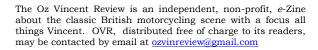


The Oz Vincent Review

Edition #61, April 2019







OVR congratulates Vincent Riders Victoria (VRV) on becoming the most recent fully recognised Local Section of the international Vincent H.R.D. Owners Club in Australia. More information about Vincent Riders Victoria, including Membership information, is available on the VRV web site https://secvrv.wixsite.com/vincent also reachable via the VOC's own web site.

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The Oz Vincent Review is an independent, non-profit, electronically distributed magazine 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

Welcome

Welcome to the latest edition in our 6th year of publication! It also marks a milestone in the Australian Vincent community and that is the recognition of Vincent Riders Victoria as a fully recognised Local Section of the international Vincent H.R.D. Owners Club.

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Melbourne, Australia. Email: ozvinreview@gmail.com

Letters to the Editor

Dear Martyn,

One of the rarely mentioned advantages of ozvinreview is probably, that you do not need a lens or loupe to study details of fotos, contrary to other printed media on our subject. But, on this occasion, I would like to answer to Nigel Spaxman's breather breathing studies, which I read with interest and pleasure.

Most of us have experienced over the years, that we have some riders in our community, who have dry engines, and some others have not. And, that's the major point: It's the man on the machine, who makes the difference! Paul Richardson states in his book: If you operate a VINCENT Twin engine always below 3000 rpm, it may well remain clean and dry. But, if you twist the grip and let her run, she sweats and shows her power.

This is normal for any V-twin engine. Also DUCATI, MOTO GUZZI and HONDA made the same observations referring to engine breathing. Especially MG have changed engine breather technologies many times on their twins. Therefore, it may be concluded, that timed breathing only works at a lower rev range until, say, 3 -4000 rpm, depending on engine type. Over this limit, blow-by is the greater influence to be controlled by other breathing methods, mostly atmospheric breathing via expansion chambers with internal impact walls or/and wire mesh to separate air from oil.

The breathing line preferably ends in the oil tank (with dry sump lubrication) like Vincents, or in a small container (wet sump lubrication) like most HONDAs, and from there back into the air. This is caused by the fact, that "Internal Combustion Engine" does not mean the pumping varying volume (under pistons) of a cold engine, but the number of explosions on top of your piston, which moves faster and faster, the more explosions you order with your twist grip, so making gas tightness increasingly difficult to maintain. The faster piston(s) move, the more blowby appears, leading to higher internal engine pressure.

PEI states this in his excellent books and led an additional atmospheric breathing line back into the oil tank of the Montlhery record bikes in 1952. This can be clearly seen on fotos of the record bikes. He also observed, that an atmospheric breather tube can have too large a diameter, so letting the engine suck back air into the engine, thus enlarging internal pressure! He recommended an internal diameter of 1/4", only!

I am sure, Nigel Spaxman with his perfectly timed breather will also find his engine in "blood, sweat and tears", if he races her on track, which is not bad at all and perfectly normal, as long,

as the rider stays on his bike until both end their ride in happiness together.

Michael Kamper, Germany

ps. referring to the foto, I must say, that Comets run much dryer, than twins at high revs. Maybe, that the sealing length of piston rings of a single is relatively shorter than on a twin in relation to engine volume (under pistons).



Great Issue thanks Martyn! Always look forward to OVR. I may not be have a Vincent but I still enjoy that others have them and get out and share their stories.

Regards, Alan Howlett, Australia

Hello Martyn,

Thanks for your fantastic reviw. It's a pleasure to read it every month, and to find out about Aussie news, and Aussie friends.

Congratulations, and Welcome to the Vincent Riders Victoria section!! I am proud to know a few of them. Congratulation to Bob, Joy, Cordy, Adéle, Brian, Jenn, and so many others I cannot name.

Yes, Aussie's mustn't forget about the International rally. I will be a good opportunity for them to share some others European VOC events. Not to forget, and must not be missed: The VOC French Rally, July 13-14th in the Massif Central, not to far away from Clermont Ferrand. and June 22-23rd a special tribute will be organise to Patrick GODET, during the Festival Café Racer, in Monthléry (close to Paris). See below information from one of the tribute organiser Guy Dano:

Tribute to Patrick Godet

Dear Friends.

On June 22nd & 23rd 2019, during the Cafe Racer Festival at Montlhéry, a warmful tribute will be paid to Patrick Godet. The ambition is to bring to Montlhéry the largest number of Egli-Vincent, Vincent and Norvin for a "laps of Honor Parade" which will take place on Saturday June 22nd at 02.00 PM.

The Godet Motorcycle team will be present and the most beautiful bikes which have gone out of Godet workshops across the last decades will be displayed.

If you wish to join in and participate to the "Laps of Honor Parade" with your bike, kindly contact Guy DANO (guy.dano@orange.fr or +336 8035 3869) for registration.



All these informations will be at some stage in OVR and MPH, but earlier people know, the best they can organise their trip.

Thanks and Best Regards from Up Above, Didier Camp (VOC France).

Dear Martyn,

May I suggest that there is another way to save the pipe where the flange has cracked as described in the last OVR.

Cut off a short piece the end of the pipe where fitted inside the silencer and have this welded onto the head end (of the exhaust pipe) by someone who really knows what they are doing. Any bluing should be hidden inside the exhaust nut and the flange can be reformed without altering the effective pipe length. This has certainly worked for me in the past.

Also may I point out the importance of having the face of the flange in correct alignment with the exhaust port. Particularly with the front flange it is worthwhile mounting the long pipe first, to ensure that the hole in the retaining bracket lines up with that in the footrest plate, adjusting the flange accordingly before proceeding any further.

Regards, Glyn Baxter

Handling Handling



Is the rear suspension on your Vincent is not as compliant as it should be? Are you running the original seat stay that incorporates a friction damper? If you answered yes to these questions this may be just what you were after.

As part of the restoration of my Comet, primarily for cosmetic reasons, I decided to remove the rear "Griffith" luggage sub frame (see KTB page 171), replacing it with the original and now restored seat stay assemblies (FT94AS). The friction dampers that are integrated into these stays are only a part of the suspension that needs attention in order to ensure correct suspension movement. There are also pivot points where the seat stays attach to the underside of the seat at the rear and there is another pivot point where the front of the seat attaches to the UFM. If ANY of these pivot points are binding then that additional and unwanted friction will

have a detrimental impact on the overall performance of the rear suspension.

While the sintered bronze bearings in the seat stay end (FT111) are readily accessible and visible and thus most likely receive appropriate maintenance to keep them free, the bearing at the front of the seat is a different story.

