The Oz Vincent Review

Edition #54, September 2018

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 a super photo of some interesting scenery and with the Australian National Rally just about to end let's hope for some photo's from it in the next edition of OVR. And yes, those front brakes are in need of some serious adjustment.

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Letters To The Editor

Dear Martyn
Thanks for the latest OVR. It's just packed, as usual, with really interesting stuff. If only motorcycle magazines were like this I might take up buying them again

Two things jogged my memory. One was the photo and mention of Granville Bradshaws ABC. Many years ago Phil Irving and I had a very pleasant afternoons conversation when I lived at Stanwell Park. Phil recalled that the first aftermarket accessory as such that he could recall was a short chain with a small circular clip at each end. These were designed specifically for the ABC which apparently had a nasty habit of dropping pushrods out of their cups and onto the road. I suggested the with one clip attached to either pushrods it saved you a walk back! However Phil responded that going to pick up the rod was not the major concern, the big problem was that in the process of falling out the rider invariably ran over the rod and bent it!

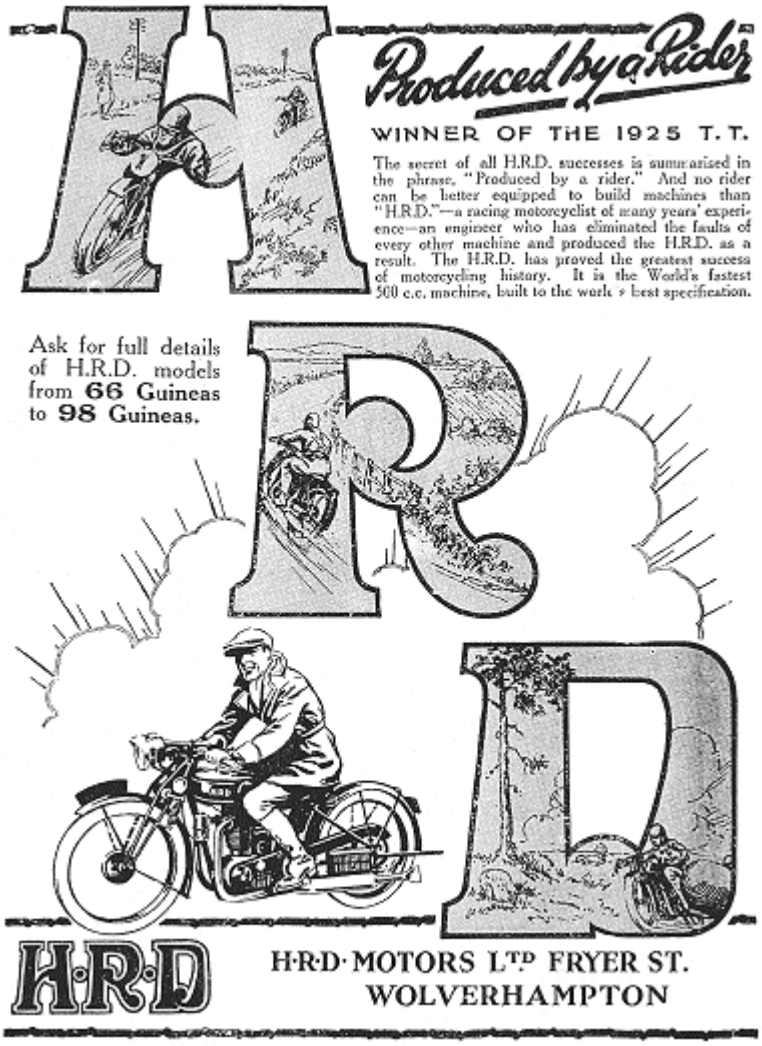
Secondly concerned the rearward movement of the Vincent front wheel under heavy braking. Many will remember that Phil Mahood campaigned a 500 Vincent in Canada in the 70's or 80's. Phil had observed that there was evidence that the wheel and guard were hitting the magneto cowl, yet when the bike was jacked up there was always adequate clearance. He concluded that the problem lay in the Series D UFM that he utilised (to save weight I guess). Under heavy breaking the single tube has a natural tendency to bend. In doing so it steepens the rake and moves the wheel aft

Yours
Ray Schriever, Australia.

J.A.P. Revisited

In OVR #12 we took a detailed look at the life of John Prestwich, the genius behind J.A.P. engines – And now OVR contributor Mitchell Barnes from Western Australia provides some history of those fabulous JAP race engines post Bert le Vack's departure and the closure of the J.A.P. race shop in 1925

JAP TT Engines 1926 – 1935



For 20 plus years, JAP power gave fledgling manufacturers the chance to win TTs. At Brooklands, JAP power set record after record in all capacities, and in Speedway, JAP was invincible. Despite limited resources, annual improvements to John Prestwich's basic 1910 arrangement, kept JAP winning and winning.

