

# The Oz Vincent Review

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The Oz Vincent Review is a totally 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 OVR@optusnet.com.au





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## Welcome

Welcome to the latest edition of The Oz Vincent Review. This month's front cover features Vincent enthusiast and master engineer, the late Bob Satterly who passed away on May 20. Taken just a couple of years back, the photo shows Bob when expounding on Vincent virtues at his favourite Rally, the Cooma Girder Fork. A friend and supporter of OVR, Bob will be missed by many.

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# Letters To The Editor

Dear Martyn,

PS

Hearty congratulations on the 50th edition (I, too, can't believe it!). In 'Vincent retirement' OVR is a tonic: your publication keeps me going at the just the right pace; its eclecticism balanced and the picture content stimulating. I wish you every success for the next 50 - no, 500 editions! Looking back over two Comets, a Grey Flash, a Shadow and Rapide, I have had my fill of the best bike in the world; now I just enjoy the best of magazines!

Geoffrey Bourne-Taylor, England

And I like to think I might have been in some way responsible for the whole thing....

Hi Martyn, The sidecar story (OVR #50) was great, many Vincents were used when new to haul them. More please. And thank you.

Zach Zniewski

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Well done Martyn. A real credit to you and we look forward to another 50. Seeing I am working Offshore Western Australia and spending most of my months off in Philippines I seem never to have the time to sit down and contribute to your wonderful newsletter.

Stephen Carson, Global Citizen

Hi Martyn, Congratulation on the half century OVR. I always find it a very interesting and informative read. Ta muchly.

Mike Chip' (UK)

# The Tyranny Of Torque

### Or.. when to back off!

#### By Joe Greenslade, USA

"What torque should I use to tighten my bolts?" is a question frequently asked. Many times I have been asked if a chart is published on the recommended tightening torque for various bolt grades and sizes. I do not know of any. This article provides such a chart for "Initial Target Tightening Torque". The formula for generating these values is explained below.

What follows is based on fitting a specified grade of nut to a bolt. *If you are working with a stud alone or a nut fitted to a stud you must also consider the strength of the stud to the case material and modify the torque to suit each application.* Futek have an on-line calculator that provides assistance regarding recommended torque on studs into cases and the nuts fitted to them. Here is the link <u>http://www.futek.com/boltcalc.aspx?mode=american</u>

The widely recognized engineering formula,  $T = K \ge D \ge P$ , was used to provide the chart's values, but it must be understood that every bolted joint is unique and the optimum tightening torque should be determined for each application by careful experimentation. A properly tightened bolt or stud is one that is stretched such that it acts like a very ridged spring pulling mating surfaces together. The rotation of a bolt (torque) or nut on a stud at some point causes it to stretch (tension). Several factors affect how much tension occurs when a given amount of tightening torque is applied.

The first factor is the bolt's diameter. It takes more force to tighten a 3/4-10 bolt than to tighten a 318-16 bolt because it is larger in diameter. The second factor is the bolt's grade. It takes more force to stretch an SAE Grade 8 bolt than it does to stretch an SAE Grade 5 bolt because of the greater material strength. The third factor is the coefficient of friction, frequently referred to as the "nut factor." The value of this factor indicates that harder, smoother, and/or slicker bolting surfaces, such as threads and bearing surfaces, require less rotational force (torque) to stretch (tension) a bolt than do softer, rougher, and stickier surfaces.

The basic formula  $T = K \times D \times P$  stated earlier takes these factors into account and provides users with a starting point for establishing an initial target tightening torque.

- T Target tighten torque (the result of this formula is in inch pounds, dividing by 12 yields foot pounds
- K Coefficient of friction (nut factor), Warning! always an estimation in this formula
- D Bolts nominal diameter in inches
- P Bolt's desired tensile load in pounds (generally 75% of yield strength)

The reason all applications should be evaluated to determine the optimum tightening torque is that the K factor in this formula is always an estimate. The most commonly used bolting K factors arc 0.20 for plain finished bolts, 0.16 for Cadmium Plated 0.22 for zinc plated bolts, and 0.18 for waxed or highly lubricated bolts.

The only way to properly determine the optimum tightening torque for a given application is to simulate the exact application. This should be done with a tension indicating device of some type on the bolt in the application. The bolt is tightened until the desired P (load) is indicated by the

tension indicating device. The tightening torque required to achieve the desired tension is the actual tightening torque that should be used for that given application. It is extremely important to realize that this tightening value is valid only so long as all of the aspects of the application remain constant Sometimes users say that their bolts/nuts are no good because they have started failing while being installed. Thorough investigation commonly reveals that the user has started lubricating the bolts/nuts to make assembly easier, but maintained to same torque as was used when they were plain finished

The table in this article shows that by using this formula a 1/2-13 Grade 5 plain bolt/nut should be tightened to 82 foot pounds, but the same bolt that is waxed only requires 41 foot pounds to tighten the same tension. A perfect 1/2-13 Grade 5 waxed bolt will break if it is tightened to 81 foot pounds because the K factor is drastically lower. The bolts are fine, but the application changed.

The chart is provided for quick reference for selecting an initial target tightening torque. The chart below was derived by using the formula shown earlier.

Hopefully the chart will help with an initial answer to the question, "What torque should I use to tighten my bolts?" But beware! This is only an estimated value. It may provide satisfactory performance, but it also may not. Every application MUST be evaluated on its own to determine the optimum torque value for each application.. Keep in mind that if the lubricant on a bolt and nut combination is changed, the tightening torque value must be altered to achieve the desired amount of bolt tension.

