



The Oz Vincent Review

Edition #82, December 2020



Photo courtesy Jean Pirot

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Welcome to the latest edition of OVR where the front cover depicts Jean Pirot and David Lancaster on a grey Sunday morning in London, 2016 with a Vincent Comet, the bike on which the Vincent Twins were modelled. A classic bike and a couple of classic chaps in classic attire!

COVID remains a major challenge world-wide and I continue to urge all readers to take sensible precautions to preserve their lives and the lives of those around them. There are no second chances!

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

Martyn

Melbourne, Australia.

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Letters to the Editor

Hi Martyn,

I have attached a couple of photos that may be interesting in the light of the Frank Sinclair story. One is just an explanation of the actual photo taken at Rowville. #69 is George Murphy (Norton) and #66 Bill Day (Brough)

Cheers, Jim Scaysbrook, Editor Old Bike Australia.
www.oldbikemaq.com.au



On the Line at "Rowville"
Sidecar Class TT Road Race
02 0
CLAREX-H.R.D Special on the
extreme LEFT. - Out-Right
winner broke Lap-Record.

Hi Martyn

Thanks for the ever more interesting OVR's. you have hit onto areas where MPH has been lacking and the personal stories are sometimes inspiring, particularly the one about my mates Bill Forbes and Bob Satterly. What characters! Bob and I had hoped to catch up at the Oz rally in QLD but alas it was not to be.

I'm writing to ask you to place an advertisement for my bike. I have decided that it wouldn't be prudent for me to continue riding it. I was laid up in hospital in the New Year crippled with arthritis in my spine. I have had various treatments and exercise routines since. Generally they have returned my mobility but my strength and stamina have not recuperated. My doctor says not to expect an improvement. I last rode the vinnie in February, it was really enjoyable but exhausting and I'm not willing to inflict more damage on myself or the beast.

Regards, Ray Schriever, Australia

[See Rays Advert in Buy, Swap n Sell, in this edition , Martyn]

Installation Sequence for a Comet Timing Chest.

From my review of available literature, the original setup is as follows, identifying components starting at the inside face of the timing case and ending at the inside face of the steady plate.

In an ideal world you set up the spindle heights when the engine cases are separated and where you can heat the cases to around 200 degrees C to allow spindle heights to be adjusted. But for the home workshop this is frequently not possible SO before you start you need to check and record the height of each spindle relative to the steady plate.

1. Spindle Height Measurement

Get a good straight edge and place it across the outer face edges of the timing case, then measure from the straight edge to the shoulder on each spindle, recording the result. For a true flat install of the steady plate, all spindle shoulders, with as applicable, thrust washers ET98/1 and ET173 in place, should be the same height. It is not the absolute height that matters, what matters is the heights relative to each other.

Identify the resulting highest spindle and then calculate and record the difference of all others to that. When you come to installing the steady plate you may need additional 5/16" and possibly 1/4" ID shims equal to those differences, to be placed against and just before the steady plate goes on.

2. Large Idler

First in is ET51/2 Idler Gear Boss Assembly, which is held in place by 3 off 1/4 inch plain washers #92 and 3 off 1/4" BSF nuts #91
Only If using alloy large idler fit ET173/1, else leave this thrust washer it out.
Next is the large idler assembly
Then ET173
And eventually the steady plate.

3. Inlet Cam Follower - *Hint:* before installing the cam followers put gloss white paint (nail polish?) around the outer edges of the pushrod cup to better see it when installing push rods as you peer down the pushrod tubes.

First is ET98 thrust washer
Then ET29 cam follower
Next is ET99, the cam follower spacer, inlet
Then ET98/1 thrust washer
And eventually the steady plate

4. Exhaust Cam Follower

First is ET98 thrust washer
Then ET29 cam follower
Next is ET99/1, the cam follower spacer, exhaust
Then ET98/1 thrust washer
And eventually the steady plate

5. Camshaft

First is a E95 thrust washer
Then the ET47/1RS, 2RS or 3RS camshaft assembly
Followed by E95 Thrust Washer
Then ET98/1 thrust washer
And eventually the steady plate

6. Cam follow centralisation

Cam followers should run central on their respective cam lobes. If they do not then the cam followers need to be shimmed so that they are. If you do alter the cam follower shim arrangement be sure to repeat step 1.

7. Small Idler E50/4 that drives the magneto.

First on is a E95 thrust washer
Next is the small idler E50/4
Then ET 173/1 thrust washer,
Followed by ET173 thrust washer
And eventually the steady plate

8. Breather

First installed is a E95 thrust washer
Then the ET141 breather assembly
Followed by a E98/1 thrust washer
And eventually the steady plate

9. Steady Place Distance Piece ET162

There are 2 of these (3 in a twin), installed without any shims, however. If the distance pieces are too long to allow a flat steady plate install a bit of careful filing will reduce the length. If they are too short ¼" ID shims will be needed.

Thrust Washer Details

E95	½" x 3/8",	nominal 0.025" thick 3 pcs
ET98	5/8" x 3/8",	nominal 0.025" thick 2 pcs
ET98/1	5/8" x 5/16",	nominal 0.025" thick 4 pcs
ET173	1" x 5/16",	nominal 0.070" thick 2 pcs
ET173/1	7/8" x 5/8",	nominal 0.027" thick 1 pcs, use only with alloy large idler

BUT

10. the end float of all but the distance pieces needs to be set with shims on the steady plate side to give an end float of 0.004" to 0.008" EXCEPT for the breather that requires a minimum end float of 0.015" .

To check end float, install the components in the sequence listed but in place of the steady plate fit a large OD 5/16" washer (as a dummy steady plate) and then the retaining nut then measure and record the end float. If it is outside of the desired range add or remove shim thickness adjacent to where the steady plate would be. If the end float is too tight you have to draw the spindle out slightly which is done by putting large washers on the component then using the spindle nut as a puller works great. But you will need to subsequently repeat step 1.

11. Steady Plate The final step is to install the steady plate but not before you have placed any required ADDITIONAL shims up against the inner face of the steady plate that you identified thru the process.



OVR Event Schedule

Nov 28, 2020 thru Apr26 2021: Exhibition - The Motorcycle Design~Art~Desire at GOMA more info here <https://www.qagoma.qld.gov.au/whats-on/exhibitions/the-motorcycle>

Dec 13, 2020: Vincent Riders Victoria Xmas Gather at Llanely, Victoria, Lunch \$20 per person

September 2021: Australian National Vincent Rally, South Australia

March 2022: Tassie (Australia) Tour around Tasmania, 10 days duration www.tassietour.info

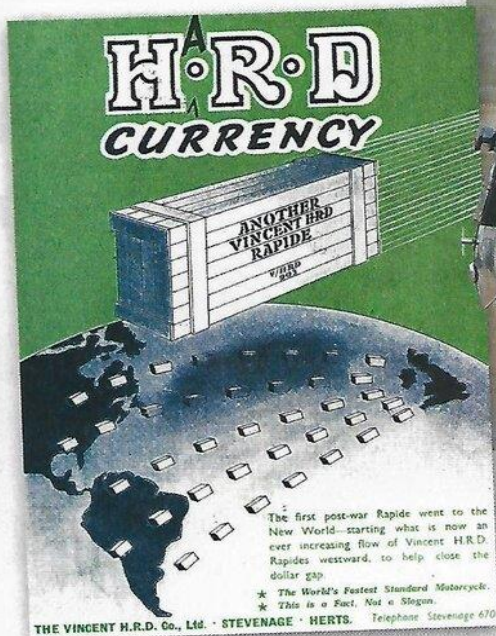
The following item is reproduced with the kind permission of Jonathan Lambley, VOC Machine Researcher.

RealClassic



You've saved your pennies and you're ready to take the plunge with perhaps the most significant motorcycle purchase of your entire life. How do you avoid being ripped off?

Jonathan Lambley, VOC Machine Researcher, explains...



Export or die, as the post-war slogan had it

Contrary to belief, a post-war Vincent motorcycle is not beyond the reach of normal people. They are expensive but, like anything in life, if you really want something then you can have it. This article will hopefully help you on your journey to



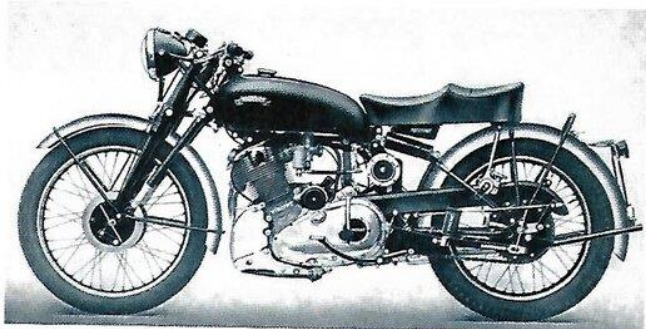
buying a Vincent and explain some of the pitfalls. The views and opinions expressed are my own, of course!

After WW2 Vincent-HRD resumed production with their new Series B Rapide which took the motorcycling world by storm. With its unit construction 1000cc V-twin engine and cantilever rear suspension, it was streets ahead of the competition. Within a couple of years, the Black Shadow, the fastest production machine in the world at the time, and the 500 single-cylinder Comet were launched. The world saw Rollie Free in his trunks ride a modified Black Shadow at

150mph on the Bonneville Salt Flats in 1948, and then everyone wanted a Vincent.

1949 saw the launch of the Series C models with the new Girdraulic forks, and the insignia changed from 'HRD' to 'Vincent'. In the background, the firm was already in financial trouble. In 1954 the enclosed Series D models were launched to rave reviews from the media, but a slump in sales exacerbated the factory's financial troubles. Despite trying to keep themselves afloat by producing military drones, lawn mowers and water scooters, the company ceased trading in 1956.

For nearly 20 years the Vincent Black Shadow remained the fastest production



Catalogue shot of a Comet; the affordable entry into the world of Vincent motorcycling *Possibly the most popular of the post-war twins. In well-used condition, too*

motorcycle in the world but, despite this, the value of Vincents diminished during the 1960s. They remained popular with club members, sidecar users, racers and for drag racing, where they proved to be remarkably successful. During the late 1970s Vincents came back into popularity and prices started to rise.

The Vincent HRD Owners club (VOC) was formed in 1949 and still thrives today. Owners come from all walks of life. Most are riders, some race or collect the machines, but they all have one thing in common: they love Vincent motorcycles.

I'm not an expert on Vincents or their value, but I own one and can offer a basic explanation of

the models and a guide to their value. One thing I do know is the importance of getting any Vincent verified before you purchase it. There's an ongoing problem of machines with restamped frames and engines, which I will touch on later.