The front of the seat is positioned on a 3/8" seat pivot rod (F35/1) that passes thru a steel tube (F57/1) which itself passes thru the top hole at the rear of the UFM. There are two sintered bronze bushes (ET64), one each side, between the bore of the UFM hole and the thru tube. The intent is that the overall length of F57/1 is slightly greater than the length of the hole thru



the UFM. What this means is that once the front seat bolts on F35/1 are tightened the seat frame is held securely (and unmoving) against the ends of the tube F57/1. However, because of the two sintered bronze bushes, the tube itself can readily rotate within the UFM and in turn the seat can also freely move in the vertical plane as required. Well that's the theory!



In practice this bearing arrangement at the front of the seat, being out of sight, is generally neglected. On my Comet the entire front bearing arrangement was seized solid, caused in part by NOT removing F57/1 or its associated bushes ET64 when , at some time in the past, the UFM was powder coated.

In order to remove the in-situ parts I had to gently heat the area around the two bushes then use a drift with a number of sharp hammer blows. Once I had all apart I used a small Dremel sanding drum to clean up the inside of the hole through the UFM, and then fitted new ET64 sintered bronze bushes and a new F57/1 through tube, having first line reamed

the bushes to ensure a snug fit while providing sufficient clearance for the F57/1 to freely rotate. A new F35/1 was also fitted as a matter of course.

Beyond the Bitter End!

By Richard Simpson, UK

WHEN motorcyclists and amateur economists gather, the topic of conversation inevitably shifts around to the demise of the British industry in the early seventies. The economists blame management and unions for under-investment and inflationary pay demands, while the motorcyclists point out that the design of the 1971 BSA-Triumph models was so bad that only a masochist could possibly enjoy riding one. The truth; according to Alistair Cave, who managed BSA's giant Small Heath factory through its most troubled years, is rather more complex than this.

Cave joined BSA in 1940, at the age of twenty-one. A time-served apprentice, he was soon working in a supervisory capacity in the shadow factories that BSA had dispersed throughout the Midlands in an effort to avoid German bombs destroying their arms production. Peacetime saw Cave transferred to bicycle production, and he was given the task of setting up a new cycle factory at Waverley. This experience was to stand him in good stead later, when he was sent to Ireland and India to establish plants producing BSA and New Hudson cycles. These countries had been captive markets for British products, but now wanted to produce their own goods — a trend that was to cause increasing problems for BSA.

In 1958, the Cycles division was sold to Raleigh, and Cave was transferred from manufacturing to spares procurement, where he worked under John Balder. Supply problems meant that the factory's production lines were often forced to use parts originally



Cave (right) shows Small Heath MP Dennis Howell around the BSA factory in 1974

earmarked for the spares or service departments, and the results were sometimes chaotic.

Cave was ordered to assist Alan Jones in the manufacture of parts for the spares and service departments. By now, the BSA group was beginning to lose its broad industrial base. Cycles had gone, the tools division had been sold to Herberts and, after a battle which saw the departure of Lord Docker, Daimler cars had been taken over by Jaguar. Increasingly, the BSA group, under new chairman James Sangster, was putting all its eggs in the motorcycle basket.



Automated assembly of singles and twins at Small Heath in the mid-sixties

the motorcycle market was shrinking, following an immediate post-war boom, and BSA started looking for sub-contract work with other companies. Dowty were an early customer, with BSA doing work for them from 1956, and other work was undertaken for Massey-Ferguson — a connection that Cave was able to throughout maintain the most troubled times that lay ahead. However, it was recognised that subcontract work was not going to provide satisfactory permanent solution to BSA's problems. So during

the late fifties and early sixties a drastic attempt was made to increase the appeal of the BSA range, and utilise the full capacity of the Small Heath works by taking in production of Ariel machines from Selly Oak. BSA pre-unit engines were replaced by updated designs, but Cave felt that an opportunity to eliminate many production and service problems by going over to horizontally-split crankcases was missed.

The vertical-sandwich engines took longer to build, and it would have been much easier to make a horizontal split oiltight,' he said. In spite of this the reception for some of the new bikes, in particular the A65, was very favourable, although it was a bad period for motorcycle sales generally.

Other new models were less successful. The 250cc C15 was 'subject to much discussion', according to Cave, and BSA staff were bitterly disappointed to be presented with a design that reproduced most of the faults of the old Triumph Terrier on which it was based. These included a weak big-end bearing and starter mechanism, a distributor-mounted contact-breaker and vertically-split crankcases. Their worst fears were confirmed when the machine went into production, for it was these aspects of the design that gave trouble in service.

This was the start of an era of badge engineering, with BSA and Triumph designs becoming so alike that at times it seemed that only the tank transfers distinguished some models among the two marques. An immediate benefit for BSA was an increased slice of the American market, where Triumph had always done very well. BSA's sales organisation was given a transfusion of fresh blood, with Wilf Harrison being sent out to the States as sales manager.

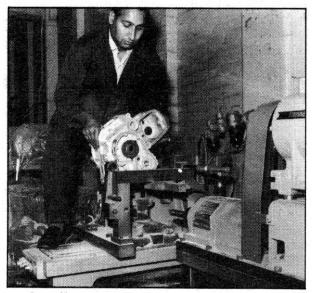
Output rose to 45,000 machines in the financial year 1965-66, and for three consecutive years BSA-Triumph won a Queen's Award for exports. Profits were good, with the motorcycle division making over £2 million a year.

But problems arose as Tiger Cub and Tina production was transferred to Small Heath, with Meriden left to concentrate on the production of big twins. Both Cub and Tina designs had their shortcomings, and Small Heath staff tended to favour their own Bantam and C15 models, while

the Meriden service department was quick to blame the problems of the Triumph designs on the BSA people.

In spite of the board's plans, Cave remembers BSA's best received model of the time as being the 650cc twin-cylinder Spitfire. This was the success-story of an otherwise gloomy year in 1964, and although it vibrated more than the standard A65, it got a good reception from press, dealers and public. Two years later the model was still attracting favourable comment, with The Motor Cycle timing a standard Spitfire at over 120mph.

At the same time, the BSA moto-cross team was keeping the company in the public eye with regular successful outings in front of the TV cameras. This was exploited by BSA, who marketed road and competition versions of the single-cylinder Victor, with advertising emphasising that these machines were similar to those used by their 1964-65 world champion Jeff Smith.



A Small Heath worker wrestles with a Trident crankcase during one of the 56 operations needed to produce it

External factors were also working against BSA. The Mini car was luring many people straight onto four wheels, and Commonwealth markets were becoming increasingly resistant to the import of manufactured goods, with tariffs appearing in such previously captive markets as Australia and South Africa. Overall, motorcycle sales for the BSA group were down to 17,000 units in 1964 against the post-war peak of 55,000 in 1948. It was plain that BSA's motorcycle division had only a short time in which to re-organise itself and find new markets for its products.