| Thread                 | Tensile Stres<br>Area | SAE Grade 2 |                                 | 2      | SAE Grade 5 |                                  |        | SAE Grade 8 |                                  |        |  |
|------------------------|-----------------------|-------------|---------------------------------|--------|-------------|----------------------------------|--------|-------------|----------------------------------|--------|--|
| Size                   | TSA                   | 75% Yield   | 5% Yield Strength (PSI) - 43000 |        |             | 75% Yield Strength (PSI) - 69000 |        |             | 75% Yield Strength (PSI) = 98000 |        |  |
|                        |                       | Plain       | Zinc Plated                     | Waxed  | Plain       | Zinc Plated                      | Waxed  | Plain       | Zinc Plated                      | Waxed  |  |
|                        | Square Inches         | A. Ib.      | Ft.Lb.                          | Ft.Lb. | Ft.Lb.      | Ft.Lb.                           | Ft.Lb. | Ft.Lb.      | Ft.Lb.                           | Ft.Lb. |  |
| 114-20.                | 0.0318                | 6           | 6                               | 3      | 9           | 10                               | 5      | 13          | 14                               | 6      |  |
| 1/4-28.                | 0.0364                | 7           | 7                               | 3      | 10          | 12                               | 5      | 15          | 16                               | 7      |  |
| 5116-18.               | 0.0524                | 12          | 13                              | 6      | 19          | 21                               | 9      | 27          | 29                               | 13     |  |
| 5116-24.               | 0.0580                | 13          | 14                              | 6      | 21          | 23                               | 10     | 30          | 33                               | 15     |  |
| 318-16.                | 0.0775                | 21          | 23                              | 10     | 33          | 37                               | 17     | 47          | 52                               | 24     |  |
| 318-24.                | 0.0878                | 24          | 26                              | 12     | 38          | 42                               | 19     | 54          | 59                               | 27     |  |
| 7/16-14.               | 0.1063                | 33          | 37                              | 17     | 53          | 59                               | 27     | 76          | 83                               | 38     |  |
| 7/16-24.               | 0.1187                | 37          | 41                              | 19     | 60          | 66                               | 30     | 85          | 93                               | 42     |  |
| 112-13.                | 0.1419                | 51          | 56                              | 25     | 82          | 90                               | 41     | 116         | 127                              | 58     |  |
| 112-20.                | 0,1599                | 57          | 63                              | 29     | 92          | 101                              | 46     | 131         | 144                              | 65     |  |
| <mark>9116-12</mark> . | 0.1820                | 73          | 81                              | 37     | 118         | 129                              | 59     | 167         | 184                              | 84     |  |
| 9116-18.               | 0.2030                | 82          | 90                              | 41     | 131         | 144                              | 66     | 186         | 205                              | 93     |  |
| 5J8-11.                | 0.2260                | 101         | 111                             | 51     | 162         | 179                              | 81     | 231         | 254                              | 115    |  |
| 5J8-14.                | 0.2560                | 115         | 126                             | 57     | 184         | 202                              | 92     | 261         | 287                              | 131    |  |
| 3/4-10.                | 0.3340                | 180         | 197                             | 90     | 288         | 317                              | 144    | 409         | 450                              | 205    |  |
| 3/4-16.                | 0.3730                | 200         | 221                             | 100    | 322         | 354                              | 161    | 457         | 503                              | 228    |  |

Joe Greenslade is an Associate Member of the Industrial Fastener Institute and a member of the American Society of Mechanical Engineers B1 Thread Specification Committee. In 1992, Joe was recognized for his technical and innovative contributions to the fastener industry when, at age 44, he became the youngest person to be inducted into the National Industrial Fastener Show "Hall of Fame."

## **PLAGIARISM:** The Most Sincere Form of Flattery??

From Jack Youdan. Melbourne. Australia.

In late 2017 Harley Davidson released a major update to their motorcycle range, effectively eight new models.

These comprised the "Softail" type (no-rear-suspension-look) and deleted the "Dyna" rear twin shock models. Following the Company's Milwaukee H.Q. launch, one US motorcycle journalist reported on the changes......

"The radical new frame is lighter, simpler and stiffer, with a triangular swingarm unit pushing directly on a monoshock and spring under the seat ..."

Photographs of the new frame confirm the cantilever layout is a copy of that employed from 1928 by one P.C.Vincent; A design most likely still protected by patents and copyright.

Well may we say there is nothing new under the sun!







Thanks to the generosity of Lou from Australia, OVR is able to bring to you in a serialised form, a reproduction of the Vincent H.R.D. Instruction Book for the Series A, originally published almost 80 years past.

*This is the third instalment – more to follow in subsequent OVR editions.* 



#### LUBRICATION.

The life of the whole engine and its sweet running depend very largely on the correct functioning of the lubrication system and the quality of the oil used. So far as oil is concerned, it is absolutely essential to use only the very best lubricants. In a modern engine, the lubricant has to stand up to abnormal conditions of heat and running speeds, and a few pence saved on oil may easily cost pounds in repairs. We therefore use and recommend only the following oils:

> Summer: Golden Shell (Extra Heavy) Patent Castrol XXL Mobiloil D Price's B de Luxe Essolube Racer

Winter: Triple Shell (Heavy) Patent Castrol XL Mobiloil BB Price's C de Luxe Essolube 50

For Very Cold Weather, etc. :

Double Shell (Medium) Patent Castrol AA Mobiloil A Motorine M Essolube 80

#### Fault Finding Charts.

For the convenience of riders, we append two fault-tracing charts to simplify the rapid location of trouble that may occur in the lubrication system, and below we describe how to overcome these difficulties individually, the paragraph numbers corresponding with the numbers appended to the various sections of the charts. Bear in mind, however, that in every case it is assumed a recommended brand and grade of oil, as shown above, is being used. Inferior oil, or the wrong grade of good oil, may easily cause many of the troubles listed, even when the entire lubrication system is working correctly.

#### Chart No. I. Too much Oil in Engine.

1. Faulty rings or cylinder barrel will permit oil to be pumped in excess into the combustion chamber. The rings may be broken, incorrectly gapped or gummed up: they may also be worn, and the barrel itself may be out of round and/or taper. A fairly good, but not necessarily infallible, test for this trouble is to check the compression of the engine, making sure the throttle is open when testing. Refer to engine section of this book for correct fitting of rings, etc.

2. The adjustment for the rear cylinder feed is provided by the hexagon headed bolt with lock nut mounted in the banjo union which secures the pipe to the oil pump. Screwing the adjuster inwards reduces the flow, which should be about 15-20 drops per minute at normal engine speed with warm oil. The flow is checked by undoing the union which secures the far end of the pipe to the crankcase and counting drops as they fall from the pipe. It is always advisable to check this and all other oil flows after the engine has come in from a run so that the oil is at working temperature. Be sure to relock the adjuster after setting.

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On "Meteor" and "Comet" models which are never driven hard, it is permissible to cut the oil down to about 12 drops per minute if all other methods fail to correct the trouble, but this should only be done after the piston has covered at least 2,000 miles.

3. Before deciding that cylinder head leaks are due to excessive o.h. rocker feed, check over all head joints since, due to the restrictor jet fitted, it is unlikely that the flow should be too great unless the rocker bushes or pins are badly worn. If only one rocker box is leaking it is possible that the pipe leading to the opposite box may be blocked, thus causing all the oil to flow into one box. Worn valve sleeves or top guides will also cause oil leaks even if oil adjustment is correct.

#### Adjustment.

On 1935 and 1936 models fitted with a single banjo union on the cambox to which both pipes are attached, a restrictor jet is formed by the small diameter hole drilled radially into the union retaining stud. This jet may have been enlarged, in which case it is permissible slightly to burr over the hole, but in no case must it be blocked sufficiently to cut the supply of oil off, otherwise very rapid wear of the rocker gear will ensue.

On 1937-38-39 models with twin adjustable feed unions and separate feed pipes, adjustment is provided by removing the pipes and taking off the top part of the unions. Inside will be found a small grub screw which can be screwed clockwise with a small screwdriver to reduce the flow. A very small degree of turn makes considerable difference to the flow and this should be checked by refitting the lower ends of the pipes with the upper ends facing away from the engine. If the engine is now run at about 1000 r.p.m. oil should issue from the pipes at the rate of 20 drops per minute for the inlet and 30 for the exhaust valves.