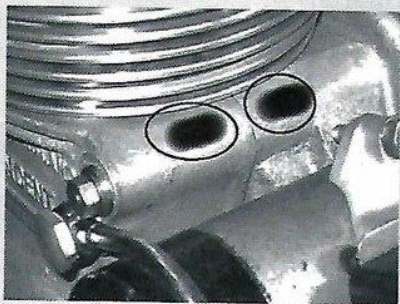
'How much is it worth, then?' A common question asked of Vincent owners which gets a bit tedious, because ownership is not about the money (not for most of us, anyway.) Like most things, the more rare they are, the more expensive they are. The most valuable

roadgoing Vincent is the pre-war Series A Rapide 1000, which can command a price of up to £250,000. Of the post-war machines, the Black Shadow currently sells for at least £65,000. Some of the rare post-war racers like the Black Lightning and Grey Flash can demand gargantuan prices. Rollie Free's modified Vincent Black Shadow is rumoured to have last changed hands for nearly £1.5million.

Back in the real world, I would expect to pay around £20,000 for a good post-war Comet; around £40,000 for a good Rapide, and at least £65,000 for a Black Shadow. An original, matching numbers machine with provenance and in exceptionally good condition could fetch up to ➤

THE VINCENT

THE NUMBERS GAME



It's crucial that you can find all the relevant numbers when considering purchase. This is where they live on a Comet's crankcase



Engine numbers can be found here



Crankcase halves are numbered in pairs. Look here on a Rapide



Front (or 'upper') frame numbers can be found here



Rear frames are stamped here. The VOC can tell you which engines and frames were originally assembled by the factory. Great chain adjuster, too



The first post-war twins continued the HRD branding. That changed later, of course

50% higher. Early or rare models go for a little bit more, non-matching numbers a bit less – and if they are rough around the edges then a lot less. It can be a nightmare to know what the correct value should be, so take along someone who knows what they are talking about, and tread carefully before you part with your hard-earned cash.

The Comet 500 is certainly within reach of the average motorcyclist. They are underrated and often overlooked, but they are without doubt a lovely machine in their own right. With its smaller engine, the machine is somewhat lighter than the larger Rapide, which results in a nimbler ride – great for

riding around the country lanes. Easy to start and ride, they are capable of 90mph – but most ride them at a far steadier speed. They are also easy to maintain for the home mechanic and, unlike the Rapide, the engine is of pre-unit construction.

The Rapide 1000 is an awesome bit of kit and a real 'top gear' machine with a unit construction engine, able to cruise along with today's traffic. They are a particularly good handling machine, even in towns, and the engine is very smooth in delivering its power. The Rapide shares the same braking system as the Comet, and for everyday use they are fine if they are maintained properly. However,

for serious high mileage touring many owners upgrade to disc brakes. They can be expensive to restore, but done properly they are easy to maintain, fairly easy to start and reliable. A good working knowledge of mechanics would be beneficial to your wallet but not essential.

The Black Shadow is of

QUICK LINKS

- VOC spares: vincentspares.co.uk
- Vincent-HRD OC: vincentownersclub.co.uk
- VOC machine registrar: registrar998@voc.uk.com
- VOC machine research: research998@voc.uk.com

course the most well-known model. Obvious differences include the black-painted engine and the iconic five-inch 150mph speedometer. However, the main difference is that the engine is in a higher state of tune than a standard Rapide, with larger carburettors, higher compression pistons and slightly different gearing. Like the Rapide, the Shadows are easy to ride in towns and handle very well. Top speed is about 125mph, as opposed to 110mph for the Rapide.

All three machines share the same chassis, with the Comet having a few minor differences. This kept things simple for production but, more importantly, gives any owner the option to put either engine in their machine, which has been done by many owners. They all have the same riding position, which is slightly high compared to other makes and takes some getting used to, but with the cantilever rear suspension it has a lovely feel.

Like all classic machines there are numerous modern upgrades available if you intend to regularly ride your Vincent, and spares are readily available. The common modifications are a multiplate clutch, electronic ignition, modern

August 6, 1953 MOTORCYCLING

No. 1
features that put VINCENT in a class by itself

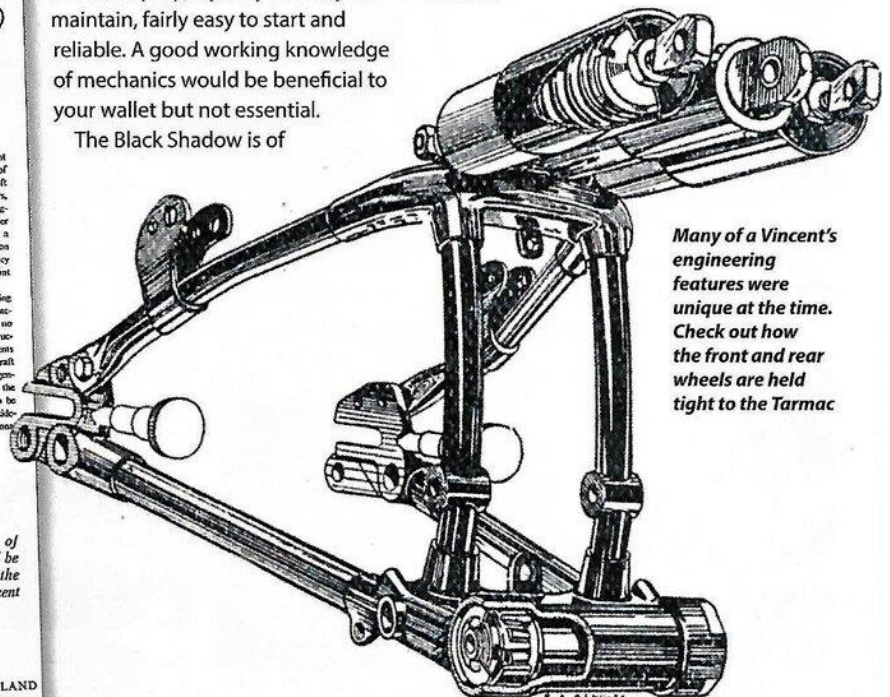
The unique Vincent Girder-like front fork incorporates the best features of telescopic forks, with their long soft rated springs and hydraulic dampers, giving a long smooth and gentle springing action, together with those of girder forks, which offer great rigidity, a more truly vertical springing motion and a great reduction in the tendency to "sink at the bend" when the front brake is applied.

The fork links swivel on self-lubricating bronze bearings running on hard, accurately ground spindles. There are no braced or welded joints in the construction, while most of major components are made from high grade aircraft quality light alloy forgings. An ingenious eccentric adjustment enables the fork trail and spring strength to be readily adapted for either solo or side-car use, without fitting any additional parts.

Motorcycles of the future will be judged by the standards set by Vincent today.

VINCENT

VINCENT ENGINEERS (STEVENAGE) LTD., STEVENAGE, HERTS, ENGLAND
Telephone: STEVENAGE 690-3



Many of a Vincent's engineering features were unique at the time. Check out how the front and rear wheels are held tight to the Tarmac

magneto, centrestand, alternator and even disc brakes. But many owners prefer originality, which can still be reliable.

The VOC Spares Company holds close to 800,000 items in stock, enough to build a complete bike, so there is no problem obtaining spare parts for your machine. They also sell Vincent machines on behalf of club members, which are checked by the VOC machine dating service.

Once you've found the Vincent you want, the real work begins. Vincents, like other classic motorcycle marques, suffer from restamped frames and engines. Most were done in the 1960s and 1970s when it was acceptable and common practice, but in the 21st century it presents a real problem – especially with machines of these values. Some people will go to great lengths to intentionally present a machine as the genuine article in order to take your hard-earned cash. So it's vital to get any machine thoroughly checked by the VOC machine dating service before you buy it. This is a free service, and is available to non-members. Do NOT rely on old dating certificates or 'certificates of authentication' – these may not be what they appear or could simply be out of date.

The DVLA have tightened their procedures to combat this, but fraudsters modify how they operate. We regularly see new crankcases stamped to deceive people into believing they are original items. The VOC have themselves have been a victim of this and now continually reviews how

it operates. The club's dating service regularly checks the identity of Vincent machines. We utilise a machine database, which contains nearly 10,000 images of machines, parts, documents, engine and frame numbers and the history of most machines. The VOC are the sole owners of the original Vincent factory records, which is another huge source of information and a great tool to fight any fraud. Unfortunately, we currently deal with three or four restamped Vincent *every month* and see all too often the aftermath of someone buying a cloned machine.

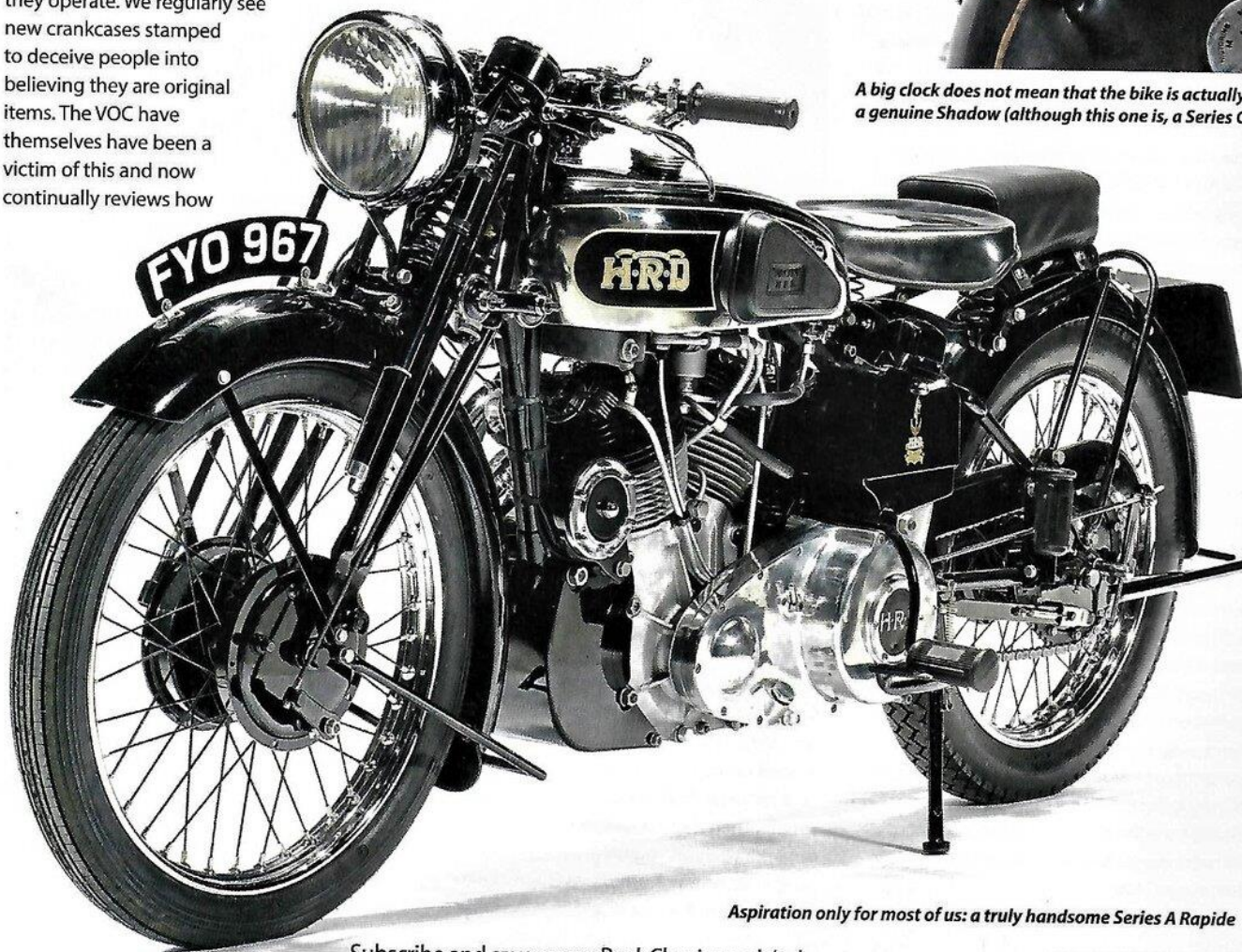
To protect yourself and your investment, you need to obtain clear, unambiguous photographs of the relevant identification numbers on the machine. You may need to gently remove paint to expose the frame numbers, so it's preferable to take photos before these items are repainted. You can find examples on the club website of where the identifying numbers are located on a Vincent. Once you have these images, there's an online form or you can email us direct. We will then guide you through the process and check the machine, which is usually a simple process.