The directors called in McKinseys, a firm of management consultants from the United States; Meriden chief Edward Turner retired as executive director of BSA-Triumph, but retained a seat on the board. A new chief executive was appointed: Harry Sturgeon, who had come from the aircraft industry

via the BSA subsidiary Churchill Grinding Machine Company, and in the following reshuffle Cave returned from holiday in Italy to find a letter asking him to call John Balder. Balder visited Cave that night and offered him the job of acting works manager at Small Heath.

Cave, who was well aware of the problems facing the motorcycle division, felt apprehensive about his new appointment. He had seen McKinsey's report, which stated that Small Heath would never again be required to produce more than 600 motorcycles a week, but Sturgeon ignored this advice and had set about welding the BSA and Triumph parts of the company into a unified mass.

Traditionally, BSA motorcycles had been assembled from components produced at Small Heath, while Triumph at Meriden purchased many of their castings and cycle parts from suppliers outside the group. It was thought that costs could be cut if there was a real attempt made to eliminate areas where BSA and Triumph efforts were being duplicated, not only in manufacture, but in marketing and sales. Small Heath was to concentrate on producing single-cylinder designs and components for Triumph, while Meriden would only build large machines. There were many in both factories who resented this move, and relations between the two plants were often less than friendly.

Although at first sight the BSA-Triumph group appeared to have been in quite a healthy position in the mid-sixties, there were problems. The failure of the lightweights, the Dandy, Pixie and

Beagle, had left the bottom-end of the market open to the Japanese. Cave remembers: 'At this point, less than 20 per cent of BSA production was being sold in Britain, and contrary to common belief, the majority of the American sales of BSA machines were on the east coast where the motorcycle sales season is as short as it is over here.'

Balancing production against seasonal demand was a major problem for Cave. 'Peak manufacture occurred at a time when sales and cash-flow were low,' he says. 'A sales opportunity missed would not occur again for another year, if at all.' It was this factor that was

eventually to prove fatal for BSA.

Steps were taken to remedy this precarious situation, and for 1966 BSA had a major drive to sell their B40, C15 and Bantam models to military and other fleet users. This had been a good market for BSA in the past, with spares demands still coming in for the World War Two M20. An order for 2,500 B40s came from the British army, and sales to other NATO and Commonwealth forces followed, with Australia alone taking 1,000 of the machines.



The military version of the C15 sold well in the troubled Middle East. 'We were selling machines finished in Fort Dixon Green to Israel, while others with Desert Sand paintwork were going to the Egyptian army, who were also still using the old M20. Machines we had supplied to one side sometimes ended up being used by the other,' Cave laughs.

King Hussein of Jordan was also a good customer, and his personal guard were mounted on fully-chromed A65s. Military sales also brought great demand for spares, often worth as much as the original order over the service life of the machine. For example, 900 front fork and wheel units were supplied to the British army alone.

Bantam production, boosted by sales to the Post Office, reached 400 per week during peak periods. Military sales were not without their problems, however, for Ministry inspectors insisted on checking that every machine was built exactly to specification, even to the extent of measuring the turning circle of each bike.

They were as fussy with the B40 as they had been with guns during the war,' Cave remembered.

In 1967 Harry Sturgeon died, leaving behind him the fruits of a £100,000 investment programme, including a computer-controlled assembly line. This had been set up in an attempt to reduce labour costs, and was to a certain extent a gamble, for a fall in demand could turn it into a white elephant. But, as Cave says, `We had to get labout costs competitive with the Japanese, and at a time of high wage demands the only way to do this was to increase the output of each person by mechanising the production process.'

The new line, on which a rack containing all the necessary parts to build a motorcycle accompanied each machine down the track, was the answer to this problem.

Plans were being made for the introduction of a new sports machine, the 250cc B25, and a 750cc triple, but in spite of all the investment directed at reducing labour during assembly, the designs were still the 'vertical sandwiches' that made engine-building a lengthy and labour-intensive process.

By now, Small Heath was at the peak of its post-war strength. Lionel Jofeh, former chairman of Sperry Gyroscope, took over from Sturgeon as the managing director of the BSA-Triumph motorcycle division. Major efforts were being made to get the triple into production before

Honda's 750cc four arrived, and although it was a Triumph-based design it was decided to market it under both the Triumph and BSA banners, as the Trident and Rocket 111 respectively. The engines were to be built at Small Heath, and from Cave's point of view, the design, intended as a stop-gap at this stage, left a lot to be desired.

Machining the centre section of the engine-gearbox shell involved 56 different operations using 48 jigs. The bottom-end of the engine was made up from seven different castings, and the need to make so many major joints oil-tight meant that production was a laborious process. This would have been bad enough, but the principles of badge-engineering meant that while the Triumph version had to have an upright engine, the BSA had an inclined cylinder. With initial production of the two triples running at only 50 a week, Cave remembers, 'on top of these problems, an incredible amount of time was wasted changing machines over from producing one version to the other and back again.'

Although initial demand for the triple was brisk, Cave is the first to admit that it was not economic to produce in this way, and that early models were not very reliable. A rash of bearing failures turned many potential customers to the cheaper and more sophisticated Honda four. The Japanese machine was making BSA-Triumph's big bikes look increasingly antiquated, and discussions took place about the fitting of left-foot five-speed gearboxes and electric starters, but nothing was done for some time.

A year later it was decided that a left-foot five-speed 'box should be designed for the A65 and the



T120 Triumph, and that the possibility of fitting a self-starter to the triple should be re-investigated. There was no room for one on the Trident, but a starter motor fitted neatly behind the inclined barrels of the BSA. For political reasons it was not considered appropriate for only one version of the triple to have self-starting, so the idea was again shelved.

The group turned their attention to the lightweight market that thev abandoned to Honda in the mid-sixties. A freelance designer called George Wallis demonstrated a small tricycle powered by a 50cc engine. Wallis claimed that the tricycle's hinged-in-the-middle design made it impossible to fall off, but Cave remembers the inventor managing to tip the prototype over in front of many senior BSA men at Redditch. Undeterred by this, the BSA board acquired manufacturing rights for the device, which was given an extensive redesign before being launched on an unsuspecting public under the slogan 'Here it is. Whatever it is'.

'It' was the Ariel 3, and it was to be a disaster. In fairness to Wallis, Cave says that the production version bore little resemblance to the original design, and many of the 3's mechanical

problems can be attributed to the plastic enclosures surrounding its 50cc engine that had been added by BSA's stylists. Overheating was a major problem and Cave remembers that a fan cooling system was only incorporated into the design after several hundred machines had been produced.

Initially, Cave was asked to produce 6,000 of the Ariels. The machine was launched at the Festival Hall in London, but dealers and the sales department made the mistake of believing their own propaganda, and convinced themselves that the machine was a revolution in personal transport. They persuaded the board to produce 60,000 of the devices per year.