At the height of their winning ways, the impending release of the latest JAP TT engines was cause for considerable excitement. For many manufacturers, any dreams of glory (with its attendant publicity) they held, was tied to the potency of that year's JAP race engine. And for year after year, JAP delivered on that promise.

By the early 1930s however, sophisticated multi valve engines from Rudge and overhead cam engines from Excelsior, Norton and Velocette combined with sustained development programs effectively relegated JAP-powered machines to also-rans. JAPs simple formula was no longer good enough to compete at the highest level. And as JAP's fortunes waned, so did the TT aspirations of countless small manufactures. But even in those depression years, JAP alone kept the faint TT hopes of OK Supreme, Cotton, HRD, CTS and others alive, although technical advances elsewhere gave them little reason for confidence.

But in the teens and twenties, it was a very different story.

1926

The 1926 engines differed from the '25 jobs with new crankcases incorporating strengthening ribs in the shape of an upright cross on the drive side. The cylinder head was redesigned specifically to accommodate a rather idiosyncratic valve spring arrangement. In place of the concentric triple valve springs of the previous year, the head featured one centrally located spring surrounded by seven smaller springs spaced around it per valve. It was thought the new design would help abate the problems associated with spring surge. All springs could be compressed quite easily by hand and it was purported that a valve would still function with up to three springs missing! A conventional single split collar retained the springs in place.

Fortunately the design enabled the former triple spring arrangement to be substituted without modification

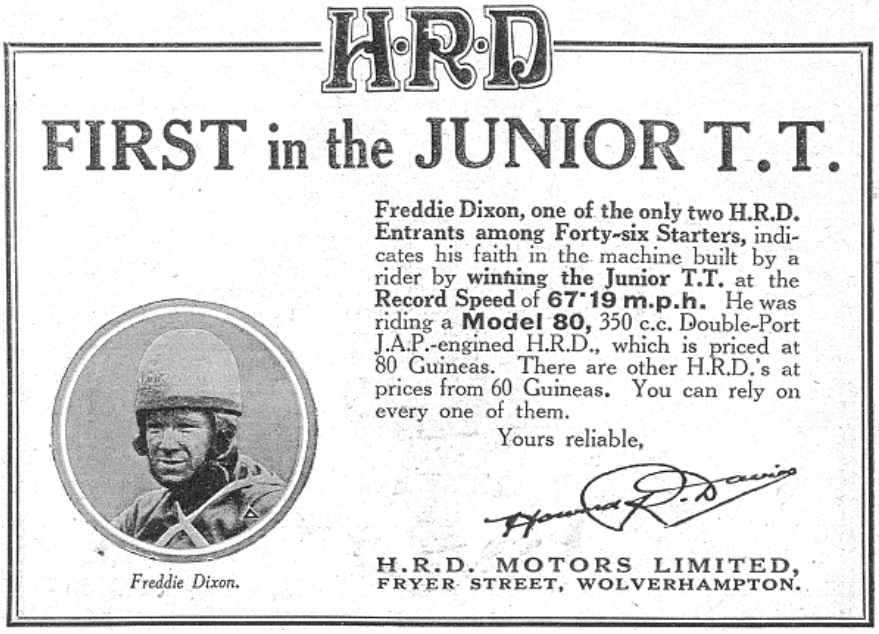
Engine lubrication was improved considerably with a mechanical oil pump feeding the bigend pin through the timing side flywheel mainshaft. Designed and manufactured by JAP, it was a simple plunger design with a non-return disc valve and was driven by an eccentric pin on the cam wheel spindle. If required, the pump could be used in conjunction with a throttle-controlled sight feed in which the flow rate was controlled by a screw-down needle valve.

The 500 engine shared the same general specifications as the 1925 engines (other than the new crankcases and valve spring arrangement) with a 85.5mm bore by 85mm stroke. Unlike the smaller capacities, the existing head could be machined to accommodate the new valve spring arrangement. The 250 (62.5mm x 80mm) and 350 (74mm x 80mm) engines required new cylinder heads on which the rocker stands were set one fin further apart in order to accommodate the revised valve spring arrangement. This is turn necessitated dropping the inlet port one fin lower. The rocker gear was modified to incorporate larger diameter double ball races at the pushrod end of the rocker stands. This design enabled the rocker spindles to be withdrawn without having to remove the races. To facilitate lubrication, the bearing cover plates were fitted with grease nipples. The new heads had increased finning particularly near the exhaust ports to aid cooling.

1927

The TT engines had incremental improvements on the successful 1926 engines with particular emphasis on the larger two capacities.