Although you don't have to be a club member to benefit from the dating service, of course I recommend joining it! You get a

monthly magazine and discounts on copies of the factory records and spare parts. More importantly you get access to the VOC members, who have the experience and knowledge of buying and maintaining a Vincent. And of course there is an online VOC forum, full of vital information. **Rc**



A big clock does not mean that the bike is actually a genuine Shadow (although this one is, a Series C)



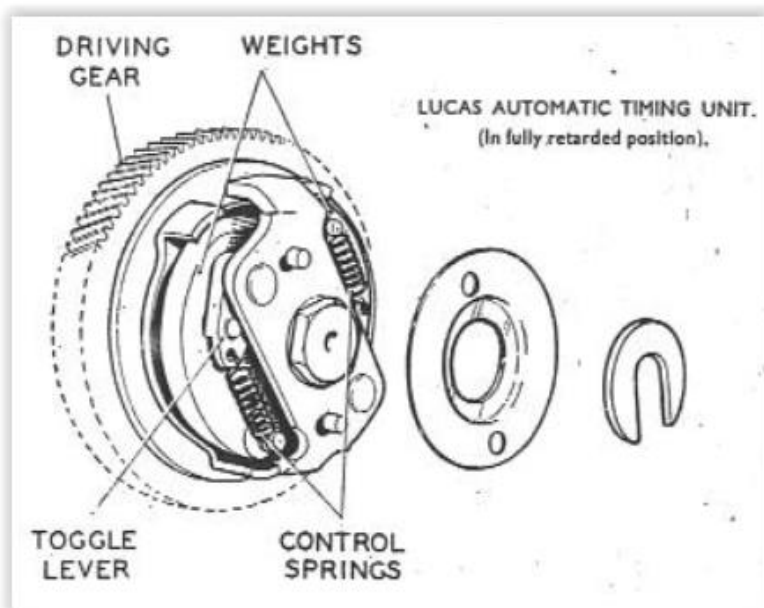
Aspiration only for most of us: a truly handsome Series A Rapide

Fine Tuning Your Lucas ATD

December 2020

Recently, by mistake, I retarded the full advance of my Comet's magneto by 4° with a surprising result – improved on road performance, especially in the hills. And that led me to ponder - Why Is This So?

The ATD fitted as standard to ALL Vincent B and C series machines is a Lucas ATD model 47505A/D that provides an advance range at the magneto of 16° to 18°. This translates to an advance range of 32° to 36° at the crank. Depending on the individual ATD the actual advance can be anywhere within that range. And as the 'fingers' of the ATD wear, all be it slowly, then the advance range will increase.



It is generally acknowledged that the ignition sweet spot for easy and reliable kick starting is 4° BTDC (before top dead centre) *BUT if you have fitted an electric start this should be reduced to no more than 2° BTDC to avoid any possibility of 'kick back' that could destroy the fragile gears inside the electric starter.*

Reference to the Vincent Riders Handbook 10th edition advises ignition timing of 38/40° BTDC at full advance for twins but reduced to 37/38° BTDC for singles. For twins this fits in exactly with an original unworn ATD and is close to the upper limit for singles. So why the need to fiddle with something that's within the original 74-year-old 1946 specification? Compression ratio and fuel volatility.

Fuel Volatility: Vincent motors were designed over 70 years ago and were intended to operate on 'pool' fuel that had a very low octane rating, but more importantly burnt relatively slowly. Modern fuels have much higher-octane ratings and burn significantly faster. This faster burning (i.e. higher volatility) means that combustion will happen much faster and with the 'original' ignition timing this results in peak combustion pressure inside the cylinder happening well BEFORE the piston reaches anywhere near the top of its upward stroke. This has undesirable effects. First combustion pressure tries to force the piston back down the cylinder, before it has reached TDC putting a massive destructive load on the bottom end of the motor, especially the big end bearings. Another consequence of this is excessive heat generation that can lead to piston overheating and failure. A further effect of this faster burning is that a significant amount of the energy in the charge has been expended before the piston gets to TDC resulting in output power being diminished.

The remedy to the effect of increased fuel volatility is to lower the ignition timing at full advance. How much? On the basis of feedback in MPH across the years and suggested by Irving in "Tuning For Speed" and endorsed on the VOC Forum back in 2018, a reduction of around 4° appears to be a reasonable starting point.

Compression Ratio: There is a tendency of motor rebuilders to use higher compression ratios (CR) that originally fitted at the works. Original for all B and C series, other than

Shadows, was a CR of 6.8 to 1, Shadows were 7.3 to 1. It is now more common to find 8 to 1 or even slightly higher CR being used. Again, looking at the advice from Irving as the CR is increased the ignition advance should be reduced. Why? The increased compression ratio can result in an improvement in combustion efficiency which in itself results in an increase in the speed of burning of the fuel in the cylinder. In "Tuning For Speed" Irving tells us that an increase of 3 in the CR should be matched by a reduction in ignition timing of 5°. So as the increase of the CR from 6.8 to 8 to 1 is around half that, it should be accompanied by a decrease in ignition advance of around 2.5°.

Conclusion: Allowing for both modern fuel and compression changes it appears that sensible maximum full advance to use on standard Vincent motors today is: For twins 38 less 4 (to account for modern fuel) less 2.5 (to account for increased compression ratio) gives 31.5° BTDC; for singles the result is 1° less thus 30.5° BTDC. You will recall that for starting 4° BTDC is optimal and advance at the ATD is half that at the crank.

Twins: 31.5° less 4 = 27.5, divided by 2 = 13.75° advance at the magneto

Singles 30.5° less 4 = 26.5, divided by 2 = 13.25° advance at the magneto.

Remember – the original ATD advance range at the magneto is 16 to 18° !

The foregoing relates to a generally standard Vincent motor fitted with a single spark plug. If your motor is fitted with twin spark plug heads then based on experience in the field, its desirable to retard the crank shaft full advance by a further 3 to 4 degrees – or if you prefer that ATD advance is retarded by 1.5 to 2 more degrees (it's the same thing). Result at the magneto is 11.75° for twins and 11.25° for singles. And if you have an electric start the full retard position must be reduced from 4 to no more than 2° BTSC

In Summary the suggested rounded up ignition advance for a standard Vincent used today is as follows

Kick Start	Single Cylinder		Twin Cylinder	
	Motor Advance Range	ATD ° advance	Motor Advance Range	ATD ° advance
Single Plug	4 BTDC – 31 BTDC	13.5	4 BTDC – 32 BTDC	14
Twin Plug	4 BTDC - 27 BTDC	11.5	4 BTDC - 28 BTDC	12
Electric Start				
Single Plug	2 BTDC – 31 BTDC	14.5	2 BTDC - 32 BTDC	15
Twin Plug	2 BTDC - 27 BTDC	12.5	2 BTDC – 28 BTDC	13

So how to tune the range of the standard ATD to what's desirable for today's conditions?

It's all to do with the fixed and moving 'legs' on the Lucas ATD. A crude method used at times is to simply bend those legs BUT this will weaken them resulting in breakages sooner or later.

The preferred solution is to add metal to the legs, building them up as required to give the advance you desire.

How to do this will be in the continuation of this topic in the next edition.

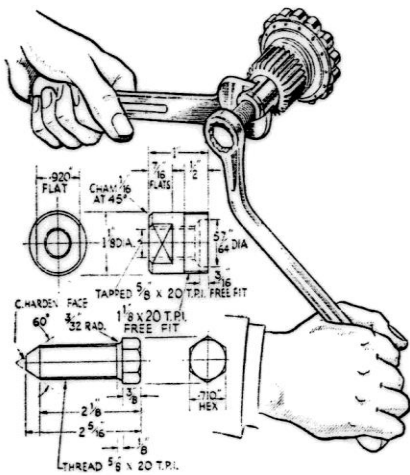


The 498 c.c. and 592 c.c. Twin-cylinder

A.J.S. AND MATCHLESS

Technical Details and Maintenance Routine for Four 1957 Touring Models Made at Plumstead

DEALING with the “twins” made by Associated Motor Cycles, Ltd., involves consideration of what is fundamentally one type of machine, represented originally by the 498 c.c. A.J.S. “Springtwin” and Matchless G9 motorcycles first introduced in 1948. Specification variations are found in the 592 c.c. versions, marketed respectively as the A.J.S. Model 30 and Matchless G11. To some extent, the 498 c.c. racing model, listed as the Matchless G45, is similar so far as engine details are concerned but, to avoid complications, reference is not made to this fifth model in the Woolwich “twin” range for, it should be noted, beyond the engine layout, there is little in the G45 specification which ties up with the roadster “twins,” for the frame, gearbox and wheels are related more closely to the race-model counterpart in the A.J.S. range, the 348 c.c. o.h.c. Model 7R.



Application of the bolt-type half-time extractor tool, together with dimensions.

Special Tools

Overhauling any one of these machines calls for a reasonable degree of mechanical knowledge and an appreciation of the use of general workshop tools, reamers and so forth. Actually, much of the work can be carried out with the manufacturer's tool kit, which is a commendably comprehensive one. But there are a few special appliances which help the work along; these are listed in the respective instruction books and the application of several such gadgets has been illustrated for this feature. In some cases there is no ready substitute for the A.M.C. tool, but in others a little practical improvising successfully provides the owner with an equally satisfactory alternative.

Dismantling Procedure

Right- and left-handed, the rocker covers, rockers and cylinder heads are separate assemblies. Thus, it is relatively easy to take down the top part of the unit piecemeal; there is no call to handle large, heavy castings or to grope about single-handed to support pistons while the cylinder block is withdrawn, for the cylinders, too, are separate.

It is improbable that there will be serious wear in the rocker spindle bearing assembly.

B8

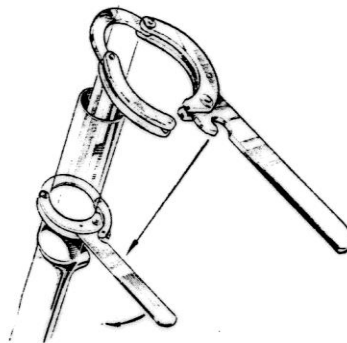
which is substantially proportioned, but the reamed size is given in the Reference Data as a guide. Rocker lubrication is ensured by drilled oilways which should be cleaned out. Reference to the cut-away engine drawing shows the location of three plain washers and a spring washer in the rocker assembly; the order indicated should be maintained.