4. Worn valve guides allow the oil to run down the stems. The method of replacing same is given in the engine section.

5. Air leaks in the suction pipe allow air to be drawn in by the scavenge pump. This air becomes churned up with oil, causing excessive frothing and naturally diminishes the suction of the pump, thus causing an excess of oil in the sump. A very bad leak will cut off the flow of oil altogether.

Remove the sump pipe and tighten the union bodies. This is particularly liable to be required shortly after new fibre washers are fitted under the unions, as they tend to bed down. With solid drawn pipe make sure the nipples are seating squarely and the nuts are tight. Ascertain also that there are no burrs on the seatings. If soldered nipples are fitted, see that the soldered joint is sound and, whilst the pipe is off, blow through it to ensure that it is not partially blocked.

The flexible pipe fitted to 1935 models and early 1936 machines occasionally becomes porous under suction, in which case it is best to fit a solid drawn copper or brass pipe which we can supply complete with special nipples at a reasonable price. When ordering, state engine number.

6. The filter element should be taken from the tank every 1,500 miles for cleaning. To remove, undo return oil pipe and unscrew the large hexagon nut, Page Fourteen

The filter can now be withdrawn complete and element removed by unscrewing knurled cap on the far end. Wash thoroughly inside and outside in clean petrol. Occasionally, if dirty or gummy oil has been used, it is impossible to clean the element properly and a new one should be fitted. In any case, a new element should be fitted every 8,000 miles. It should always be possible to see oil dozing through the fabric of the filter over its entire length when the engine is running. When replacing element, make sure that the spring and collar are replaced next to the large brass body. Mistakes in this, as in other cases of dismantling, will be avoided if the construction is observed carefully before taking to pieces.

Important Note .- This filter only cleans oil returning from the engine. See, therefore, that only clean oil, from clean containers is put into the tank. See page 25 for details of 1937 type filters.

 $\begin{bmatrix} 7.\\ 8. \end{bmatrix}$  See oil pump section.

9. See paragraph 5 above.

10. Remove pipe if blocked and clear by blowing through it. Make sure also that the small holes in the banjo bolts are clear.

#### Chart No. 2. Insufficient Oil in Engine.

11. For adjustment of rear cylinder feed, see paragraph 2 above.

12. See oil pump section.

Check by running engine with top union nuts securing pipes to rocker 13. pins loosened off. If no oil appears, remove pipes. If both pipes are clear, run engine again and observe if oil issues through the small radial hole in the lower union holding stud on the cambox or, in the case of twin feeds and separate pipes, that oil comes from each union; in the latter case, first check the adjustment of feeds as described in paragraph 3 above. Remove holding stud or unions and make sure all holes are clear.

If, after holes have been cleared as described in paragraph 13 above, and 14. with stud or unions removed, oil does not appear out of the hole or holes in the cambox when the engine is run, the blockage must lie in the passage from the pump or the small restrictor jet mounted in the back face of the pump opposite the entrance to the passage. Remove pump and see that the jet is clear: it can be removed with a screwdriver for cleaning. The passage can be cleared by forcing oil down through the hole in the cambox with a pressure squirt with pump removed, or by pumping air down with a tyre inflator. If the cambox has been recently refitted and the methods given fail to clear the passage, it is probably filled with jointing cement and the cambox will have to be taken out again. (See notes on fitting cambox in engine section.)

15. If the check explained in paragraph 13 shows oil to be present at the rocker pin unions of the oil pipes, it is almost certain that the holes in the rocker pins are blocked. To remove rocker pins, rotate engine till both valves are definitely closed. Remove rocker oil pipes completely and unscrew rocker pins. Withdraw carefully, clean all oil holes and replace-with a smear of jointing cement under the head.

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16. See oil pump section.

17. Take out lower union which secures pipe to pump. Oil should flow out in a steady stream. If it does, see that the banjo bolt is clear. If there is no flow, remove pipe, check banjo fixing it to the tank and blow through pipe to remove obstruction. Then check for flow as indicated above. Should there still be no flow, the pipe must be damaged internally and should be renewed. Make sure relief valve spring and ball are replaced in pump when refitting banjo bolt.

18. See oil pump section.

19. Drain oil and clean out tank.

20. See pump section.

21. Refill with recommended grade of oil.

22. See paragraph 17.

23. See oil pump section.

#### CHART FOR TRACING LUBRICATION FAULTS.

General Symptoms. Any of the following faults are liable to be due to some failure in the lubrication system.

Too much Oil. Smoky exhaust, oiled plugs, oil leaks, oil blows out of filter cap, chain case fills up, oil drips from rocker breather pipe, excessive consumption.

Insufficient Oil. Engine seizes, tappets require frequent adjustment, loss of compression, engine runs hot and/or tightens up, valve stems appear dry.

| Spillof avon                                    | all, avoia Libe  | Faulty rings or<br>  barrel (1                         |  |
|---|--|--|--|
| latorque da 61<br>al colo das e<br>moste passes | Oil returns<br>normally to<br>tank                         | Too much rear<br>cylinder feed (2                      | 2) Air leaks in suction<br>pipe or unions (5)              |
| er tor adi ser                                  | in the lock days<br>built of the lock<br>cleaning The lock | Too much o.h.<br>rocker feed (3                        | Filter blocked $(6)$                                       |
| Too much oil -                                  | Oil returns<br>intermittently<br>or very                   | $ \begin{cases} Worn valve \\ guides \end{cases} $ (4) | (7) Scavenge gear<br>key sheared (7)<br>Too much clearance |
|   | irothy   | As for<br>intermittent return                          | on scavenge<br>gears (8)                                   |
|   | Oil does not   | Suction pipe blocked<br>or broken (9                   | d<br>')  |
|   | return at all  | Pump to filter retur<br>pipe blocked (10               | n<br>))  |
| Page Sixteen                                    |  |  |  |

|                  | Chart No. 2 fo                                     | or Tracing Lubricatio                         | n Faults.  |  |  |  |
|------------------|--|---|------------|--|--|--|
|                  |  | No oil to cylinder base                       | (11)       |  |  |  |
|                  |  | Big end feed<br>blocked                       | (12)       | and the second   |  |  |
|                  | Oil returns<br>normally to<br>tank                 | Feed to rocker<br>blocked (13-                |            |  |  |  |
|                  |  | Relief valve<br>working<br>incorrectly        | (15)       | The solution of the second sec |  |  |
|                  |  | Feed pipe from<br>tank partially<br>blocked   | (17)       | *  |  |  |
| Insufficient oil | Oil returns<br>intermittently<br>or very<br>frothy | Pressure gear<br>key sheared<br>Floating      | (18)       | Failing which<br>try as for<br>normal oil  |  |  |
|                  |  | obstruction in oil tank                       | (19)       | return   |  |  |
| 14               |  | Too much clea:<br>on pressure<br>gears        | rance (20) |  |  |  |
|                  |  | No oil in tank                                | (21)       |  |  |  |
|                  |  | Feed pipe from tank blocked                   | (22)       |  |  |  |
|                  | Oil does not<br>return at all                      | Pump drive or<br>pressure gear<br>key sheared | (23)       |  |  |  |
|                  |  | Oil way in pum<br>blocked                     | p<br>(24)  |  |  |  |
|                  |  |   |            |  |  |  |
|                  | •  |   |            | aint   |  |  |
|                  |  |   |            |  |  |  |
|                  |  |   |            | Page Seventeer   |  |  |

