vsmetaal.nl for info.

François Grosset, France: Electric starter for Vincent Twin. Electronic ignitions for Vincent Single and Twin supplied complete with drive gear. Email pontricoul@gmail.com for more info.

Cometic Gaskets: Modern, reusable gasket sets for Vincent twins and singles. If you actually USE your Vincent you are mad not to have these. Contact Paul Holdsworth of the VOC Chicago section c/o phpeh@hotmail.com Located in Chicago IL USA.

Nuts n Bolts:

Classic Fastners, Australia: Their aim is to supply obsolete and hard to obtain fasteners for your restoration project be it a professional or private venture. The print catalogue, available for download, lists the current complete range. Ships Worldwide. <http://www.classicfasteners.com.au/>

Precision Shims Australia: All types of shims made to your requirements, ships worldwide. More info at their web site www.precisionshims.com.au

V3 Products (see entry under Spares above) also stocks a large range of Vincent specific nuts n bolts.

Keables, Australia: The original nut n bolt specialists who are able to supply just about anything with threads and bits to match such as taps n dies. Recently have relocated to 11 Braid St, West Footscray, Vic. Ph 03 9321 6400. Web site www.keables.com.au

Restoration Services:

Steve Barnett, Australia. Master coachbuilder and fuel tank creator who does incredible workmanship; located in Harcourt, Victoria. Ph +61 3 5474 2864, email steviemoto@hotmail.com

Ken Phelps, Australia – Qualified aircraft engineer and builder and daily rider of Norvins for over 30 years, who has the skill and experience to carry out overhauls, rebuilds, general repairs and maintenance to Vincent HRD motorcycles. Full machine shop facilities enabling complete engine and chassis rebuilds, Painting, wiring, polishing, aluminium welding and wheel building. Ken Phelps Phone: (61+) 0351760809 E-mail: ogrilp400@hotmail.com . Located in Traralgon, Victoria, Australia

Outer Cycles, Australia: Jim Browhly is a master craftsman who manufactures bespoke motorcycle exhaust systems for classic bikes, no job is beyond his capability, so if you do need a new system that will be made to your precise requirements, give Jim a call, telephone 03 9761 9217.

Grant White – Motor Trimmer, Australia: Specialising in Vintage and Classic Cars and Motorcycles. Located in Viewbank, Victoria. ph 03 9458 3479 or email grantwhite11@bigpond.com

Terry Prince Classic Motorbikes, Australia: Specialises in development and manufacture of high performance components for Vincent motor cycles. For more information visit the web site [Click Here](#) or telephone +61 2 4568 2208

John Parker, AMAL Carbs, Melbourne, Australia: A specialist in AMAL carbs of all models, repairs, restorations and a massive supply of spare parts. For information phone him on +61 3 9879 3817 or email to ukcarbs@hotmail.com

General Services :

Peter Scott Motorcycles, Australia: Top quality magneto and dynamo services, from simple repairs to complete restorations plus a comprehensive range of associated spares. Provides hi-output coil rewinds with a 5 year warranty. For more info contact Peter on (02) 9624 1262 or email qualmag@optusnet.com.au

LUCAS STUFF - The man who bought Kevin Baker's Lucas Parts business is Danny Lee in Melbourne. Email: dannyleepersonal@gmail.com His phone number is 0412 327 197 Apparently Kevin has moved to Melbourne and works with Danny one day a week.

Ringwood Speedometer Service, Australia: Experts in the repair and restoration of all motorcycle, automotive and marine instruments. Smiths cronometric specialists. Telephone (03) 9874 2260

Dyson M/C Engineering, Australia: Wheel building, Crank rebuilds, Bead blasting, Rebores & Engine Rebuilds and more. Located at 12 Chris Crt., Hillside, Victoria. Phone 0400 817 017

Piu Welding, Australia: Frank Piu is a master welding engineer who works with Aluminium as well as steel. No job to small. Has been recommended by multiple OVR readers. Phone 03 9878 2337

MotorCycle Fairings, Australia: This crew are are total professionals when it comes to painting. Expert service, quick turnaround and fair prices. <http://www.melbournemotorcyclefairings.com.au/>
Ph 03 9939 3344

VINCENT H.R.D HISTORY

(P. C. VINCENT & R. HARPER)

DO YOU LIKE QUALITY BOOKS?

Roy Harper & Co. (London & Spalding) is the only company supplying de-luxe books to motorcyclists: **Vincent H.R.D. Gallery**, Vol. I of the **Vincent History** compiled by Philip Vincent and Roy Harper, is superbly bound in real leather (black hide, gilt edges), printed on art paper and autographed by P.C.V. and R.H. 76 works photos. 168 pages (no adverts). Dust jacket. First batch (of 250) sold out. Second (and last) batch (with alterations), **£9.98** (**£8.98** until August 31st, 1975 or till sold out). Cloth-bound edition, **£3.98**. **Vol. II: Vincent H.R.D. Story** (at printer's). Background and 100-odd photos supplied by H.R.D., P.C.V., Phil Irving, Bob Burns, George Brown, Ted Davis, C. J.

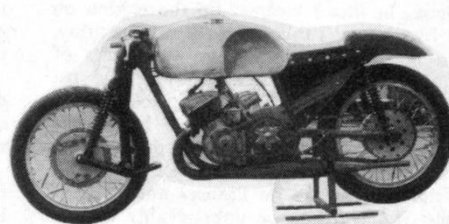


Williams, Rollie Free, *et al.* **£8.98** will reserve your numbered, signed copy before publication scheduled for later this year. In preparation: **Vol. III: P.C.V.'s Autobiography**.

We recommend the following hardbacks: Jeff Clew's **Scott History** (80 illustrations) **£4.65**; **Velocette History** (Always in the Picture) **£6.50**; **Brough History** (Rolls-Royce of Motorcycles) **£5.10**;

Douglas History (The Best Twin) **£5.88**; **The Norton Story** **£3.25**; **Bikes at Brooklands** **£4.50**; **Brooklands and Beyond** **£4.10**; **Vintage Years at Brooklands** **£5.75**; **Tuning for Speed** **£2.25**; **Guinness Guide to Motorcycling** **£5.40**.

Books despatched by return in padded bags (post paid). Air mail extra.



350 c.c. SCOTT RACER

ROY HARPER & CO. (Mail Order), 41 HIGH ST., SPALDING, LINCS. (inc., TURNPIKE BOOKSHOP)
Visit us at Donington Park, BMF Rally, May 4th (we're next to Vincent Owners' Club)