The valves face up at 45° to hardened inserts which are cast in and the valve guides are circlip-located and the head must be warmed before removal of the latter is attempted. Drive out the guide part-way to free the circlip, which can be taken off and the guide then pressed right through from the outside. Routine checking of the free valve-spring length can be carried

the unit is ultimately to come out of the frame—and the cam gear wheels extracted by the application of the bridge-type tool illustrated. The nuts securing the timing wheels are slotted to key with drive-tongues on the two oil-pump spindles. Because of this special function, the spindles and camwheel nuts are left-hand threaded.

It is not difficult for the owner to make up his own tool resembling the manufacturer's appliance No. 015374 to the dimensions shown. There is also available from the makers a magneto pinion extractor—a bolt-puller type of gadget (No. 015273)—the outer sleeve nut of which screws into the threaded centre of the pinion. Also threaded internally, the sleeve nut accommodates a hardened thrust bolt which, rotated clockwise, abuts against the end of the armature shaft, breaking the taper fit.

The engine mainshaft pinion is a parallel fit with the shaft and keyed, and this too can be extracted with tool No. 015273—provided that it is considered necessary to take it off at all. A.J.S. and Matchless twins are unusual in that the crankcase can be split and the timing-side half drawn off, leaving the mainshaft pinion in position (see sketch). Actually, the only reason for disturbing the pinion is the possible need to renew the rollers and inner race of the bearing on this side. The idler wheel in the timing gear-train can be taken off by hand and the dynamo, complete

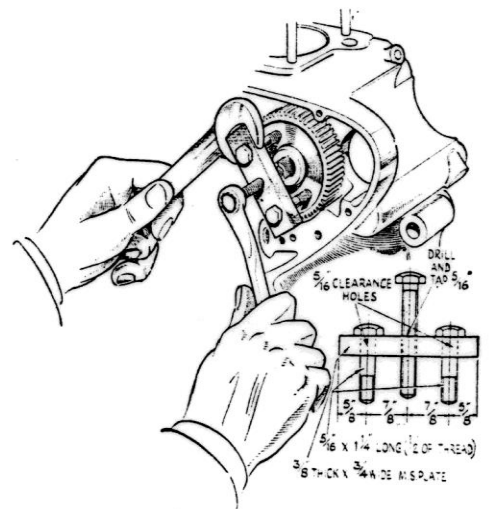


Special clamp tool for the front fork sliders, shown “open” and applied.

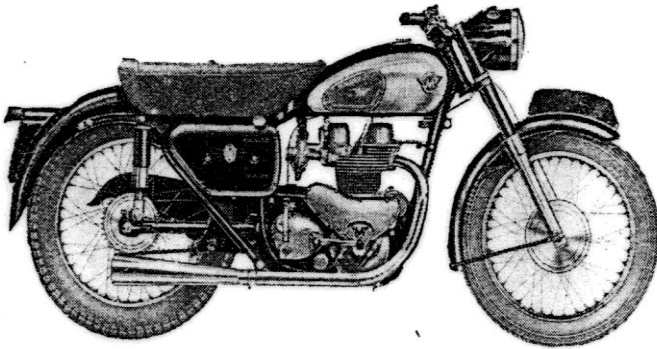
out at this stage. See Reference Data for the “as-new” dimensions.

A special tool is included in the kit for the removal of the Seeger-type piston circlips. Five turns of special wire bind the B.H.B. pistons and, while the two compression rings and single scraper are detachable in the usual way for inspection, the wire should be left intact; it is a fixture designed to control expansion and to minimize risk of distortion. Note the positioning of the split piston skirt, the split facing to the front.

Long through-studs retain each of the cylinders, which can be taken off conveniently while the engine assembly is still in the frame. At this stage, the timing cover (located by ten screws and one nut) and pump-plate assembly may also be removed after disconnecting the oil-pipes. The primary transmission should be removed—assuming



Dimensions and application of the bridge-type cam pinion extractor tool.

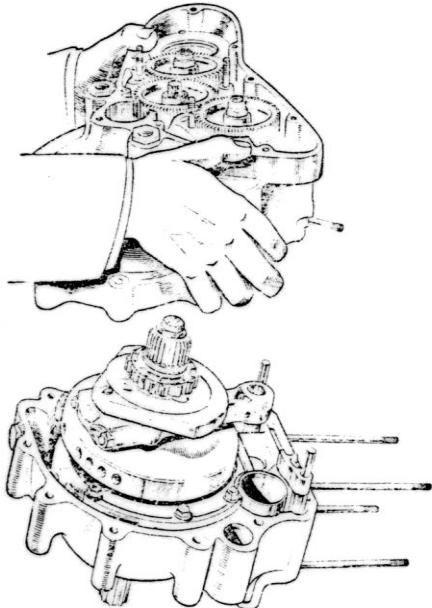
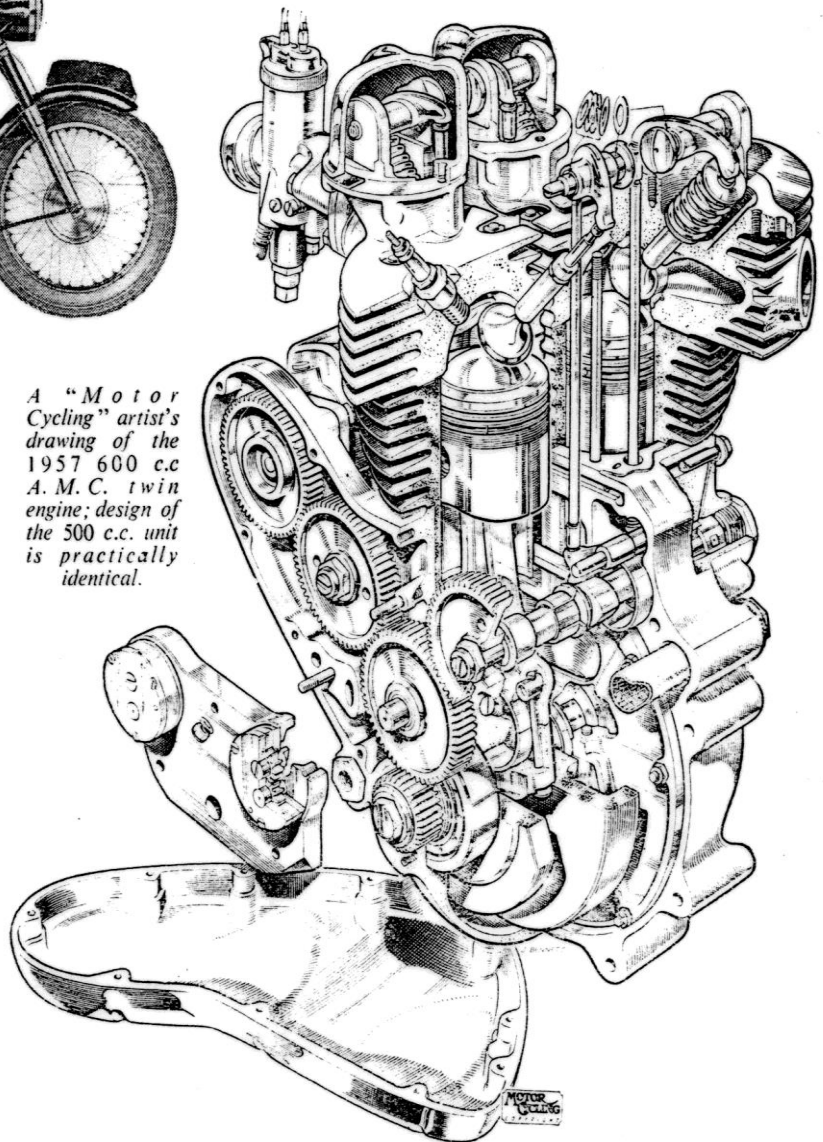


Typical of the range is this Matchless G9 498 c.c. o.h.v. twin.

with its pinion, pulled out of the cradle as soon as the fixing strap has been sufficiently slackened.

Normally, one separates the crankcase halves only to attend to the two main roller bearings, or the plain bearing big-ends or centre support. A.M.C.s are unusual in another twin-cylinder design feature. The use of a centre journal makes it possible to have a main oil delivery to this point where, under high pump pressure, streams of lubricant divide at the base of a V-shaped oil-way in the shaft, passing in equal quantities to the two big-ends, any sludge or foreign matter being flung by the centrifugal action of the shaft past the big-end feed orifices in the journals to the tops of the V-drilling, which act as sludge traps. The most important aspect of this layout is that one is unlikely to find one journal and bearing—usually the one farthest from the oil pump in other types of vertical twin engines—showing early signs of advancing wear. Actually, the writer's own experience with A.J.S. and Matchless twins represents a mileage of 38,000 over a period of five years and, during that time, neither of the two engines in question required attention to the bearings. In each case, when the unit was stripped

A "Motor Cycling" artist's drawing of the 1957 600 c.c. A.M.C. twin engine; design of the 500 c.c. unit is practically identical.



Removing the timing-side half of the crankcase, with the pinions left in position.

down at the end of its long tour of duty, micrometer readings at the journals revealed negligible wear.

Splitting the crankcase will have involved taking out the main oil-filter element, a caged fabric component located transversely across the engine in front of the exhaust camshaft, where it accepts the full output from the pump for initial cleansing. Pressure is maintained by the use of a ball-valve housed in the hexagon-headed end-cap. It is necessary to remove the end-cap to withdraw the filter element from the drive-side, and it will be noted that in 1957 engines the component is works-assembled: in other words, the ball and spring are not detachable, as previously. The earlier arrangement gave rise occasionally to incorrect reassembling of the ball and spring, with the result that the valve did not operate at all and the supply was cut off from the engine, so that seizure occurred and pump pressure built up dangerously, sometimes with further damage. This is impossible with the current end-cap incorporating the trapped ball and spring.

The camshaft tunnels are sealed on the drive-side by end-caps, that at the front

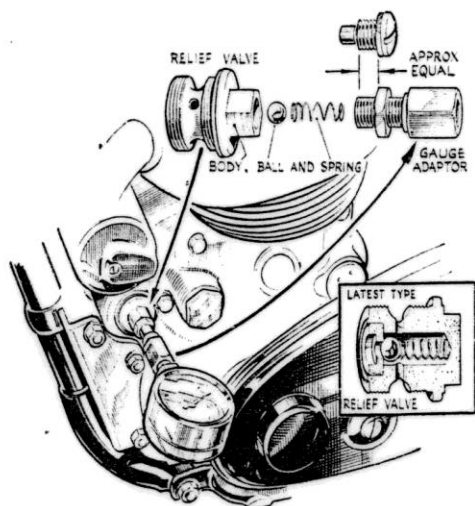
hexagon-headed and that at the rear keyed (for a peg spanner). There are bushes pressed into the crankcase castings (one on the drive-side and two on the timing-side) in which the shafts bear.