The serialisation of this 80 year old document will continue in subsequent OVR editions. Ed

## Australian Motor Vehicle Standards Act 1989

There are wholesale changes coming to the way historic vehicles (of ALL types) are imported into Australia, with the regime under the Motor Vehicle Standards Act 1989 about to be replaced by the Road Vehicle Standards Bill 2018 and associated Bills and Rules.



The bill is Part of a package of five bills to regulate the importation and provision of road vehicles, the bill replaces the Motor Vehicle Standards Act 1989 by: enabling the minister to determine national road vehicle standards for road vehicles and road vehicle components; prohibiting the importation into Australia of road vehicles that do not comply with Australia's unique and ocassionaly bizarre, national road vehicle standards, establishing a Register of Approved Vehicles, establishing a framework for the recall of road vehicles and approved road vehicle components; providing for criminal offences, civil penalties, injunctions, enforceable undertakings and infringement notices.

The greatest change that affects Classic and Vintage vehicles will be to obtaining an import permit – at present, pre 1989 vehicles can be imported as of right. Under the existing legislation the Minister MUST grant a VIA (Vehicle Import Approval). The new scheme will see the Minster having unfettered discretion to refuse the importation of any vehicle, plus the ability to insist on an inspection of the vehicle anywhere in the world at the importer's expense.

At present, historic vehicles are often taken overseas for events without using a carnet, and then reimported by obtaining a Vehicle Import Approval which is granted automatically. The new laws will enable to Minister to exercise sole discretion and refuse re-importation, leaving vehicles stranded overseas with no appeal process – never to be imported into Australia. There are also concerns that the importation of low volume and bespoke components for our classic and vintage vehicles may also be adversely impacted under the proposed changes.

More information is available from the Australian Government, <u>CLICK HERE</u>

Thanks to the Vintage Car Club of Queensland for this information

## **REMEMBER MORNING PRACTICE?**

An OVR exclusive, from David Wright, IOM

For some it will be a fading memory and for others it is an aspect of the Isle of Man TT known only from hearsay, but 2018 sees the fifteenth anniversary of the last early morning practice sessions at the TT and MGP.

Loved by some, disliked and even loathed by others, morning practice was part of the Tourist Trophy races right from their outset in 1907. Indeed, dawn outings were the only ones available to riders up until 1937 when the first evening practice was held. In the earliest days practice extended over two weeks. Yes, that meant two weeks of very early rising if you were a marshal, and the unwelcome aspect of such an early start was made worse by the fact that whereas in later years riders were despatched at 5.15 am, during the early decades the first man was on his way at 4.30 am.

In those early years, Douglas was the centre of TT activity but not all the early race teams stayed there, with Triumph and Levis taking accommodation in Peel and Scott choosing Ramsey. For their convenience, riders were permitted to join practice sessions at Ballacraine and Ramsey. However, it was not only riders who could join at such spots, because before 1928 the roads of the TT Course were not closed to ordinary traffic during practice. It is difficult to imagine, but horse-drawn carts, lumbering lorries, cyclists, etc, could use the roads to go about their normal business. It was a recipe for disaster and in 1927 Archie Birkin was killed when he swerved to avoid a fish-van and crashed, just outside Kirk Michael. Many now know the spot as Birkin's, while to others it is Rhencullen. Thereafter, the Road Closing Orders which reserved the exclusive use of the roads for competitors during racing, were extended to cover practice periods.

From 1928 the roads were closed by the passage of an official car which did a complete lap. A report from 1936 - by which time practice had been reduced to nine morning sessions told that Jack Williams was first in the queue of starters and when the course car arrived back at the Grandstand he was told: "good visibility, lots of wind and millions of rabbits". As first man and unpaid rabbit scarer, he left at 4.33 am. Local hotels made special arrangements to cater for such early risers at TT, the popular 'Falcon Cliff' in Douglas advertising: "guaranteed practice calls at 3.45 am with refreshments".

Such early morning proceedings were wearying, not only for those connected with the racing, but also for local inhabitants. Few riders had vans in those days and sleep would be shattered by the sound of racing bikes being ridden to the Start. Indeed, the noise in some of the enclosed back-alleys of Douglas must have been like the worst thunderstorm, as riders bump-started and blipped their bikes in the early dawn. Then, for the many people living within earshot around the 37<sup>3</sup>/<sub>4</sub> mile course, something like a Manx Norton going past at full-bore was guaranteed to provide an unwanted wake-up call.



A cautious G Clark (Vincent) rounds a spectator-free Creg ny Baa, during a wet early morning practice session for the 1953 Clubman's TT.

Early morning rising was a requirement for all involved: riders,

marshals, officials and spectators. Not everyone found it easy and Travelling Marshal of the early 1950s, Len Parry, took unusual precautions to ensure that he woke on time. Upon retiring to bed at Mrs Cringle's 'Studley House' establishment on Douglas Promenade, Len would tie a piece of string around his foot and lower the other end out of his front bedroom window. Fellow Travelling Marshal and guaranteed early riser, Fred Hawken, would give the string a tug as he passed on the way to where he garaged his bike.

Legend says that, in later years, a few riders, some star names amongst them, would finish a night on the Town at the Casino and go straight from there to ride in morning practice.

In their last years of early morning use, roads were closed at 5.00 am by virtue of the official Road Closing Orders and the first rider was despatched at 5.15 am - slightly later at the MGP. Being up so early presented an unfamiliar world to many, but even experienced riders were shocked when they read the information board displayed before one morning practice at the MGP. It told them that conditions were generally good "except for frost here and there".

After the introduction of the first evening practice in 1937, they gradually increased in number and morning ones reduced. Strangely, some riders vied for the 'honour' of being first away in morning practice and amongst the most successful in immediate pre- and post-war years was privateer Les Higgins. It was Les who was first on the line with his Velocette on the morning of Monday 29th May 1947, for what was the first post-war TT. It was a nostalgic moment for him and for some of those watching, because he had been first man away in practice for the last TT meeting before war broke-out in 1939, eight years earlier.