But the machine was illegal in many overseas markets, and sales never reached the hoped for 1,000 per week. The Ariel 3 was scrapped in 1971, leaving BSA with large stocks of the engines that they had bought from the Dutch Anker concern. These were sold off for a nominal sum, and the whole project resulted heavy losses.



BSA-Triumph's joint research facility at Umberslade Hall was causing massive problems at both Small Heath and Meriden. Set up in 1968 in an attempt to inject fresh blood into British motorcycle design, many of its senior staff were, according to Cave 'just engineers, rather than motorcycle engineers', and too new to the industry to be of any real use. It had been decided that the BSA and Triumph ranges should be given a complete redesign, with production of the new Umberslade Hall-styled machines to commence in August 1970 to catch the American market in time for the 1971 season.

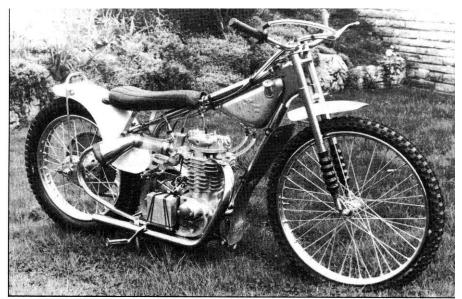
But the inexperience of senior designers combined with generally troubled times in the motor engineering industry to delay production of the new range until to January 1971. These were wasted months for both Small Heath and Meriden, for production of the old-style models had ended, and the plant had been changed over to produce the new designs. The 1971 American sales season was missed, and when the machines did arrive in the States, the response was that BSA had ruined the bikes by making them look too Japanese!

Changes were implemented, with seats being lowered and fuel tanks enlarged, but the missed US season hit the over-invested BSA-Triumph group very hard. Financial consultants Coopers warned of huge losses if something drastic was not done to cut overheads. Lionel Jofeh was replaced by Lord Shawcross as chairman, and a new board was formed to salvage what it could from the ruins. Cave was told that no more BSA machines would be produced, and that Small Heath would now make only three-cylinder engines and other components for Triumph, as well

as continuing with sub-contract work. In October 1971 he was given just six weeks to reduce his 5,400 workforce to 1,500, and the last BSA Lightnings and B50s were assembled in early 1972.

Cave found himself fighting a rear-guard action to try and keep the BSA name going. B50 production continued, but the machines, although entirely Small Heath built, were sold as the Triumph TR5MX Avenger. There was a good deal of resentment between Small Heath and Meriden, for although Triumph wages were 25 per cent higher than those at BSA, only 300 jobs were lost at Meriden. There had also been many stoppages at the Triumph factory, while only one working day was lost through industrial action at Small Heath in years 1964-75 in spite of the workforce being reduced from a peak of 5,500 to just 320.

This one statistic alone speaks volumes about Cave's skill as a manager. However, Coopers thought that Triumph's American dealer network made it the more attractive of the two marques, and Cave had to set about organising the evacuation of the part of the works that was



Cave and Cyril Halliburn produced four B50-based speedway bikes before the project was vetoed

being sold to the Birmingham Corporation, and the auction of over 5,000 machine tools that would no longer be required.

B50 engine units were still being produced, with Alan Clews of CCM buying them for use in his moto-cross machines. An inquiry from Coventry speedway led to Cave and Cyril Halliburn producing a speedway version of the B50, and four engines were built and tested with results before the project was abandoned by the directors who did not want a revival of the BSA

name in any form. Cave points to the subsequent success of the Weslake engine as proof that there was room for a British-built power plant in this market.

In early 1973, BSA's share price collapsed, probably because of rumours over a projected amalgamation with Norton Villiers. By August, the government and Manganese Bronze Holdings (who owned Norton Villiers) decided to form the Norton Villiers Triumph group. The new NVT company would have had enough work to support its three factories, Meriden, Wolverhampton and Small Heath, and as Meriden had fewer facilities than the other two it was decided to close it.

The result was that the Meriden workers began their renowned sit-in. Cave was advised that the action would be short-lived, and was told to retain his staff and keep making engines for the Meriden-assembled Trident triple. Stocks of the engines soon built up, and Cave was forced to switch his workers to maintenance tasks. In late 1973, it was decided to tool-up for Trident production at Small Heath, and the first T150 left the Birmingham works in March 1974.

With much of the equipment needed to build the Trident blockaded in at Meriden, the machines had to be built on a primitive pusher track that was a far cry from the old computer-controlled assembly line, but morale was boosted by the simple fact that Small Heath was again producing complete motorcycles. A design division was set up at Kitts Green, where experiments using parts from various BSA designs took place. One involved mounting a B50 engine in the chassis of the ill-fated BSA Fury, using Norton Isolastic mountings, although this machine was never

produced. But, the design department also revamped the Trident, adding a left-foot five-speed gearbox and using a Rocket 111-style inclined engine to enable an electric starter to be fitted. This machine was introduced in August 1974 as the T160V Trident, and things seemed to be going well for the Small Heath factory.

Cave was engaged in negotiations between his own shop stewards, who were blacking Meriden in retaliation for the blockade that had caused so many difficulties for them in 1973, and the government, who wanted to see the Meriden co-op off the ground using Small Heath made components.

I seemed to spend more time at Whitehall than I did at Small Heath in those days,' says Cave. But his efforts were to no avail, for unsold stocks of Norton and Triumph machines were building up in the United States, and the government was becoming increasingly wary of extending the export credit facilities that had financed their production. NVT were told that there would be no more cash from the government, and in July 1975 the receiver was put into Wolverhampton. The following August there was a court case which resulted in the interchange of components and bills of sale between the Wolverhampton and Small Heath works being stopped, and on October 20 the receiver went into Small Heath.

Cave devised a plan under which some jobs could be saved if the unions agreed not to obstruct the disposal of existing stocks of bikes, machinery and raw material, and cooperation between the parent company, and banks receiver allowed the formation of a new firm, NVT Engineering, continue with subcontract work. Tooling



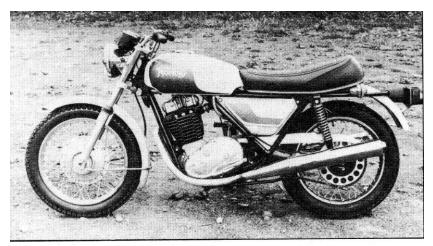
for the Trident was *The British Bike Follies*. A lavish launch for the 1971 BSA-Triumph range saved by Cave, who was managing director of the new firm, but this was eventually transferred to Meriden, where it was never used.

With the Small Heath factory being so often the victim of bad decisions taken elsewhere, you might expect Cave to be a bitter man: surprisingly this was not so. He was not keen to allocate blame for the disasters that afflicted BSA in the later years, but thinks that many of the problems were caused by a failure by the directors to see that their traditional overseas markets would disappear, as third world and Commonwealth countries developed their own industrial capacity.