Six studs and nuts retain the centre plate and bearing assembly; for the latter, and also the connecting rod big-end caps, shake-proof nuts are used. It is wise, perhaps, to renew the nuts if the bearings are dismantled. Bearing renovation constitutes either the renewing of the half shells; or, after lengthy service or following a seizure, the regrinding of the journals and fitting undersize-diameter shells, when the big-ends will again be as good as new. The rollers and inner race of each main bearing are a light press fit on the shaft. The outer races fit tightly in the crankcases; they can be jarred out if the surrounding metal is heated.

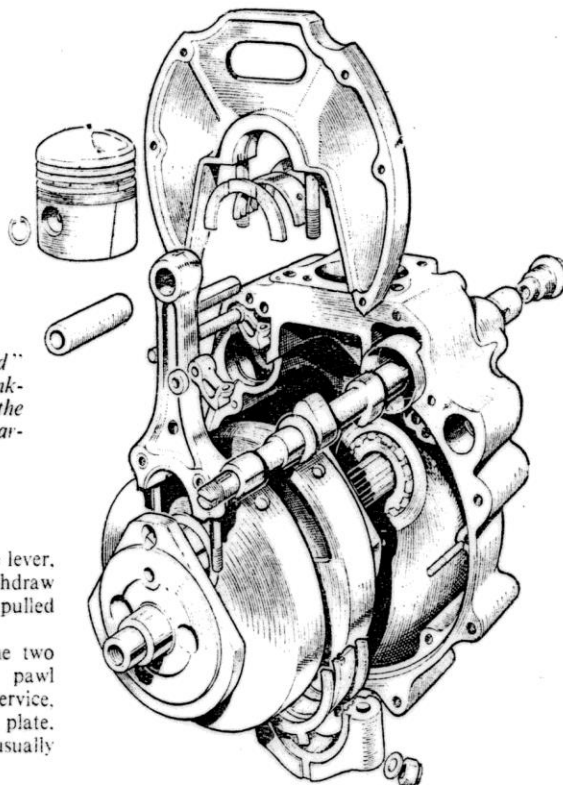
Assembly

Because of its design, the engine is not difficult to erect, for the work is largely similar to that of assembling two "singles"

(Continued overleaf)



(Left) Testing the oil pressure by inserting a gauge and screw adaptor in place of the end-cap. Note the use of pre-1957 parts; the 1957-type relief valve, made as a single assembly, is shown inset.



(Right) An "extended" view of the A.M.C. crankshaft layout, showing the camshaft and centre bearing support.

on to a common crankcase. Probably the easiest procedure is first to feed the complete crankshaft, including the centre plate, into the drive-side crankcase, to bolt up this sub-assembly and then to check endwise location by putting on and tightening the primary drive sprocket and nut. Tighten the centre-plate fixings, insert the camshafts and then offer up the timing-side crankcase, into which the timing gears may then be assembled once more.

Inserting the oil-filter element and replacing the camshaft tunnel end-caps are the next jobs, followed by the replacing of the pistons and the two cylinders. At this stage it is a good idea to get the ignition timing right while it is easy to measure the recommended B.T.D.C. advance. Valve timing must wait until the cylinder heads and rockers are in position, when the timing wheels should be meshed in accordance with the markings. This operation is, of course, sufficient to ensure correct valve timing. (The timing figures included, for information, under Reference Data apply to 1957 models; readers who are using this article as a guide to work upon 1956 machines should note that their timing is: Inlet opens 35° before T.D.C., closes 65° after B.D.C. Exhaust opens 65° before B.D.C., closes 35° after T.D.C.)

The oil-pump unit and timing cover complete the main assembly work.

Transmission

A 1957 A.M.C.-manufactured twin (except the G45) carries the new roadster gearbox, which is of the conventional type with ball journal bearings supporting the mainshaft at both ends. Plain bushes carry the layshaft on both sides. Removal of the K.S. crank (though not the gear lever), the gear indicator mechanism, the oil filler and inspection plates and five securing screws, makes it possible to take off the polished outer cover. But before this is finally freed it is desirable to put a scribe mark on the outer surface of the gearbox end-plate to indicate the angle of the clutch thrust arm when in the working position. Being able, by this means, to line up the arm and slotted arm holder greatly

facilitates reassembly. The gear-change lever, left *in situ* as advised, serves to withdraw most of the mechanism as the cover is pulled away.

Possible wearing components are the two hairpin springs of the ratchet and pawl mechanism and, after a long period of service, the bearings and bushes. The cam plate, operating under very good conditions, usually has a very long life.

Suspension

Taking down a fork slider, usually in order to renew oil seals, is one of the few jobs which the owner may have to carry out. Anything of greater magnitude, such as taking down the stanchions, is usually called for only as the outcome of a mishap when, for preference, the complete fork assembly should be put in the hands of an A.M.C. dealer for works checking.

In removing the slider, the unscrewing of the extension tube is carried out with the wheel *in situ*, but supported free of the ground. When the extension tube has been slackened, take out the wheel and disconnect the front stays and mudguard. Using a thin tubular box spanner, unscrew the bolt sunk in the upper half of the spindle clamp: the oil content of the slider will now escape, but the slider will be free of the damper tube and can be withdrawn if given a sharp downward jerk. The oil seal is a close pushfit in the top of the slider, and may initially be the cause of a slight difficulty in pulling the slider free.

At the rear, the swinging-fork assembly bears in two flanged "Oilite" bushes which are an interference fit in the lug. During assembly at the factory, the annular space between the bushes is filled with 1½ fl. oz. (42.6 c.c.) of heavy gear oil which may be replenished, if necessary, via an orifice, normally closed by a screw cap, in the right-hand end bearing cover. The internal diameter of the bushes should be reamed to 1.001/1.002 in. after fitting. It is the fitting, however, which will probably constitute the biggest headache to a man working without a fairly powerful press. The Girling dampers are sealed at the factory and should not be tampered with.

Lubrication

The gear-type pump is not a wearing component and will operate satisfactorily for many years without attention; but the main filter element, of gauze and fabric construction, should be renewed frequently. While it often suffices simply to rinse filters of this type in petrol, there is always the risk that dirt and metal particles thus liberated from the inner surface of the felt will swirl around and settle on the outer surface, remaining there after the element is thought to be clean. In consequence, the initial surge of lubricant sent around the engine to the relatively soft big-end bearings carries with it a quantity of foreign matter which, to say the least, can do no good.

There is also a metal filter located in the feed line at the bottom of the oil tank, plus a magnetic device incorporated in the draw-plug which at least attracts and traps ferrous particles in the sump. A full range of lubricants and greases suitable for engine and other components in all weather conditions is contained in the instruction book; and, in the writer's opinion, all twins of A.M.C. manufacture respond well to the use of S.A.E. 20 engine grades, not only in the "extreme cold" conditions specified, but for general use during English winter weather.

Pre-1957 engines could easily be tested for oil pressure faults by substituting a gauge and screw adapter in place of the end-cap. The 1957 end-cap offers no such facility and earlier-pattern parts, as illustrated, must be used when testing. Make sure the engine is warm, so that the lubricant is flowing freely, and test chiefly at idling speeds (20-40 lb. readings should result) simply to establish that pressure is consistent.

REFERENCE DATA

CYLINDER-PISTON GROUP

500 c.c. 600 c.c.
 Bore: 66 mm. 72 mm.
 Stroke: 72.8 mm. 72.8 mm.
 Swept volume: 498 c.c. 592 c.c.
 Compression ratio: 7.7 7.5
 Rebore to: .020 in. O.S. when maximum wear exceeds .008 in.
 Piston Diameters:
 At top land: 2.570/2.572 in. 2.804/2.806 in.
 At bottom land: .000/.0008 in. larger than top of skirt.
 At skirt: 2.5969/2.5976 in. 2.8334/2.8341 in.
 Piston ring gap: .006/.030 in.
 Piston ring depth:
 Compression: .092/.100 in. } .101/.109
 Scraper: .095/.102 in. }
 Permissible vertical play: .002 in.
 Gudgeon-pin diameter: .7497/.7499 in.
 Small-end bush diameter: .7500/.7505 in.

VALVES AND VALVE GEAR

Valve stem diameter:
 Inlet: .27875/.27975 in.
 Exhaust: .3090/.3100 in.
 Bore of valve guides:
 Inlet: .28075/.28175 in.
 Exhaust: .3120/.3130 in.
 Seat angle: 45°
 Free valve-spring length:
 Inner 1 1/32 in. Outer 1 1/2 in.
 Rocker spindle diameter: .498/.500 in.
 Rocker bush bore: .500/.5005 in.
 Timing wheel bush bore:
 1 1/16 in.—.008/.010 in.
 Bore of cam followers: .3745/.3755 in.
 Valve timing (with tappets set at .012 in clearance):
 Inlet opens before T.D.C. . . 24°
 Inlet closes after B.D.C. . . 65°
 Exhaust opens before B.D.C. 63°
 Exhaust closes after T.D.C. 25°
 Normal tappet clearances: .006 in. (cold)

CRANKSHAFT GROUP

Journal track diameter: 1.62475/1.62525 in.
 Con-rod big-end eye diameter: 1.7710/1.7715 in.
 Type of big-end bearing: Three-layer lead bronze indium plain bearing in halves to fit 1 1/8 in. shaft. +.0025 in.
 Main bearings: SKF type RLS 12 1/2, single row roller; 1 1/8 in. bore by 3 in. O/D by 1 1/2 in. (2 off, one each side).
 Left-hand threads on engine components
 Camshaft gears and nuts 3/8 in. by 20 T.P.I
 Location of contact breaker: Magneto behind engine

GEARBOX

Bearings, type and size: Sleeve gear carries "Oilite" bushes, 8140/8145 in. bore by .9053/.9060 in. O/D by .875 in.
 Mainshaft bearing at clutch end, SKF RLS 9Z, 1 1/2 in. bore by 2 1/2 in. O/D by 1 1/2 in. At K.S. end: Hoffmann RLS7 3/8 in. bore by 1 1/8 in. O/D by 1 1/8 in.
 Layshaft supported by SKF 6203 ball bearing 17 mm. bore by 40 mm. O/D by 12 mm.
 Internal reductions: 1.35, 1.77 and 2.67:1
 Left-hand thread on gearbox: sleeve gear and nut retaining gearbox sprocket, 1 1/2 in by 20 T.P.I.

TRANSMISSION

500 c.c. 600 c.c.
 Sprocket Sizes:
 Engine: 21t 22t
 Clutch: 42t 42t
 Final drive: 16t 16t
 Rear wheel: 42t 42t
 Gear Ratios:
 500 c.c. 5.25, 7.10, 9.3 and 14.0 : 1
 600 c.c. 5.00, 6.8, 8.9 and 13.4 : 1
 Primary chain: Renold 110046 1/2 in. by .305 in. by .335 in. (500 c.c., 67 links; 600 c.c., 68 links.)
 Secondary chain: Renold 110056 3/8 in. by .380 in. by .400 in. (97 links).