Nowadays, the first practice session is held on a Saturday evening, but for many post-war years it was on Monday morning. Everyone went out together in those days, so newcomers and old hands would be up at an early hour, climbing into cold, stiff leathers and heading for the Start in the near dark. After the bustle of scrutineering and in the chill of a just breaking dawn, they were despatched on their high-speed laps.

Hardy spectators would also be out, for they could easily find themselves an empty viewing spot, sit listening in the silence of the Manx countryside and then, faintly, pick up the distant sound of a racing motorcycle. It was an experience unique to the Isle of Man. The sound would come ever closer, until machine and rider leapt into view, followed by many others; for practice could be busier than a race.

Travelling Marshal 'Kipper' Killip rounds the Gooseneck, in front of a few hardy earlymorning spectators.



In their last few years of use, morning sessions were reduced to three (Monday, Wednesday and Friday) with the option to include Saturday if necessary, and then to just Monday and Wednesday, with Friday in reserve. They remained unpopular with some riders, a few of whom always gave them a miss, with even more doing so if a look through the bedroom curtains at 4.30 am showed it to be wet. However, most recognised that they still offered track time, to aid course-learning and machine set-up, so half-asleep riders, mechanics and helpers would make their way to the Start area at the Grandstand. As ever, marshals and officials could not pick and choose, for they had to be on station whatever the weather!

Come 2004 and morning practice no longer featured at the TT and MGP, although the organisers had a couple of emergency sessions reserved in case they lost any evening ones. Mixed reasons were given for dropping them. These included claimed difficulty in getting sufficient marshals, together with some pointing of fingers at ever increasingly specialised tyres that were said to be unsuitable for the mixed road conditions which could be found at such early hours.

Attempting to compensate for the time lost by the dropping of morning practice, evening sessions were extended slightly into the gathering dusk and practice opportunities were provided after race-days. That is the situation which prevails today.

The topic of morning practice divided opinion amongst the racing fraternity, for almost the hundred years in which it was used. Now it is just a memory and a part of Island racing that has gone for ever.

\_\_\_\_\_

### For a look at the building of Triumph Motorcycles in the 1930's

Use this link: <a href="https://www.youtube.com/watch?v=L40MaCjqY5w">https://www.youtube.com/watch?v=L40MaCjqY5w</a>

| 2018         |  |
|--------------|--|
| August 07-31 | Australian National VOC Rally, to be held at the Maroochy River Resort in      |
| August 27-51 | Queensland. Contact <u>kevinfowler2@bigpond.com</u> for more info              |
| Sect 19 04   | VOC Austria Rally. Said to be the best ever – too good to miss. Contact Michi  |
| Sept 10 - 24 | for more info <u>schartner.m@sbg.at</u>  |
| 2019         |  |
| March 22 -24 | VOC NZ 2019 Annual Rally @ Otago. Email <u>beatim@xnet.co.nz</u> for more info |
| June 3 10    | VOC International Rally; Belgium and Austria. More info to follow also see     |
| Julie 3 - 19 | MPH  |
| 2020         |  |
| the          | International Jampot Rally in Nelson, New Zealand for AJS & Matchless bikes.   |
| tba          | Contact <u>nipper@nipper.net.au</u>  |

# Maintenance Miscellanea:

# Setting Up a Comets Timing Case

**Initial setup** – at this stage do not worry about installing any shims.

- 1. Install the Dynamo/Alton lipped seal. If you intend to use the original Miller Dynamo you should install the lipped seal, part number E224. If you intend to install an Alton then you need to fit a lipped seal type 18-35-7 available from any reputable bearing supplier. These seals need to be installed with the garter spring side facing INTO the timing case.

- 2. Seal Position
  - a. DYNAMO: The FRONT (the side with the spring) of the seal MUST positioned around 1/16" below the timing case (inside) face of the crankcase so allowing the seal to bear

on the larger diameter portion on the back of the Dynamo pinion. Install the Dynamo being sure to get the drive shaft central in the lipped seal. You will need to slip the drive gear, E228 onto the Dynamo shaft to guide you. The shoulder on the back of the drive pinion MUST BE CENTRAL in the lipped seal to avoid subsequent oil leaks from this area.

- b. ALTON: The back of the seal MUST positioned around 1/16" below the outside face of the crankcase so allowing the seal to bear in the larger diameter portion of the Alton drive shaft and the body of the ALTON to mount flush against the outside of the crankcase. Install the Alton being sure to get the larger diameter portion of the drive shaft (closest to the ALTON case) central in the lipped seal. The drive shaft MUST BE CENTRAL to avoid subsequent oil leaks from this area.
- 3. FINALLY: Now fit and tighten up the 2 nuts retaining ET176/2 the dynamo clamp. Make a second check that the drive shaft is indeed central in its lipped seal if in doubt, repeat this section.

#### Valve Lifter

4. Installation and setting up of the Valve Lifter is described in detail in OVR Edition 45, available in the OVR Archive.

#### **Positioning of Large Idler Bush**

- 5. Put the camshaft on its spindle
- With the Large Idler mounting boss nuts loose (all 3) fit the Large Idler
- 7. Adjust the position of the large idler for minimum backlash of the cam and Dynamo gears.
- 8. Next fit the timed breather onto its shaft and make sure it's not binding on the large idler – a bit of backlash with this part is not of concern so don't worry if it feels a whisker loose. It is a concern however if it's very tight or difficult to slide on over the teeth of the Large Idler.



- 9. Only if you cannot get the breather to slide onto its spindle with its drive pinion engaging smoothly with the large idler THEN will you need to slacken off the 3 retaining nuts on the Large Idler boss then reposition the Large Idler Boss for nil backlash on the camshaft gear and the smallest possible backlash on the Dynamo/Alton and breather gears. Otherwise go onto the next step.
- 10. Rotate the large idler at least 10 times making sure there are no tight spots. If you do find a tight spot then repeat the previous and this step as well till you get to the point where there are NO tight spots. DO NOT apply any thread lock to the large idler boss nuts just yet.
- 11. Time for a well-earned break.

#### Select half time pinion

12. Select the correct size of half time pinion. The half time pinion is available in sizes from 0.010" undersize (smallest) to 0.010" oversize (largest). If you are fortunate your local section or an obliging chum *may* have a full set of the sizes available for you to 'try out' so you can be sure to obtain the correct one for your motor. You need to fit the one that provides the absolute minimum of backlash while not actually having any tight spots on the Large Idler. Once you have fitted what you think is the correct size – and at this point it is not necessary to fit the key into the mainshaft keyway, just allowing the half time

pinion to rotate on the mainshaft if it want to rotate everything for around 10 rotations of the large idler seeking out any tight spots between the large idler and the half time pinion. If you do find a tight spot then repeat this step, this time with a slightly smaller half time pinion. You only need to fit the ½ pinion locking key when setting up the valve timing – as described in OVR # 17 and also OVR #39.