With hindsight you could say that we should have realised what was happening,' he said. 'The third world needs a manufacturing base, and the only way that our high-wage economy can compete on the world market is by reducing the labour costs for each item produced.

BSA's gradual movement away from being a broad-based engineering group to a specialised volume producer of motorcycles was a response to foreign competition in other areas. But, as Cave points out, even the Japanese are now having mechanical and marketing problems with

their motorcycles, and even if BSA had survived the events of 1971 they would have been hit very hard by the recession.



Above: Norton single-cylinder prototype produced using a mixture of BSA components

But although he did not think that BSA-Triumph could have survived as a large concern, he regrets that Britain's expertise in building motorcycles has been lost. A keen motorcyclist in his younger days, he had a 250cc New Imperial and a Matchless 500 before getting a brandnew BSA B31 in 1946; he wishes that the British industry had been able to stage an Italian-style recovery and become a small but significant producer of prestige motorcycles.

The still-birth of the 350cc twiner had gone so far with it, it should have been

cylinder BSA Fury caused him some anguish. 'We had gone so far with it, it should have been launched,' he says. 'The defects of the original design had been ironed out by Bert Hopwood when a problem with the starter gears delayed the launch.'

The machine would have been very expensive, and by the time it would have been ready for production the failure of the rest of the 1971 range had caused financial crisis to grip the group. Components for 2,000 gearboxes and many other frame and engine parts awaiting the start of production at Small Heath were scrapped, and with them went the last chance that the British industry had of producing a high-performance middleweight machine.

Following his retirement, Cave lived in the Birmingham area, where he had many friends among the ex-BSA workforce. As young looking 66, he spoke of his old colleagues with a quiet pride, emphasising their loyalty and reliability when he gave talks to motorcycle clubs and other organisations about his good and bad times with

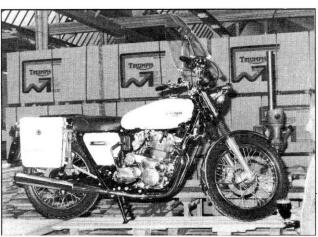
He

Allister Cave passed away in October 2007.

was the man who switched the lights off when they closed Small Heath. Literally!

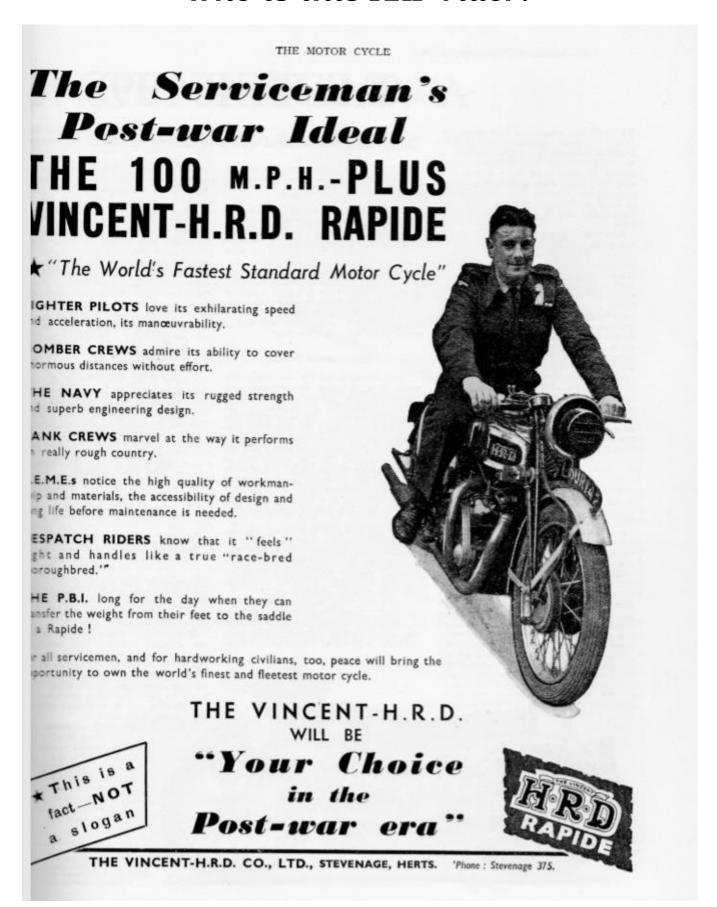
BSA.

The very last motorcycle produced in the Small Heath factory, a Saudi Police Trident, prior to crating.



OH - The Vincent Connection: David Bowen, ex of Stevenage, advised OVR that George Rose, a long time Vincent employee and one of the last to depart when the factory closed, owned and used an Ariel 3 as his daily ride.

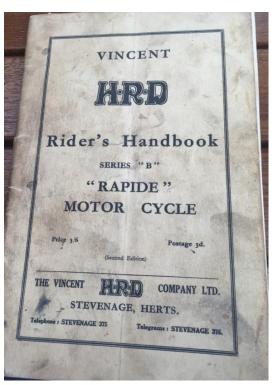
Who is this RAF rider?



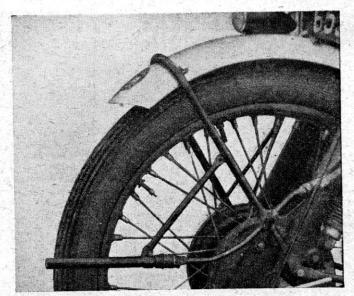
Yet another picture from David Bowen. Clue is two crew of Squadron Leader Bill Clarke's (deceased) Short Sterling bomber visited the works in 1944. Oh – and the brevet on the upper left sleeve may give the game away! Prize = lifetime OVR subscription. Solution plus a lot more prompted by this item in the next OVR.

Help! I'm Lost.

An OVR reader and Vincent tragic – starting out with a miss-spent youth riding Vincents at speedway in the 1960's, has unearthed a possible treasure. Here it is, an original Vincent HRD Riders handbook, series B. If this handbook is a match for your bike then contact the OVR editor to then be put into contact with the current holder of the document who is prepared to DONATE it to you. Send your email, with details of your bike, to ozvinreview@gmail.com



	ine in this space for easy reference
Registration	No.1.7.61556
Frame No	2043218
Engine No	10 AB/13/2621



WIND IN YOUR SAILS

Experiments to Determine the
Effects of Wind on Petrol
Consumption
by RAB COOK

(Left) The air-speed indicator's pressure head fitted alongside the Vincent's front wheel. (Below) The "instrument panel" comprising A.S.I., speedometer and rev. counter.

HAVE you ever set off into a strong wind muttering "this is going to use some petrol!" and then comforted yourself with the thought that the tailwind on your return journey would make it all up again? If so, you've been living in a fool's paradise! Certainly a tailwind saves a little petrol, but not nearly so much as the extra you use when battling against the gale. If you are really interested in saving juice on a run against the weather-cocks, remember that air resistance increases as the square of the speed, so if you creep against the breeze and romp the other way, things will more nearly even up, and the wallet remain less molested. I recently decided to try a few experiments to ascertain the true effect of wind on petrol consumption.