WHEELS

Front: WM 2-19.
 Brake diameter 7 in.
 Spokes: 5 1/2 in. by 11G (straight, 20 each side).
 Hub bearings: SKF W. 6669 taper roller 27 mm. bore by 1 1/2 in. O/D by 1 1/2 in.
 Rear: WM 2-19.
 Brake diameter: 7 in.
 Spokes: 6 1/2 in. by 10G (straight 20 each side).
 Hub bearings: SKF K. 1178X/K1130 N.I. taper roller two-part bearing, 3/8 in. bore by 1 1/2 in. O/D by 1 1/2 in.

FRONT SUSPENSION

By "Teledraulic" forks carried on ball-and-cup race type head bearings, comprising 56 3/16 in. diameter balls with 1.750 in pitch circle
 Three-rate compression springs: solo 218 lb., sidecar, 280 lb. maximum.
 Head angle: 62°
 Trail: 2 1/8 in.
 Damper fluid content: 6 1/2 fl oz. of S.A.E 20 oil.
 Slider bush dimensions:
 Bottom bush (steel) 1.2495/1.2500 in. bore 1.5605/1.5610 in. O/D by 1.000/1.002 in.
 Guide bush (flanged) 1.2505/1.2515 in. bore by 1.5605/1.5625 in. O/D by 1 1/16 in.

REAR SUSPENSION

By swinging-fork and Girling S/B-type 3.5-in piston stroke units with cast light-alloy bottom yoke and light-alloy collets at top location with the fixing eye.
 Pivot bush details:
 "Oilite," 1.001/1.002 in. bore, by .995/1.005 in. long under flange (2 off).

CARBURATION

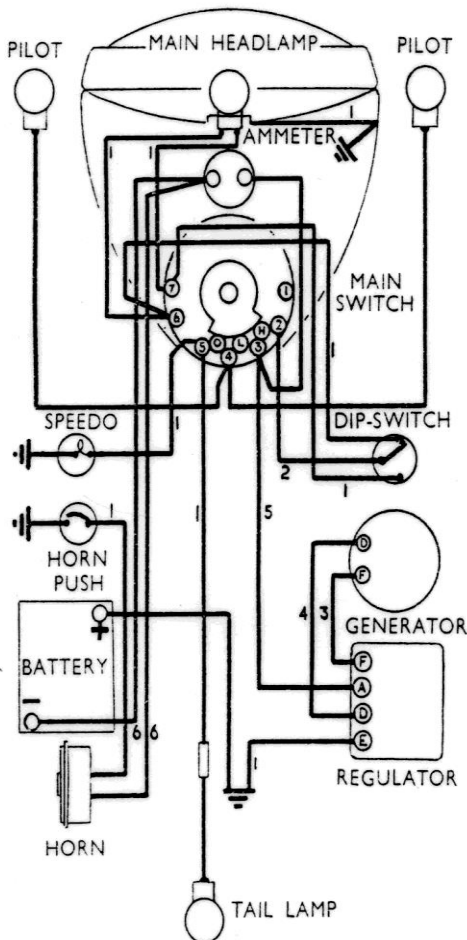
500 c.c.
 Amal Monobloc type 376/6: 1 in. choke; 240 main jet (no air filter); 230 main jet (with air filter); No. 4 throttle slide; centre notch needle position; .1065 needle jet. 30 pilot jet.
 600 c.c.
 Type 376/78; 1 1/8 in. choke; with 300 main jet (no air filter); 220 main jet (with air filter); No. 4 throttle slide; fourth notch from top needle position; .1065 needle jet. 30 pilot jet.

LUBRICATION

Circulation by double gear type pump; delivered under pressure to filter chamber with direct onward supply to centre and big-end bearings. Supply to rocker mechanism by metered bypass with provision for back draining to camshaft housings: final overflow to crankcase and sump.

ELECTRICAL EQUIPMENT

Lucas K2F magneto and E3L 60-watt dynamo with output controlled by MCR2 C.V.C set as follows:
 Cut-out:
 Cut-in voltage. 5.3/6.7 volts.
 Drop-off voltage. 4.5/5.0 volts.
 Reverse current: 3.0/5.0 amp.
 Regulator: (setting on open circuit):
 10°C. (50°F.) 7.7/8.1 volts.
 20°C. (68°F.) 7.6/8.0 volts.
 30°C. (86°F.) 7.5/7.9 volts.
 40°C. (104°F.) 7.4/7.8 volts
 Bulb Ratings:
 Headlamp, 6v. 30/24w.
 Pilot, 6v. 3w.
 Tail, 6v. 18/5w.
 Speedometer 6v. 1.8w

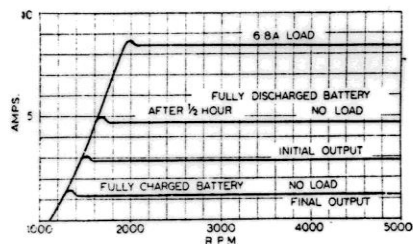


Wiring diagram for the A.J.S. and Matchless "twins."

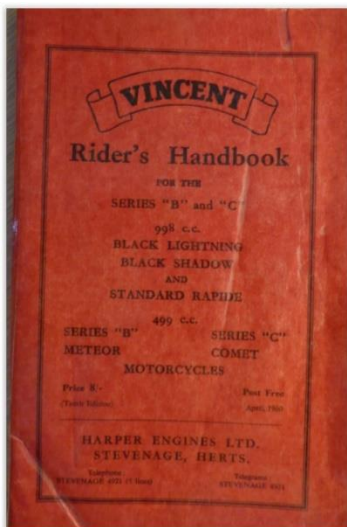
Key to colour code:

- 1 = Black
- 2 = Blue
- 3 = Green
- 4 = Yellow
- 5 = Purple
- 6 = Brown

(Right) Performance curves for the Lucas E3L dynamo with voltage regulator.



CVG 317, F10AB/1/204 Where Are You?



An OVR reader has in his possession an original owners handbook dated 23 AUG 1947. The book was issued for F10AB/1/204 and originally registered in the UK with the registration number CVG 317.

The book came with his 1950 Rapide when purchased back in 1987, but was obviously not for the machine he bought. As you might imagine, it is showing its age and is looking pretty daggy.

Some years ago he contacted the VOC registrar but they had no record of that engine number.

He would be happy to reunite this handbook with the machine to which it belongs so if there should happen to be an OVR reader who has this machine sitting in a crate then they are welcome to get in touch via email to the editor ozvinreview@gmail.com who will put the two folk in contact with each other

The Frank Sinclair Story – part 2

David Dumble continues with the second instalment of the memoirs of the late Frank Sinclair, a well known and much loved personality in Australian motorcycle racing circles.

THIS offer was of course accepted and Phil Irving said to come and see him in a couple of weeks. When I visited Phil's home a fortnight later, I was surprised to see my outfit with the girder forks plus Phil's own Vincent with Girdraulics both in little bits spread all over his garage floor. Well, for once I was speechless, particularly when Phil said, "Do you think a good one can be made from this lot?" I went back a couple of weeks later and there was a really terrific outfit — I couldn't get it out quick enough to try it. We loaded it onto my trailer and headed out to the Frankston-Dandelion Road, which in those days had very little traffic so you could race up and down for several miles with ease.

So, with Phil as passenger I was soon on the fastest outfit I had ever handled. I remember asking Phil how fast it was and after a pause he said, 'I have done all the things that were done to Gunga Din, (the Lightning that held the World Motorcycle Speed Record) plus a little more, so it should go.'

It certainly did, and I was having a great time sitting on 100mph-plus, forgetting about my passenger. When I stopped and chatted to him excitedly, he didn't seem interested — I was soon to find out why 'Get in the chair' he said, and what a ride.' 100mph so close to the road really stirred me up and, on my protest to Phil, he growled. 'Well now you know how I felt'.

For the next three seasons this outfit was almost unbeatable, but of course you can't win them all. That hard-to-win Victorian TT came our way at the second meeting at the Ballarat Airstrip. At Darlev, near Bacchus Marsh, I won set several doubles, that is scratch and handicap races on the same day plus record laps - they' don't win races but are nice to get anyway.

I well remember one handicap event in which I was giving away over a lap start to the limit man and 15 seconds to Bernie Mack with 8 laps to run.

After passing a few on the last lap I was able to go past several riders in a bunch by rushing up to a bend and sliding the back end until the bike was facing the right way. This put me in behind Bernie Mac and I decided to try to pass him on the last bend before the finishing straight. I did just that, to find Spud

Renshaw on a white Triumph outfit just ahead. I shot past him on the left while Bernie passed him on the right. I won another record lap and Bernie came in second. Afterwards a very pale Spud came up to me to say that Bernie and I had scared the hell out of him and he needed a beer!

Frank Sinclair was President of the Harley Club for 8 years in his first stint and during this time he managed to arrange for motorcycling racing to take place at Fisherman's Bend, largely by donating the proceeds to charity. He reckons the most successful meeting to be held there was in 1954. when the World Champion rider Geoff Duke came out with his very fast Gilera. "No one who was there will ever forget Geoff's superb riding or the sound of his magnificent four-cylinder racer. Maurie Quincey was the best of the local riders, and such was the crowd that £4500 was raised for the Sutherland Homes for Children. At a later meeting Bill Lomas and Dickie Dale were the big attraction, and it is a pity that the efforts of Perce Quincey as Sports Secretary of the Harley Club received so little recognition.

Fisherman's Bend seemed to be a hoodoo track for me, but at the Victorian TT we were really steaming thanks to Phil Irving's tuning. In fact, we broke the lap record by a second during practice. It was a push start with a dead motor and we got away OK, but after 10 yards the back-brake drum



disintegrated, the chain whining round but not driving the wheel. It had happened before, so there was no excuse. Later we fitted a spacer plate and had no more trouble.

Another time at the Bend I thought the hoodoo had struck again, when the primary chain broke during practice — the only time this ever happened to me. Result: a rather large hole in the chain case and part of the crankcase. Always at his best in a crisis, Phil Irving set to and cut a patch from an old tin. Together with a few screws and a visit to the Repco piston factory, this enabled me to start and win a Victorian All Powers

Sidecar TT. I should add that no oil leaked out of this repair.

Frank's presidency covered most of the years he raced the Indian and Vincent outfits and, besides competing, he raised funds for the club and for the St John Motorcycle Ambulance Brigade by putting on film shows. Realising that motorcycle racing circuits were very scarce, he was always looking for suitable venues, with the proceeds going to charity. A cunning move this, as it made everyone happy. The racers got an interesting new circuit, the charity got much-needed funds and publicity, and the public got to see some exciting action.

One such was the Naval Depot at Flinders, known as HMAS Cerberus, and the circuit was around the roads inside the depot. Another was the base at Puckapunyal.