13.Once you have completed the above you will have positioned your Dynamo/Alton in the optimum spot for its lipped seal to work efficiently, you will have the Large Idler Boss



in the best position to ensure overall minimum backlash and you will have found the correct half time pinion for your motor.

14.Now gently remove the large idler then remove just ONE of the nuts retaining the large Idler Boss in position. Apply some Loctite Blue to the thread then refit and tighten the nut then, just ONE at a time, do the same for the other two nuts. Please don't punch lock anything; it ruins parts and makes disassembly difficult, Loctite works! Reinstall the large idler.

#### And Another Thing

15.A problem you run into with punch locked studs is the fact that many times the stud comes out of the case instead of the nut corning off the stud. If/when this occurs, take the stud out of the case, hold it in a vise or Vise grips on the unthreaded portion and take the nut off. Dress the punch damage with a file, making sure the nut will start on easily. Use Loctite cleaner to clean the threads. Now put the stud back into the case with red Loctite 263. Red Loctite is much stronger than the blue Loctite that you use on nuts. This way the nut will always release, leaving the stud in the case where it should be. Don't Loctite the oil-feed shaft nuts--they are self locking nylock and won't 'unscrew anyway.

Finally over 30 years ago Vincent enthusiast W.I. (Rip) Tragle described how to complete the setup of a Vincent twin timing case and it has application to singles as well; what follows is a precis of his original work.



### RIP TRAGLE'S VINCENT TIMING CASE REVIEW

**Objectives:** 

1. To remove all excessive clearances in the timing chest to include pinion to gear clearance, end float in cams, idler gear and followers. For all but the timed breather the end float should be within 0.004 to 0.008". The timed breather needs a minimum of 0.015" end float to allow for its aluminium tube to grow in length when in service.

2. To insure positive follower to cam relationship (in other words the followers must run dead centre on the cam lobes and stay that way.)

Required Materials :

1. Good Cams--with bushes that fit the spindles .0005-.0015". New bushes can be found at a bearing supply house and can be honed to size by any good machine shop.

2. Good Spindles--No ridges at all--no wear.

3. A round Idler Gear - check yours. It must be no more than 0.002"out of round—and even 0.002" is a bit too much.

4. Good cam followers- And if required the followers must be re-ground true to the pivot hole. Also many followers have oversized or out of round spindle holes--throw them away !

6. A good 1/2 Time pinion Gear--The 1/2 Time Pinion comes in several over-under sizes ...you won't know which size you need until you set up your Cams & Idler Gear.

7. Three packages of PSW Brand Arbor Shims:

3/8" x 5/8" UPC # 25120; <sup>1</sup>⁄<sub>2</sub>" x <sup>3</sup>⁄<sub>4</sub>" UPC # 25140 and 5/8" x 1" UPC # 25160

Each package contains a wide selection of hardened shims of various thicknesses. Manufactured by Precision Steel Warehouse, Inc., 3500 N. Wolf Rd., Franklin Park, IL 60131.



8. Loctite, you will need the first 3 and possibly the last item as well. Blue Loctite 243, medium strength for nuts

Red Loctite 263, high strength stud lock

Loctite Cleaner 7070, cleaner and degreaser

Grey Loctite 660, Metal press fit repairer (for slightly loose spindles)

#### **Procedures:**

**Start with the cams.** Place cams on shafts with a washer under the spindle nut to take the place of the steady plate. The thickness of this washer is meaningless what you want to discover is the end float of the camshaft with the E95 in place, you want to reproduce its actual running condition. There are two ways to get minimal end float. Shim the cam at the rear with the 1/2'' arbor shims or move the spindle. If the end float is too tight you have no option other than to draw the spindle out slightly which is done by putting large washers on the cam then using the spindle nut as a puller, works great. It's also a test for loose spindles which can be fixed well with grey Loctite 660.

Now that correct cam end float his been obtained it's time to assemble the followers.

**Cam Followers:** With the cams loose on their shafts (you have to be able to take them on/off the shafts) put one pair of followers on their spindles as described in the Vincent books--do the above thing to the cam follower spindles. Put a temporary washer in place to act as the steady plate and tighten the follower spindle nuts down. (Remember that with a twin to remove and insert your rear intake follower your compression release rod must be removed). Slip cam on its spindle and, if your heads are off, look down through the push rod tube holes and see if or not your followers are running dead-centre on your cam lobes. If the heads are on, you have to use a flashlight and lots a neck bending to see around the camshaft gear. If I can't look down through the push-rod holes I judge the cam/-follower relationship by lining up the edge of the follower with the edge of the cam lobe. It's helpful here to have a pointed rod to poke in there and actually feel for any over-lap one way or the other. The object here is to either add to the thickness of your ET98s or subtract from them to get your correct case-to-follower distance with perfect cam/follower alignment. This is where you use your assortment of 3/8" arbor shims.

After you've established correct follower placement you must reassemble all the spacers ET99, ET99/1, ET99/2, etc. then, with the washer that acts as the steady plate--tighten the spindle nut and check end float. Remember now that the follower is spaced to the case and you mustn't change that spacing. All spacing for end float must be done on the outside of the followers, between the followers and the steady plate. If after tightening the spindle nuts the follower is jammed you must take material off your long spacer (ET99,/1,/2) until the long spacer will turn with the nut tightened but having negligible end float. You don't want the longer spacer to drag, but you don't want excessive end float either. If you do have end float greater than 0.004°, you use your 3/8° arbor shims wherever they will fit on the spindle without fouling the camshaft gear wheel.

Your front exhaust follower is a special case due to its location, You do same as above--the trick here is to "glue" your arbor shims to each side of the depression in the case with light grease, This holds the shims in place while you carefully insert the follower between them and insert the ET30/3 spindle snug it down and check side slop--KEEP WORKING UNTIL YOU GET IT RIGHT--WITH EACH CAM FOLLOWER DEAD CENTER ON THE CAM LOBE.

**Next:** With cams and followers in place check the end float of large idler; you will need to shim this (if necessary) to run true with the cam gears.

Timed Breather and Intermediate Idle Gear (singles only) may also need to be shimmed in order to realise the desired end float.

**Finally:** Only now are you ready to set your Valve timing – see OVR #'s 17 and 39 on ways to do this; and for a guide to setting your Breather timing see OVR # 18; All in the OVR Archive.

# 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. Re-torque 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, ET1801 and 2 each ET181. US\$52.46. Also ET 140 Clutch cover gasket available, US\$14.56

**Post war Comet and Meteor kit** includes (pictured): ET 106, ET180, ET182, ET181, PD14/1, and ET106. US\$52.00

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 <u>phpeh@hotmail.com</u> Located in Chicago IL USA.