The machines used for these experiments were a Vincent "Black Shadow," both solo and with sidecar, and, to a lesser extent, a C11 B.S.A.—"to a lesser extent" because it was difficult to reach with it the speeds where the air-speed indicator was known to be accurate, and the only way of using it with anything near accuracy was to check the wind-speed with the "Shadow" and then make a rapid switch to the C11—not a very reliable method at all.

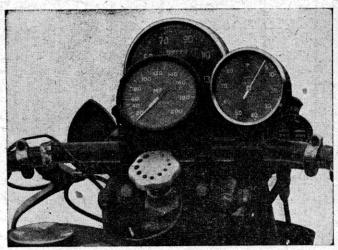
Checking Wind Strengths

Wind strengths were found by fitting the "Shadow" with an A.S.I., calibrated in m.p.h. Many hours were spent in getting this to read accurately, and finally it was considered to be correct from 60 m.p.h. upwards and probably right from "50-ish."

The static tube was a rubber one, cut at an angle of 45° at the end remote from the instrument, this end being placed in dozens of different positions before a little patch of static air was discovered. It would appear that the only place where such a spot can be found on a motorcycle is just under the clutch lever and, even there, it has to be right within a quarter of an inch either way.

The pressure head was tried in various places in a search for lack of turbulence, and eventually the spot chosen was very slightly ahead of the front tyre and some four inches to the left. Further out, in, backwards or forwards found swirling air of some sort, and here again it was a case of finding out the hard way—by constant experiment. But it was very interesting, so no tears shed.

With the static and pressure tubes firmly fixed, it was still necessary to make adjustments to get correct readings on the dial and the method adopted was to fit various diameters of tubes to the pressure head, a method which would probably make any self-respecting aero engineer shudder violently, but it worked.

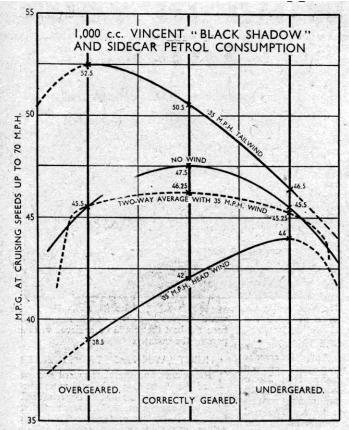


And how does one test an A.S.I.? Simple enough really—you find a long, straight road with a slight wind blowing as near as possible parallel to it. You then belt down the road at a fixed ground speed (in this case, 80 m.p.h.) and note the reading on the A.S.I., remembering to allow for initial instrument lag. If the A.S.I. reads 85 m.p.h. into the wind, then it should read 75 m.p.h. the other way. If it does you have a five m.p.h. wind and if it doesn't, back to the garage for further adjustments. All very simple until you learn that it took me two months to get everything just so! Relief was enormous when it was discovered that fitting the sidecar did not cause any alteration in the readings due to different turbulences.

Measuring Petrol Consumption

Petrol consumption was measured by lashing a quart tin complete with the necessary rubber piping atop the standard petrol tank, and, for each run, a carefully measured pint was used and the machine run until spitting in the front carburetter indicated weakness. The wind-speed figures given should be accurate to within plus or minus one m.p.h. and petrol consumption figures were taken to the nearest quarter-mile because of the impossibility of knowing if the figure shown on the trip mileage was contemplating an early move forward or if it had just arrived to keep us company for the next tenth of a mile. The speedometer on the "Shadow" is accurate and possibly pessimistic, being on standard gearing but with a front wheel one inch larger than standard.

The fun and games started around last August and have only recently ended. Every time I went for a run of any sort, the pint was measured in and used, and I would then note the



figures and switch to the machine's tank and proceed like any normal motorcyclist, whatever that may be. The log shows 97 checked runs, a fair number of these being done in young gales which blew at between 34 and 36 m.p.h., so in order to have a common basis for the statistics, these only are dealt with here—allowing for gusts we will call them all 35 m.p.h. winds (enough to make whole trees sway and cause quite a bit of inconvenience to pedestrians). The route was always the same—a fairly flat road with moderate bends, the driving normal and, with the "Shadow,"3,500 revs. the limit in the indirect gears. The C11. was driven flat out most of the time but not wound up too much in the gears.

Still-air Tests

In the flat, windswept country of northern Scotland where these tests were made, the most difficult task proved to be finding days when there was no wind so that "control" consumption figures could be obtained, and out of the 97 checks, only five of these could honestly be described as genuinely windless, or with a breeze of under five m.p.h. With the "Shadow" and sidecar running with 70 m.p.h. as the top speed and a minimum of 35 on one or two bends (an empty chair by the way), we were doing 47.5 m.p.g. A 35 m.p.h. headwind reduced this to 42 m.p.g., and, going the other way with the wind "pushing," we got a figure of 50.5, these being the averages of several runs. So you see the headwind was using more petrol to the tune of 5.5 m.p.g. but only handing back three m.p.g. on the return journey! Thus, over the whole series of trips, 2.5 m.p.g. was the toll of the breeze. At lower speeds this was reduced, and in fact, limiting the top speed to 60 m.p.h. almost exactly halved the differences, which is very interesting indeed; but the differences never quite evened out, and at higher speeds, involving higher revs. in each gear, they increased almost alarmingly.

Being a demon for work, I next decided to tinker around with the overall gearing of the model and more figures were obtained—"Mr. Vincent" was blessed for his q.d. wheel with its twin sprockets! Anyhow, the outfit was first of all over-

geared by eight teeth (rear sprocket of course!) and the figures were:

No wind, 45.5 m.p.g. Headwind, 38.5 m.p.g. Tailwind, 52.5 m.p.g.

Here we had the headwind drinking seven m.p.g., 1.5 more than when correctly geared, but it also handed back seven, thus seemingly proving either: (a) a case for over-gearing, or (b) that my ideas of correct gearing are all wrong. Actually not so, as the no-wind figure is down by two m.p.g. from the correct-gearing one and, of course, acceleration was noticeably lessened and more normal driving would call for higher revs. in each gear before changing up. This was tried and the figures showed considerable alteration, the headwind providing a decrease and the tailwind staying much the same, as also did the no-wind figure so far as could be ascertained. But no accuracy is claimed for these latter observations.

Then I undergeared by four teeth and took the final set of figures with the sidecar. These were:—

No wind, 45.5 m.p.g. (the same, note, as for overgearing). Headwind gave 44 m.p.g..

Tailwind 46.5 m.p.g.—a loss of .25 m.p.g. on the round trip average.