We went to South Australia one time to race on the sand at Sellicks Beach — myself, my passenger Jim McIntosh and his wife, Phil Irving and his son Denis. I was driving the P3 Rover with the outfit on the trailer, and we were loaded to the limit. At about 5am, with the sun just coming up, we hit a pothole and I said to Phil, 'Gee, that must have been a foot deep!' Ridiculous,' he replied. 'It was no more than a couple of inches.' What rot,' I said. 'Six inches at least.' Phil said, 'Stop, we will soon find out.' So I stopped and we both got out and walked back, the others being asleep. Phil soon had his measuring device — an empty cigarette packet — and placing it in the hole he lay stomach down on the road surface to sight it. He then stood up, grinned, and said. 'There you are, no more than two inches.' I got down, as Phil had, to take a look just as a car went past, and I'm sure they must have thought we were crazy, lying flat out in the middle of the road at that early hour.

One time at the Darley track we were up against Les Warton on a Lightning outfit. Les had won at Bathurst, so was not to be taken lightly. We got to the first corner and I slid in my usual way to get around the right-hander, but Les just carried straight on and crashed into me, damaging the exhaust pipes and the back wheel, putting us both out of the running. After some repairs I won the handicap event and broke the lap record.

Darley isn't used now — a pity, it was one of the best circuits I've ever raced on — so that record probably still stands.

Darley puts me in mind of a hectic Easter weekend when we were due to race there on the Monday. We had gone up to Bathurst for the racing, and in practice on the Wednesday the outfit was really flying. Going down Conrod Straight at well over the ton I reached out to check that the ignition lever was on full advance when I knocked it into retard and holed a piston. I was speechless with fury but, with no one to blame but myself, back at our camp I remembered that Les Warton's outfit was for sale, a real Lightning which had won many times at Bathurst — but La had decided to retire after a bad crash at Ballarat. Don Bain was his tuner, and the bike was at his home, so, after contacting Les, we persuaded Don to come with us to load up the bike. Back at Bathurst we practised on the Friday after changing sidecars, but to no avail, as the gearbox jammed in third while we were leading in the race on Saturday and so — DNF.

With two dead outfits and Darley 600 miles away, the question was what to do. Phil said, 'Let's leave the Lightning here, bring your sidecar and we'll go back to Seaford and see if we can get the other bike going for Monday.' That sounded okay to me, but we had to wait until after 9pm before we could leave, as I had promised to take Maurie Quincey and his wife Betty back with us, and he had to attend the trophy presentation that evening. Well at last we were off, five people, trailer, outfit, tools, fuel and luggage on a 1949 P3 Rover — not fast but reliable. I drove all the way and we got to Seaford at 1pm Sunday.

After lunch we took the Vincent apart and found we had to do a lot more work than we had expected — in fact we didn't finish until 2am Monday, by which time I was more asleep than awake. We arrived at Darley at 7.15am and Phil suggested I just run the bike around the pits to bed in the new piston and other bits we had put in. This I did, plus some very slow practice laps.

Before the scratch race Phil said, 'Just take it easy but win if you can.' I did just that and won by a length, also just won the handicap and gained another record lap. Was I tired —three hours' sleep in the last 48!

A trophy I won at Bathurst in 1952 brings back many memories. We were running on low-octane fuel supplied by the promoters (ACUNSW). It was the cause of a few headaches for Phil and myself, because up until then we had been running on a brew of 80 per cent methanol, 10 per cent benzoic and 10 per cent petrol plus a castor oil base, so obviously some jet sorting was in order. Time came to go out to the grid for the start of the race, and grid positions had been picket by ballot. For the first time I had drawn No 1, but there was a delay due to the narrowness of the gate from the pits. By the time we got out onto the track the grid was crowded and I was told, in fact ordered, by a very well-known official to go to No 9 on the grid. This made Phil and me quite upset, and soon Phil was telling this chap just what he thought of him, as only he could.

As I saw Phil take off his glasses, I thought, 'Gee, we will both be ordered off!' So I promptly got myself between them with my back to the official and told Phil, 'If I can't win from No 9 grid position 1 can't win at all. But don't worry, I'll win, okay?' After these words Phil put his glasses back on and with a grin said to the official, 'Well, you must be wrong or you wouldn't have lost your temper!' The upshot of all this is that we won, in fact led right from the first corner and on to the chequered flag — my first Bathurst win.

It was at this meeting that I had the pleasure of being with Phil's son Denis —just as clever as his father — and we always got on well, as he has his father's sense of humour. Also, with us was my passenger Jim Hocking, who was quite good as such but couldn't take it when anything went wrong.

Now, on the way home we were set to race at the only meeting ever held at the Puckapunyal military camp near Seymour in Victoria.

During practice we had a bit of fun with Bernie Mack on his Norton outfit by slowing for the sharp corners to let him catch up, then a fistful of throttle to accelerate to a good lead. This we could do on most of the corners, and I'm sure it made him hopping mad. However, he is a good sport and, as his record shows, one of the best all-round sidecar riders.

Anyway, there was none of this in the race, and with a few hundred yards to the finish and nearly a lap ahead we were trying to take it easy and not flog the machinery too much, when the rear brake drum col-lapsed, leaving us with no drive and a push to the finish. Well a thing like this brings out the best or worst in a man, and Jim threw his crash hat in the chair saying to me that he wouldn't be long and wandered off, leaving yours truly to push the outfit to the finish. Later he asked if he could go home with some of his mates. I of course replied. 'On your way', and Denis and I were very pleased to see him go, and we had a much better trip from there.

At a later meeting at Bathurst we took two outfits, the first 750cc Vincent ever and the 1000cc, each with its own sidecar to save time swapping them over.



When Phil arrived on the Friday morning just before practice, he asked how the 750 went and suggested we go out for two laps so he could see it going. I told my passenger Alan Smith that we would make it a real practice start, warming up the motor, then waiting for about the time we would at the actual start, then do two fast laps and come in. Well we started okay, round the first corner and rushed up to the third-gear right-hander known as Castro! Bend. Flat out in that gear going into the bend the main front fork spindle broke and we went straight on into the Castro' sign. I woke up in Bathurst Hospital some five hours later, badly bruised but no bones broken. I was very sore for several weeks after.

It had been quite a trip up that year, as near Cowra we rushed over a bridge in need of repairs and wrecked the trailer, so we loaded all the gear into the Rover and towed the 1000 outfit the rest of the way. A good mate of mine, Fred Pope, was the rider and he managed to jump on the gear lever instead of the brake, smashing first gear. With myself and the 750 out of action, the 1000 was without a rider, so Phil decided to let Bob Mitchell ride it. On checking it over he discovered the damaged gearbox and with time running out he had to swap the gears from the 750 in a hurry. In his haste the adjuster on the twin front brake was not tightened.

Bob had not practised on the 1000, but after a poor start, he went through the field and, from 13 seconds behind the leader Sandy McCrae on the first lap, managed to pass him on Conrod Straight on the last lap, but the front brake tightened up only 50 yards from the finish line, letting Sandy win by a wheel.

The 1952 Australian TT was held at the Little River township circuit. It was here I rode the 750 for the first time, but didn't do any good, as we were still sorting it out — I found we always learned more by losing than winning. In the All Powers race the 1000 went great and a lad named Braun was my main opponent. His Lightning had gone very fast in practice. I got a good start and led after the first lap by about ISO yards. On slowing for the right-hander out of the finishing straight I was horrified to find the

clevis pin in the rear brake pedal had come adrift, leaving me with front brakes only. Well I thought that was the end of the race for me, but I was still in the lead and quickly decided to make sure

I took the slow corners slow and the fast corners very fast. On the back part of the circuit there was a quick right-hander with trees on the left, so if the approach was just right it could be taken at 100mph or so. I just made it and then thought, I hope Braun doesn't try to follow us at that speed, as I was not impressed with his sidecar setup.

But when we came around again poor Braun had rushed off the road and hit a tree, injuring himself so badly that he subsequently gave up racing — a pity, for he could have won a lot of races. This was my first Australian TT win and the next TT was at the Longford circuit in Tasmania.

The practice here proved to be a bit hectic, the solos being allowed on the circuit with the outfits. You can imagine my surprise on entering the long straight to look back and see Harry Hinton Senior in our slipstream. I thought, well, pass me if you can, took a fistful of throttle and away. " Looking under my right arm I saw his wheel come alongside and then drop back. Later I realised he just wanted to have a gaze at the revs we were doing. I lifted my head to look at the rev counter — not easy as we didn't have a screen fitted — and got a shock to see we were doing 7500. Phil had said, 'Don't take it over 6500 or so.'

Anyway, I decided to get out of the way of the solos and came into the pits, only to have Phil roar at me for going so fast, but almost in the next breath asking what revs it was doing. I said, 'Er — well . . . about 7300 to 7400!' Out came Phil's cigarette packet and pen to work out my speed. I had been timed by a couple of the car boys at over 140mph and Phil's figures agreed with this, so he walked away a bit happier. Just then Harry Hinton came in and called me over and I copped another blast. He said, took, you can win this TT if you go a damn sight slower!' I did win, but with a good lead in the early stages cased off a bit only to find Bob Mitchell's 500 Norton outfit not far behind. I really turned it on to gain 12 seconds a lap over the last three laps — and I didn't go over 6500 revs for the entire race, so I obeyed the orders of the boss!

At one time I was managing a Shell service station in Camberwell. I had a race entry at Orange. NSW, for the Vincent but was unable to get away and so I offered the ride to George Murphy as his own outfit was not going, and he was very happy to accept. He started on the back of the grid but soon took the lead, overtaking in true scramble style by taking to the grass on the side. The main opposition was from Jack Ehret on a Lightning which had recently taken the Australian record as a solo, and a chap named Slaughter, also on a Vincent. It seemed that George got such a lead that these two thought they were racing first and second, thinking that George couldn't have got so far in front. By the time they finished, George had won and was enjoying a well-earned beer!

Not long after this we were to race at Bandiana, another Army camp circuit near Hume Weir. I was in the lead when Phil put out a pit signal reading 'SLOW'. I thought, hell, I'm in front, can't be slow, so I went a bit quicker, only to see the next signal, 'SLOWER'. Damn it, I thought, and really turned it on. Well, as you may have guessed by now Phil put out the next signal with the words 'CAN'T YOU BLOODY WELL READ?', so I thought, better slow down and did, but won anyway.

At Fisherman's Bend I let Noel Heggart have a ride. He was a very good scrambles rider, and his technique was to rush up to corners and then stand his 14 stone on the back brake. This was fine on grass or mud, but on the bitumen, it locked the back wheel, with smoke pouring off the back tyre for several yards. A new tyre was fitted before the race and after four laps it went flat. Upon examination we found the tyre had four flat spots, one for each lap! Well that was his first and last ride on my bike!

[Photos courtesy Old Bike Australia]

To be continued ... ■

New Racing Vincent-H.R.D.