The 500 engines were given a longer stroke (and longer conrod). The new bore and stroke was the famed 80mm x 99mm. The timing side flywheel mainshaft was enlarged to be the same diameter as the drive side shaft so identical roller bearings could be fitted both sides. The crankpin was increased to be the same diameter as the V-twins. The double row caged roller bigend bearing design introduced the previous year was retained. The piston now had three 1/16" rings. The complicated valve spring arrangement introduced the previous year was abandoned with a return to the triple coils. The pushrod side rocker stands were modified for roller bearings.


H·R·D

FIRST in the JUNIOR T.T.

Freddie Dixon, one of the only two H.R.D. Entrants among Forty-six Starters, indicates his faith in the machine built by a rider by **winning the Junior T.T.** at the **Record Speed** of **67·19 m.p.h.** He was riding a **Model 80,** 350 c.c. Double-Port J.A.P.-engined H.R.D., which is priced at 80 Guineas. There are other H.R.D.'s at prices from 60 Guineas. You can rely on every one of them.

Yours reliable,

Freddie Dixon.

H.R.D. MOTORS LIMITED,
FRYER STREET, WOLVERHAMPTON.

The 350 engine was more robust than the 1926 type. Like the 500, it had a longer conrod to accommodate a longer stroke. New dimensions were 70mm bore x 90mm stroke. Flywheels were heavier with larger diameter mainshafts for added rigidity. A new higher compression domed aluminium piston now had with three 1/16" rings. The gudgeon pin diameter was also boosted to 11/16". A new cam wheel with higher lift cams was employed. Cam followers were mounted on larger diameter spindles. Valves

were both 1 5/8” diameter with double coil springs and a modified split collar fixing.

Across the three capacities, the JAP oil pump no longer had the throttle control. Oil regulation now relied upon the needle valve and sight feed. All capacities were available with either front or rear-mounted magneto. All capacities retained twin exhaust ports.

The 250 engines retained its 62.5mm x 80mm bore and stroke but like its bigger brothers, featured larger diameter roller main bearings and a new bigend with double row caged rollers.

1928

The 1928 TT engines were similar to their 1927 counterparts but developed considerably more power. Much time had been spent on cam profiles and the resultant power increases were phenomenal for the time. The 250 engines showed a 25% power gain at 6,000rpm and the 350s a 15% power increase.

Although a number of manufacturers used the JAP race engine, OK Supreme stole a march on their rivals by fitting special cylinder heads designed by engineering tyros Jones and Mason. Jones and Mason’s cylinder head continued with the twin exhaust ports but had smaller valves and a downdraft inlet port cylinder head. The smaller valves enabled a rudimentary squish effect. It was rumoured that the OK Supreme’s were a good 5% faster than their JAP-engined rivals. It is believed that JAP manufactured these heads for OK Supreme as it had no manufacturing facilities at the time.

1929

The 1929 TT race engines were similar to the ’28 engines. Development was concentrated on the 250 whose rockers and pushrods were enclosed within a large aluminium rockerbox. This was shaped to make the offset pushrods seem parallel. A two-bolt fixing secured the inlet manifold which was inclined to the right of the centreline except for the engines destined for OK Supreme which used their own cylinder head with straight inlet port.

A Best & Lloyd dual oil pump handled the lubrication needs with a direct feed to the bigend and an external pipe to the rockers. Surplus oil drained back drained into the valve guides through an external ‘Y’ pipe. No leakage from the rockerbox was anticipated because of the vacuum.

The 350 and 500 engines were more or less the same as the previous year save that the 500 head had improved cylinder head finning. The enclosed rockerbox was also fitted to the 350s and 500s. The pushrods were also enclosed in their own tubes. The cutaways in the head and barrel for the pushrods was enlarged for tubes

1930

Most of JAP’s performance development was focused on the Speedway engines and the ill-fated V-Twin 500. The single cylinder engines were pretty much as they had been the last couple of years. The 250 benefitted from a beefed up bigend pin (the same as that used on the 350s). Both smaller capacity engines benefitted from stronger connecting rods. Lubrication was improved (better oil pump) and the roller ends of the cam followers were bushed. The flywheels were lightened for all three engines and the 500 had slightly larger exhaust ports. Both larger capacity machines had roller bearing and the rear magneto platforms were strengthened with an extra support.

All three engines continued with twin exhaust ports and optional forward mounted magneto.