Summing up, then, we find that, for a round trip, correct gearing would give an average of 46.25 m.p.g., overgearing 45.5, and undergearing 45.25, figures which speak for themselves, and one should also remember that correct gearing means so much extra driving enjoyment.

The solo "Shadow" was tried on standard gearing only (3.5 to 1) and the top speed was raised five m.p.h. to 75. No wind gave 68.25 m.p.g., headwind gave 60 exactly and tailwind 74.5—an average of 67.25 m.p.g. for a round trip and a loss of a mere one m.p.g.—a small amount as would be expected in view of the reduced frontal area with the sidecar removed. At higher speeds though, this one m.p.g. could be increased quite remarkably, again to be expected in view of the "resistance-increases-as-the-square-of-speed" affair.

Wind on Small Motors

The C11 was not very accurately tested, but it was apparent that a small motor suffers very much more than a large one when driving into the wind, both in petrol consumption and, not unnaturally, in considerably reduced top speed. It would be interesting to know how such a model compares with the twin in this respect. On the other hand, a tailwind would make the C115 bowl along at more than its makers say it should, but, so far as I could discover, at an increased petrol consumption, although it is only fair to say that when a steady speed of 50 m.p.h. was chosen, a fair gain in consumption was noted.

Now what does all this prove? Primarily, that I've been having a lot of fun with myself and that many people who have of late asked why in heck my bike was wearing an A.S.I. at last know the peculiar truth instead of the evasive, facetjous or even somewhat rude answers they got before. The figures do point towards the truth, but they cannot be taken as a standard, for another driver on exactly the same runs would possibly get higher m.p.g., whilst his friend would get lower. It all depends upon one's driving habits—I know a chappy who regularly gets 95 m.p.g. from a Vincent "Comet" and another who rides a machine identical in every respect and pays his 4s. 6d. every 50 miles

What is shown is the importance of correct gearing. But I claim to do no more than show yet another way in which you can obtain interest from your daily journeys, not suggesting for a moment that you go to the lengths I have, but rough estimates can provide you with a fair number of figures with which to juggle and bemuse your friends. If, however, you are one of those people who gaze into the tank and say, "Hm—nearly full when we left, used about a gallon and I think it's about 75 miles. . . "Leave it, boy, leave it—no one will believe you, in any case!

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OVR Event Schedule, updated 31 March 2019

Date	Details	More Info?
2019	2019	
April 7	Vincent Riders Victoria (VRV) Day ride to Geelong Botanic Gardens plus General and Committee meeting;	events@.vrv@gmail.com
April 7	Vintage Motorcycle Club of Vic. Motorcycle Only Swap Meet. National Steam Centre, 1200 Ferntree Gully Rd Scorsby VIC 3	
April 13	Mirboo North Motorcycle Only Show and Swap Meet	Ph: 0491 106 888
April 13	Motorcycle safety Awareness Event @ MotoGC, Thomastown, Vic Australia	See Last Page for more info.
April 13 - 15	VRV Autumn Colour and Alps Run (Melbourne-Bairnsdale-Bright-Melbourne)	martynjgoodwin@gmail.com
April 20	Gathering of riders in Vincent Regalia with their Vincents for the filming of "Speed is Expensive" at the Broadford Bonanza, Broadford, Victoria.	
April 19-21	Shannon's Broadford Bonanza; fun filled days of riding , no racing and lots of companionship	https://www.trybooking.com/ book/event?eid=432162
Aril 27-28	The BSA Motorcycle Owners Association has run the All British Rally® annually since 1977. This year's event is to be held again in Newstead, Victoria, at the Old Newstead Racecourse.	https://www.bsa.asn.au/html/ events/abr/index.html
May 4	VRV gathering, General Meeting and BBQ	
May 4 - 5	Bendigo Singles and Girder Fork Rally at LLanley	
May 1 to July 22	No VRV scheduled events as many VRV members travelling to the VOC International Rally in Europe	http://www.voc.uk.com/net/i ntrally.php
May 10	Bayles Link Run: Classic Vintage and Veteran bikes gather together from all over Victoria at the Bayles Recreation Reserve in Bayles near Koo Wee Rup for this popular Triumph Owners MCC annual event.	https://www.tomcc.com.au/even t/bayles-link-run-2019/
May 17-18	43rd Historic Winton	
May 18	Federation Delegates Meeting at Kerang	
May 19	Federation inaugural Picnic at Kerang	

Date	Details	More Info?
June 22	Cafe Racer Festival at Montlhéry, France including, a warmful tribute to be paid to Patrick Godet. If you wish to join in and participate to the "Laps of Honor Parade" with your bike, kindly contact Guy DANO (guy.dano@orange.fr or +336 8035 3869) for registration.	guy.dano@orange.fr
July 28	VRV Pre-AGM Committee Meeting @ Secretary's Home	sec.vrv@gmail.com
August 17-19	VRV run to Wimmera Silo Art plus General Meeting,	sec.vrv@gmail.com
Aug 21-29	2019 Vincent Owners Club North Queensland Atherton Tableland Tour	mdbarr@bigpond.com
Aug 24-25	BULLI ANTIOUE MOTORCYCLE WEEKEND, Bulli Showgrounds, Grevillea Park Road Bulli NSW	
Sept 8	VRV Annual General meeting;	sec.vrv@gmail.com
Sept 22	VRV post-AGM Committee Meeting – venue to be decided	sec.vrv@gmail.com
Oct 6	HTPAA Antique & Collectable Tool Market, St Anthony's School Hall, 164-168 Neerim Rd, Caulfield East, 9am start till 12.30pm	
Oct 19	VRV Bit on the Side Run, for outfits but singles also welcome	brianh1967@yahoo.com
Oct 22	VRV First Anniversary Event plus Committee and General Meeting	sec.vrv@gmail.com
Nov 10	VRV Day ride plus General and Committee meeting; venue to be decided at the prior General meeting	sec.vrv@gmail.com
Nov 16-17	Bendigo Swap Meet, Bendigo showgrounds	
Nov 22, 23 24	VRV Annual Vincent Riders Dinner	brianh1967@yahoo.com
Dec 8	VRV Xmas Function plus General and Committee meeting; venue to be decided at the prior General meeting	sec.vrv@gmail.com
2020	2020	
ТВА	Australian National Vincent Rally, South Australia	
Feb 3 - 18	2020 International Jampot (AJS & Matchless) Rally in New Zealand	matchlessnz@icloud.com
March 10-19	Tassie Tour 2020 , held in association with the British Motorcycle Club of Tasmania.	<u>www.tassietour.info</u>