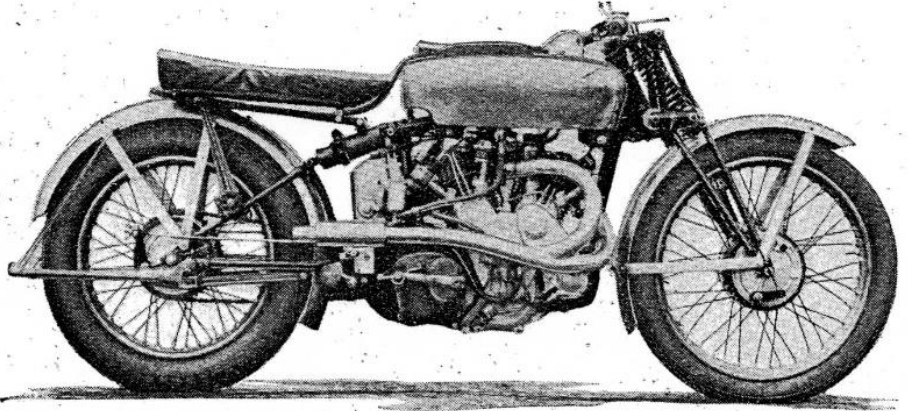
Spring-frame Big-twin Claimed to be Capable of Over 115 m.p.h. in Third Gear and Over 90 m.p.h. in Bottom

LAST Saturday a new racing model made its appearance in the Dublin "100," the Irish handicap road race. It was the 998 c.c. Vincent-H.R.D. "Rapide" in racing trim, and in the hands of M. Barrington it broke the lap record at 86.67 m.p.h., and finished fifth at an average speed of 82.81 m.p.h., the best of the day.

The engine is similar in specification to the 500 c.c. Vincent-H.R.D. replica model. It has T.T. replica pistons, con-rods and camshaft, but instead of bronze cylinder heads, cast-iron heads are used, and the crankcase is of Y-alloy. The compression ratio is 7.7 to 1—comparatively low for a racing engine.

Sports Amal carburettors of 1½ in. bore are employed. The gear box is a Burman of the special racing type, giving a top gear of approximately 3.6 to 1. The clutch is lined with a special material which has been designed to stand up to the enormous power developed by the engine, and as this material has to be run in oil an Elektron oil-bath is fitted.

The frame is similar to that used on the standard 1,000 c.c. models, and it has, of course, Vincent-H.R.D. rear springing. The brakes, however, are of the T.T. type with ribbed iron drums and alloy back plates. There is a separate oil tank which holds seven pints, and the standard T.T. petrol tank has a capacity of five gallons.



The new spring-frame road-racing 998 c.c. Vincent-H.R.D. which made a successful debut in the Dublin "100" road race. The engine has a specification similar to that of the 500 c.c. replica model

Some difficulty has been experienced with the petrol supply. The petrol tap supplying the front carburettor is at present fitted in the middle of the tank, but the acceleration of the machine is so great that when there is less than two gallons of petrol in the tank the petrol surges to the rear of the tank and the front cylinder is starved.

Owing to the great power developed by the engine, several new problems of this nature have arisen. A 4 in. section

rear tyre has to be used, for with a smaller section tyre wheelspin is very bad, and no particular effort has been made to save weight in the front of the machine, since the front tends to become very light when accelerating.

No maximum speed figures are yet available, but it is claimed that the model is capable of over 90 m.p.h. in bottom gear, and that over 115 m.p.h. has been attained in third gear.

Buy, Swap n' Sell

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

SWAP - Series B UFM



I have a good condition (probably needs a repaint) Series B UFM, number R3576.

Would like to Swap for a good condition Series C UFM for Comet project.

If you can help please email to Rodneybrown58@icloud.com

SELL – Series B Rapide:

It is with great reluctance that I have decided to part with my Series B Rapide, Engine #1309



I have owned this bike for 6 years having purchased it from Jeffrey Richardson. Jeffrey sold it to me with a rebuilt top end done by Laurie Binns. I rebuilt the bottom end with a new big end from Greg Brillus. Everything in the bike is like new and close to factory Specifications. I have fitted shadow drums on the front and an Alton alternator. The original drums and large Dyno will go with the bike as well as the new and old parts list, Richardson manual and Know Thy Beast.

This bike is an easy starter and pulls very well.

I am suffering some ill health and this ends my run of Vincent ownership since 1968

I'm asking \$80,000AUD.
Please no offers

The bike and myself are located in Maroochydore Queensland Australia

Inquiries, email Ray at izenoze@yahoo.com.au within Australia, phone 0405098799



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

SELL - COVID Cleanout: I have had a good look through all my Vincent stuff and have decided that a number of things need to be moved on. These items are all located in New Zealand, though the prices are in Australian \$. Packing and post/shipping costs extra.

Contact Eugene Nehring in New Zealand on: eugenednehring@me.com

1 x mostly complete set of Girdraulics REDUCED to just A\$5,000, 2 x Used Rear Hubs \$50 each, 1 x Good Used G50 \$100, 1 x Vincent Single Pull Throttle \$100, 1 x Comet Steady Plate Good Used \$50, 1 x Rapide Steady Plate Good Used \$50, 1 x Comet foot Hanger (Brake Side) CAD plated \$150, 1 x Comet Pivot Stand Axle CAD Plated \$50, 1 x Series D exhaust Nut \$50, 1 x Comet Battery Carrier with front Strap \$150

SELL: Steib Sidecar

I have become the owner of an original, fully restored, 1950 S350 Steib sidecar, due to the fact that I had to buy the Sidecar with the attached 1961 BMW R50/2. **The bike I want to keep**, but the sidecar has to go. The sidecar is in immaculate unmarked condition and has been fitted with a hand operated hydraulic brake. Like most Steibs, it is easily converted between left and right hand mounting. Located



in Townsville, Australia. Seeking sensible offers around A\$14,000. Can assist with shipping world-wide.

Email to Paul Gilbert for more information
pmgilbert@netspace.net.au

WANTED/SWAP: RFM number R2567

Hi Martyn, I purchased my 1948 B Rapide in 2006 and it came with non-matching RFM number R3269. With the bike having been in Australia for at least the last 60 years I am hoping to locate the original RFM number R2567, that may well be fitted to a bike or in storage somewhere in Oz. If anyone knows of the whereabouts of RFM 2567, I would consider any reasonable proposition to acquire it; swap of parts, \$\$ or whatever. Thanks, Mark Hamilton, Adelaide. email markhamilton998@bigpond.com

WANTED

A pair of Vincent twin matched crank cases in reasonable condition. Email Richard on faulk@iinet.net.au

SELL: Vincatti

Illness forces the reluctant sale of my recently finished Vincatti. The motor (freshly built series B with new cases) which was fully assembled and tuned by the late Laurie Binns incorporates a BT-H magneto, Alton 12 volt electrics, and a Grosset electric start.

This fantastic bike has covered less than 2,000 trouble free miles since completion. Located in Melbourne, Australia.

Asking Australian \$65,000. Can assist with international shipping if required.

Email horner@bigpond.net.au for more info



SELL: Vincent 5" Black Shadow Speedo – The Read Deal!



Available now is the just completed full restoration of an original Vincent Black Shadow 5" speedo with correct gearbox and provision for internal light. Located in Victoria Australia it is for sale at just Australian \$3,200. *[that's about US\$2,300 ed.]* Can ship world wide.

Also presently restoring a matching 5" Vincent Black Shadow Tacho in a repo case. The tacho has the correct angle drive like the speedo, and the dial is RPM as per the original factory setup. Only difference is the case is without the internal light fitting.

For more information email Steve at nortones2@internode.on.net

Service Providers

The Service Providers listed have been used with a degree of satisfaction by OVR readers in the past. Just because they are listed does not imply an endorsement of them by OVR.

Spares:

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

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

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

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

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

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

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

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

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

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

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

Nuts n Bolts:

Classic Fasteners, 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

Small Parts & Bearings, Australia: Has an extensive range of small parts and bearings and also spring steel shims an an amazing range of sizes. More info at www.smallparts.com.au

Restoration Services:

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

Ken Phelps, Australia – Qualified aircraft engineer and builder and daily rider of Norvins for over 30 years, who has the skill and experience to carry out overhauls, rebuilds, general repairs and maintenance to Vincent HRD motorcycles. Full machine shop facilities enabling complete engine and chassis rebuilds, Painting, wiring, polishing, aluminium welding and wheel building. Ken Phelps Phone: (61+) 0351760809 E-mail: ogrip400@hotmail.com . Located in Traralgon, Victoria, Australia

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

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

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

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

General Services :

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

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

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

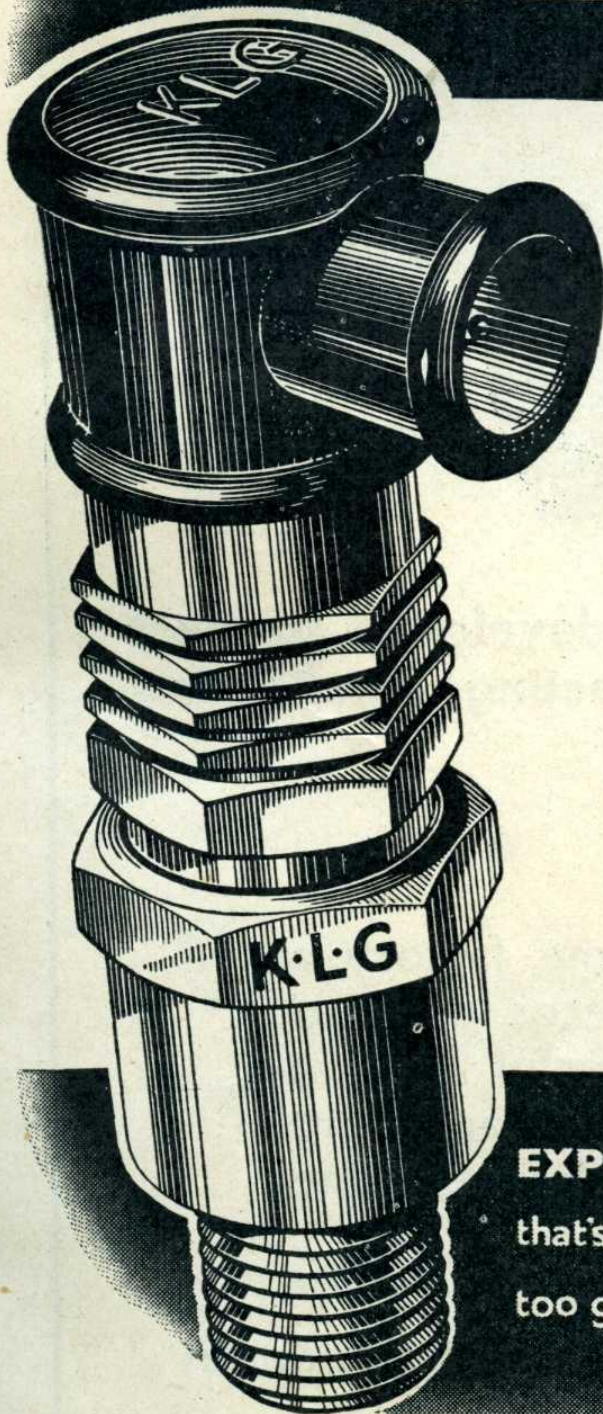
Dyson M/C Engineering, Australia: Wheel building, Crank rebuilds, Bead blasting, Rebores & Engine Rebuilds and more. Located at 12 Chris Crt., Hillside, Victoria. Phone 0400 817 017

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

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

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