### **Gingin Outing**

The British Car Day at Gingin in Western Australia is a major annual event for British car enthusiasts and I have had prior exposure through my association with the Aston Martin Owners Club. This year I thought it would be a good idea to see if I could get some Vincent motorcycles up there for the event and my suggestion was met with genuine enthusiasm by the organisers (thanks, Carrie!) who arranged for us to park out the front of the old railway station and across the road from the Gingin pub.



I got in touch with Frank van der Worm who has numerous contacts and I also had the VOC published riders list, and in the end we had a few willing participants. However, the participants were well outnumbered by those with prior arrangements, bikes not running, or overseas on holidays.

On the day we managed to get three Vincent's parked up at the Gingin railway station and Frank generously drove his extra special Ford S Series ute as the support vehicle.

We have plans to go again next year when we will hopefully have a few more riders on the day.

vailable Chicago

# Broadford, Australia 2018

a report from Alyn Vincent

Without doubt a major Australian Vincent event. Despite suggestions that the lack of 'suitable' accommodation would diminish the Vincent content, it was the biggest single show of Vincents in Australia since the 2007 International Rally. Some people brought in more than four machines. Bikes not seen for decades were on display. This was all due to the outstanding efforts of Bob Allan and Jeffrey Richardson from the Vincent Owners Club. People made the effort to travel from just about all states and territories to attend what was in effect, a rally.









Photos courtesy of Don McInnes and Bob Allan.

Broadford was possibly the first time TWO father and son combinations rode out. Ken and Ryan Phelps plus Greg and Brad Burt both rode on Vincent twins. An added bonus for Greg and Brad was the generosity of Luis Gallur to allow them to ride his Grey Flash Replicas. With more power than a Black Shadow , the Grey Flah Replicas had already raced at the IOM and Phillip Island in the hands of Cam Donald and Beau Beaton. The lucky bastards!!!



What's that Skippy?

It's got What ?

A 40T rear sprocket: Well that should get the jump on the competition !

The Motor Cycle, August 11th, 1949 114



# 998 c.c. Vincent-H.R.D

MERE mention of the name "Black Shadow" is enough to speed the pulse. Since the machine's introduction last year as a super-sports brother to the already famous Rapide, the sombrely finished "Shadow" has achieved wide distinction. It is a connoisseur's machine: one with speed and acceleration far greater than those of any other standard motor cycle; and it is a motor cycle with unique and ingenious features which make it one of the outstanding designs of all time. So far as the standards of engine performance, handling and braking are concerned—the chief features which can make or mar an otherwise perfect mount—the mighty Black Shadow must

Every line of the 998 c.c. vee-twin Black Shadow is suggestive of powerful urge. Cruising speed is anything up to 100 m.p.h.!



be awarded 99 out of 100 marks; 99 because nothing, it is said,

be awarded 99 out of 100 marks; 99 because nothing, it is said, is perfect The machine has all the performance at the top end of the scale of a Senior T.T. mount. At the opposite end of the range, notwithstanding the combination of a 3.5 to 1 gear ratio, 7.3 to 1 compression ratio and pool quality fuel, it will "chuff" hap-pily in top at 29-30 m.p.h. Indeed, in top gear without fuss, and with the throttle turned the merest fraction off its closed stop, it will surmount average gradients at 30 m.p.h. In Britain the machine's cruising speed is not only limited by road conditions, it is severely restricted. It is difficult for the average rider in this country to visualize a route on which the

An Ultra-high Performance Mount for the holding and a Cruising

when the attempts were made to obtain the maximum speed figures. Steering and road-holding were fully in keeping with the exceptionally high engine per-formance. A soft yet positive movement is provided by the massively proportioned Gir-draulic fork. There is a "tau-draulic fork. There is a "tau-the condition of the road surface. Corners and bends can be taken stylishly and safely at ultra-high speeds. There was no chopping, no "sawing"; not one of the faults which are some-times apparent on high-speed machines. Bottoming and con-sequent clashing of the front fork were, however, experienced once or twice. Low-speed steering was reather heavy. Any grumble the critics may have had with regard to the hydraulic damper between the spring plunger units. So efficient is the rear supension has been met by the fitting of the hydraulic damper between the spring plunger units. So efficient is the rear springing now, that never once was the rider bumped off the Dualseat or forced to poise on the mark, only the absence of road shocks gave indication that there was any form of rear-springing, such was the smoothness and lateral rigidity. Straight-ahead steering was in a class by

indication that there was any form of rear-springing, such was the smoothness and lateral rigidity. Straight-ahead steering was in a class by itself. The model could be steered hands off at 15 m.p.h. with engine barely pulling or just as easily at 95 to 100 m.p.h. The steering damper was required only at speeds over 115 m.p.h. Used in unison, the four brakes (two per wheel) provided immense stopping power. Light pressure of two fingers on the front-brake lever was sufficient to provide all the braking the front wheel would permit. One of the front brakes, incidentally, squealed when in use. The leverage provided at the rear brake is small, and the brake operation was heavy.

The compact engine-gear unit remained ex-ceptionally clean throughout the 700-mile test. Only a faint smear of oil and slight discoloration of the front exhaust pipe close to the port indicated that the model had been ridden at all

![](_page_23_Picture_21.jpeg)

The Motor Cycle, August 11th, 1949 175

# Black Shadow

#### Connoisseur : Magnificent Steering and Road-Speed of Up to 100 m.p.h.

Engine starting from cold was found difficult at first. Cold starting was certain, however, provided that only the front carburettor was flooded and the throttle control was closed. When the engine was hot, there was no difficults. The acold or warm start the engine would immediately settle down to a true chuff-chuff tickover. Throughout the ourse of the test the tickover remained slow, certain and one-hundred per cent reliable. No matter how hard the previous miles had been, the twistgrip could always be rolled back against its closed stop with a positive assurance that a constant tickover would result. The engine was only tolerably quiet mechanically. At idling speeds, there was a fair amount of clatter, particularly from the valve gear. But so far as the rider was concerned all that remained audible was the pleasant low-toned burble of the exhaust and the sound of the wind in the rider's ears. Bottom gear on the Black Shadow is 7.25 to 1. Starting away form rest can seem at first to require a certain amount of still in handling the throttle and clutch. The servo-assisted cutch had a tendency to bite quickly as it began to engage.