Date	Details	More Info?
March 28- April 4	Australian Historic Motoring Federation 2020 National Motoring Tour, Albury NSW & Wodonga Vic.	www.ahmf.org.au
Sept 6	VRV Annual General meeting; venue TBA	sec.vrv@gmail.com
Sept 21-25	Australian National VIncent Rally, McLaren Vale, South Australia. Timed to align with the Bay to Birdwood event for vehicles built up to 1960 which will be held on the following Sunday 27 Sept.	
Sept 27	Bay to Birdwood Run, South Australia	
Nov 20, 21, 22	VRV Annual Vincent Riders Dinner	Sec.vrv@gmail.com
2021	2021	
Sept 5	VRV Annual General meeting; venue to be advised	sec.vrv@gmail.com
Nov 19,20, 21	VRV Annual Vincent Riders Dinner	sec.vrv@gmail.com
2022	2022	
March	Tassie Tour 2022, held in association with the British Motorcycle Club of Tasmania. Register now for priority entry!	www.tassietour.info
Sept 4	VRV Annual General meeting; venue to be advised	sec.vrv@gmail.com
October ?	Australian National Vincent Rally, Victoria	
Nov 18,19,20	VRV Annual Vincent Riders Dinner	sec.vrv@gmail.com

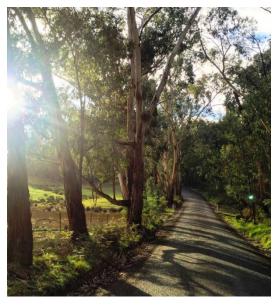
Planning an event? Any other event OVR readers should know about? Contact OVR to have it listed here

Victorian Ramble on Vincents (VRV)

An OVR contribution from Brian Hale, Australia

March 10, members of the newest VOC section, Vincent Riders Victoria (VRV) gathered for their first ride as a full local section of the international VOC.





From the start we rode around the back of Diamond Creek on Broad Gully Rd. to Hurstbridge.

From Hurstbridge along Aurthurs Creek Rd. to Nutfield where we turned right onto Mine Rd.

Mine road turned into Hildebrand Road as we followed the ridge line along to Mittons Bridge Road where we turned right and rode down to St Andrews.

Left onto the King Lake - St Andrews Road and up to Kinglake for coffee.

Kinglake Glenburn Road down to the Melba Hwy and then on to the Toolangi Tavern for lunch.

After lunch we travelled the Healsville-Kinglake Road down to the outskirts of Healesville and then across to Yarra Glen on the old Healsville Road.

From Yarra Glen we made our way to Buttermans track and followed it back to St Andrews From St Andrews we took School Road back up to the ridge line (Hildebrand Rd) and rode across to Arthurs Creek and on to home from there.

All in all a superb ride in congenial company along picturesque and quiet country lanes in glorious autumn weather.

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 advertisment. 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. Items will be listed in 2 consecutive editions of OVR.

For Sale: Modern gaskets for the Vincent.

The gasket materials, known as 'AFM' is a chemically blown, compounded nitrile synthetic rubber, bonded to an aluminium core with temperature resistance of over 250° F. AFM material does not require gasket sealers or silicone bead. Retorque is NOT required.) These gaskets can be used many times over.

Post war Vincent twin gasket set includes:ET106, PD14, ET105, 2 each ET102, ET182/1, ET180l and 2 each ET181. US\$58.00. Also ET 140 Clutch cover gasket available, US\$15.28

Post war Comet and Meteor kit includes (pictured): ET 106, ET180, ET182, ET181, PD14/1, and ET106. US\$55.00

Pack and post is additional. All gaskets are .060", ET106, is supplied in .032". (gaskets are available in.032" & .018" thickness). Contact Paul Holdsworth of the VOC Chicago section c/o phpeh@hotmail.com Located in Chicago IL USA.



For Sale: Expressions of Interest are being sought for a Vincent Series A Comet 1937 (previously owned by Ollie Fuller – South Australia VOC). Bike is located in South Australia. Engine # C4xx, Frame # D15xx (original D13xx) *Editor's note, numbers edited to foil forgers!*

Almost complete. Final parts available. Photos can be emailed. Inspection in situ will be arranged prior to purchase. Purchaser's responsibility to pack and ship.

Send a request for the photos to Anne Clark kurraltacco@bigpond.com. You can then submit your **first and final best offer** for consideration to the email above. Potential purchaser will be invited to inspect the bike.



For Sale: Taps n Dies



1/4" to 1/2" HSS BSF tap and die kit made in EU, just the thing for your Vincent, also available in BSC (CYCLE THREAD) A\$230. Contact vindian1952@gmail.com

For Sale: Vincent Comet Flywheel Assembly

From a 1950 Comet, but in great condition. Comprised of original ET3 flywheels, Maughan's caged needle roller crankpin assembly, an original and polished ET6/2 conrod in superb condition and unmarked mainshafts. This flywheel assembly has been dynamically balanced to 66% (to match an piston) Phil Omega per Irving's recommendation using a Repco balancing machine designed by the same Phil Irving.

Sale is the result of upgrading my Comet with a Terry Prince performance items. Seeking Australian \$1,600 or near offer for the complete Flywheel Assembly.

Also available is a matched 0.020" oversize Omega piston complete with new rings for A\$80 if purchased with the matching Flywheel Assembly, If purchased alone the piston, complete with rings is A\$140

Located in Melbourne, Australia. Can assist with shipping.

Hi-Res photo's available. Email to grannybiker1945@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 endorsment 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.

Coventry Spares Ltd, USA: Fantastic service and deep product knowledge plus extensive range of excelent 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 excelent Vincent Spares. Ships Worldwide. Email for more information steve@conway-motors.co.uk

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, Amal and control cable parts, plus an extensive range of Vincent parts. Ships worldwide. More info at the website www.unionjack.com.au

VSM, Holland: 2x2 leading shoe brake kits for Vincents; high quality 30mm wide 4 leading shoe system. Email <u>vspeet@vsmmetaal.nl</u> 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 creater who does incrediable 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

Ace Classics Australia is a Torquay Vic. based Restoration business specialising only in British Classic and Vintage Motorcycles. Complementing this service, they provide in-house Vapour Blasting, Electrical Repairs and Upgrades, Magneto and Dynamo Restoration plus Servicing and Repairs to all pre-1975 British Motorcycles. They are also the Australian Distributor and Stockist for Alton Generators and Electric Starters. Phone on 0418350350; or email alan@aceclassiscs.com.au . Their Web page is www.aceclassics.com.au

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 <u>Click Here</u> or telephone +61 2 4568 2208

General Services:

Balancing Services Australia, Experts in the dynamic balancing of all motorcycle and automotive crankshafts, flywheels and the like. 43 Chifley Dr. Preston, Vic. Contact Murray on 03 9480 4040 http://www.balserv.com.au/

Peter Scott Motorcycles, Australia: Top quality magneto and dynamo services, from simple repairs to complete restorations plus a comphrensive 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

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

Located in or near Melbourne, Vic., Australia? Then this is for you!



Road Safety Grants