#### The Riding Position

The riding position for the 5ft 7in rider who carried out the greater part of the test proved to be first-class. The saddle height is 31in which is comfortable for the majority of riders. The footrests are sufficiently high to allow the rider complete peace of mind when the machine is heeled over to the limit, and wave sufficiently how to provide a comfortable position for the ere sufficiently low to provide a comfortable position for the

were sufficiently low to provide a comfortable position for the 5ft 7in rider's legs. Now famous, the 25<sup>1</sup>/<sub>2</sub>in from tip to tip, almost straight, Vincent-H.R.D. handlebar provides a most comfortable wrist angle and a straight-arm posture. All controls are widely adjustable—the gear pedal and brake pedal for both height and length. Both these controls, incidentally, move with the foot-rests when the latter are adjusted. The gear change was instantaneous but slightly heavy in operation. Snap gear changes could be made as rapidly as the controls could be operated. The clutch freed perfectly throughout the test and bottom gear could be noiselessly

Extreme lateral rigidity is a feature of the massively - propor-tioned Girdraulic fork. The trail can be altered for sidecar work in a few minutes

![](_page_24_Picture_11.jpeg)

selected when the machine was at standstill with the engine idling. However, because of the pressure required to raise the pedal it was sometimes necessary to select neutral by means of the hand lever on the side of the gear box, and also to engage better grave band

bottom gear by hand. In the 700 miles of the road test the tools were never required. In the 700 miles of the road test the tools were never required. In spite of the high speeds there was no apparent sign of stress. Primary and rear chains remained properly adjusted. There was very slight discolouring of the front exhaust pipe close to the port and a smear of oil from the base of one of the push rod tubes on the rear cylinder. The ammeter showed a charge at 30 m.p.h. in top gear when all the lights were switched on and the road illumination was better than average. An excellent tool-kit is provided and carried in a special tray under the Feridax Dualseat. the Feridax Dualseat.

There are many ingenious features of the Vincent-H.R.D. which brand it as a luxury mount built by highly skilled engi-neers who at the same time are knowledgeable motor cycle enthusiasts. The Black Shadow finish is distinctive, obviously durable and very smart; and only a minor reason why the "Shadow" attracts a crowd of interested passers-by wherever it is seen! it is seen!

### Information Panel

#### SPECIFICATION

- ENGINE: 998 c.c. (84 x 90 mm) vee-twin high camshaft o.h.v. with gear box in unit. Fully enclosed valve gear. Dry-sump lubrication: tank capacity, 6 pints. Four main bearings. Roller-bearing big-ends. Specialloid pistons. Cast-iron liners shrunk into aluminium-alloy cylinder barrels. Aluminium-alloy cylinder heads. CARBURETTORS: Amal: twistgrip throttle control and twin-handlebar-mounted air levers.
- TRANSMISSION: Vincent-H.R.D. 4-speed gear box with positive-stop foot control. Gear ratios; Top, 3.5 to 1. Third, 4.2 to 1. Second, 5.5 to 1. Bottom, 7.25 to 1. Servo-assisted clutch. Primary chain, jin pitch triplex, enclosed in aluminium-alloy case. Secondary chain, i & jin with guard over top run, R.p.m. at 30 m.p.h. in top gear; 1,392
- IGNITION AND LIGHTING: Lucas magneto with auto-advance. Miller dynamo : 7in head lamp : stoplight. Dynamo output, 50 watts. FUEL CAPACITY : 3ª gallons.
- TYRES : Front, 3.00 x 20in. Avon ribbed : rear, 3.50 x 19 Avon studded. BRAKES : Twin on each wheel : drums 7in diameter x 7 in wide.
- SUSPENSION : Girdraulic front fork with twin helical compression springs and hydraulic damping ; link action ; pivot-action rear springing hydraulically damped. WHEELBASE : 56in. Ground-clearance, 5in unladen.
- SADDLE : Feridax Dualseat. Unladen height, 31in.
- WEIGHT : 476 lb fully equipped and with approximately 3 gallon of fuel.
- PRICE : £315 plus purchase tax (in Britain only) £85 Is. Price includes Smith's speedometer. **ROAD TAX :** £3 15s a year (£1 0s 8d a quarter). Half rate if used only on standard ration.
- DESCRIPTION : The Motor Cycle dated February 19th, 1948.

![](_page_24_Picture_28.jpeg)

| MEAN I   | AXI                                     | MUM                                | PERF  | ORM   | ANCE DA<br>Bottom : 68<br>Second : 87<br>Third : 110<br>Fop : Not       | TA<br>m.p.h.<br>m.p.h.<br>m.p.h.<br>obtained.                       |  |
|--|---|------------------------------------|---|---|---|---|--|
| ACCELE<br>Bottom<br>Second<br>Third<br>Top<br>Speed a<br>Time to | RATI                                    | ON :                               | <br><br>ter-mil                                     |   | 0-30 m.p.h.<br>2.4 secs<br>3.6 secs<br><br>n rest : 96 n<br>mile : 14.2 | 20-40 m.p.h.<br>2.8 secs<br>4.2 secs<br>5.8 secs<br>n.p.h.<br>secs. | 30-50 m.p.h.<br>3 secs<br>3.4 secs<br>4.8 secs<br>7.6 secs |
| PETROL<br>91.2 m.<br>BRAKIN<br>TURNIN<br>MINIMU<br>WEIGHT        | CON<br>.g. /<br>G : Fr<br>IG CI<br>IM N | At 50 m<br>om 30 r<br>RCLE<br>ON-S | PTIO<br>1.p.h.,<br>n.p.h.<br>: 14<br>NATO<br>: 0.48 | N : A<br>86.4 r<br>to rest<br>ft.<br>CH SI<br>Ib. | At 30 m.p.h.<br>n.p.g. At 6<br>., 26ft 6in (su<br>PEED : 21             | ., 96 m.p.g.<br>60 m.p.h., 70<br>urface, coarse,<br>m.p.h. in top   | At 40 m.p.h.,<br>m.p.g.<br>dry chipping).<br>gear.         |

# 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 refering 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 <a href="mailto:nvidean@optusnet.com.au">nvidean@optusnet.com.au</a>

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

**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 <a href="http://www.thevincentparts.com">http://www.thevincentparts.com</a>

**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 <u>steve@conway-motors.co.uk</u>

**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 <u>www.fastlinespokes.com.au</u> 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 <u>www.unionjack.com.au</u>

**Paul Goff,** UK: A massive range of electrical spares and replacements including 6 and 12V quartz Halogen bulbs, LED lamps, solid state voltage regulators and lots lots more. Ships Worldwide. PayPal accepted. See Paul's website for more information <u>www.norbsa02.freeuk.com</u>

**VMS**, Holland: 2x2 leading shoe brake kits for Vincents; high quality 30mm wide 4 leading shoe system. Email <u>vspeet@vmsmetaal.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 <u>pontricoul@gmail.com</u> 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 <u>phpeh@hotmail.com</u> 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. <u>http://www.classicfasteners.com.au/</u>

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

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 <u>www.keables.com.au</u>

### 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 <u>grantwhite11@bigpond.com</u>

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 <u>alan@aceclassiscs.com.au</u>. 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 <a href="http://www.balserv.com.au/">http://www.balserv.com.au/</a>

**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 gualmag@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 total professionals when it comes to painting. Expert service, quick turnaround and fair prices. <u>http://www.melbournemotorcyclefairings.com.au/</u>Ph 03 9939 3344

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