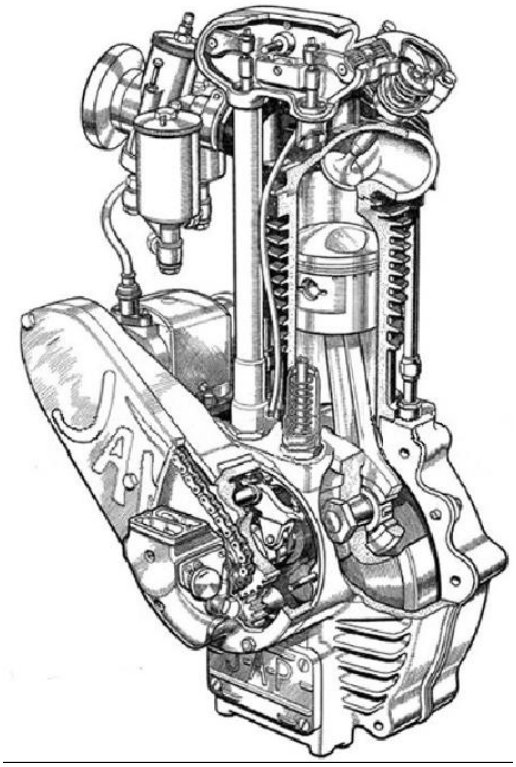
1931

After a couple of less than satisfactory years in the Junior and Senior TT races, the factory undertook a concerted effort to extract still more power from their venerable engine.

The 500 received the most attention and detail modifications reduced its weight from a hefty 85lb to a sprightly 67lb, mainly through the expedient of significantly lightened flywheels (a direct benefit of the factory's speedway program). Horsepower was increased at the same time mainly through a combination of a single exhaust port cylinder head and reduced diameter downdraft inlet port. The inlet port was also canted way over to the left. On the test bed, these modifications had been found to deliver greater power output and better acceleration. Unfortunately, such was the cant of the inlet port that the carburetor venturi became partially blocked by the rider's leg. In the relentless quest to pare back weight particularly up high, cylinder head finning was reduced as well.

The bottom end featured a new crankcase with the lower 2/3rds having horizontal ribs for added strength and improved cooling. Flywheel diameter was 8" and highly polished to reduce oil drag. The drive side main bearing comprised three rows of ¼" x ¼" roller bearings in a dural cage. The timing side had 17 only 3/16" long rollers. The bigend comprised a caged double row roller assembly lubricated by a Pilgrim oil pump through a hollow timing shaft. It was still considered preferable to supply fresh oil in controllable quantities rather than recirculate. A copper head gasket was used and the slightly domed piston gave a 7.5:1 compression ratio.

The 350 was much the same as the year before with twin exhaust ports (albeit slightly enlarged) and parallel inlet port. Lighter flywheels reduced total weight.



The 250 engine was also modified with the cylinder head machined differently. The diameter of the inlet port was reduced thus enabling the port to be machined with a slight downdraft. The flywheels were little more than discs carrying a rim, a bob-weight and bosses for the mainshafts. A new barrel with shallower fins was specified. Compression ratio was 8.5:1 and the engine peaked at 6,200rpm

1932

By and large, the 1932 engines looked similar to the 1931 types but there were major detail improvements as well as a different type of oil pump with a return feed. Bronze cylinder heads were also offered for the first time.

The 500 engines were given dry sump lubrication (although the crankcase had no sump as such), improved cams and a 14mm spark plug. A new internally ribbed piston supported a higher compression ratio of 7.75:1. Valves were made from an improved steel alloy and the valve guides were oil impregnated. Oil to the valve guides was fed by gravity.

The 350 engine benefitted from the previous years' major updates and shared many 500cc components such as crankcases and bigend. The 350 head was a 500cc casting underground for the smaller combustion chamber and so had a downdraft inlet port and single exhaust port. Bore and stroke was shortened to 74mm x 80mm and the new domed piston had only 2 rings.

The 250 engine also had detail improvements and benefitted from a shorter 64.5mm x 70mm.

At the TT, there were engine detail differences depending on the manufacturer. Frank Longman's OK Supreme 500 had its carburetor bolted directly on top of the cylinder head between the inlet and exhaust valves. It was claimed that this ultra downdraft arrangement provided phenomenal acceleration. Charlie Dodson's Excelsior 500 had a 2nd Pilgrim oil pump to fed oil to the bigend before returning it to the tank via the sump. To mitigate the previous year's piston seizures, oiling to the lower barrel was improved.

1933

This proved to be more a less a hiatus in JAP race engine development and engines were much the same as 1932.

1934

After years of declining fortunes at the TT, it was felt a fresh start was needed if JAP was ever going to be competitive again. Besides which, their road engines were falling out of favour as well and any revision would ultimately benefit the range.

In the 20s, JAP had experimented with the overhead cam design but in the light of their Brooklands and Speedway successes, it was considered that the venerable pushrod arrangement still had the potential to do well at the TT.

Greater power at higher rpm would certainly need to be found. The need for bottom end structural strength to allow increased power to be sustainable for 3 hours of high speed racing was of paramount importance. The result was an entirely new crankcase of massive proportions. It was pear shaped to allow the cam followers to sit as high as possible so the actual pushrods could be shortened considerably. The spigot of the cylinder barrel was sunk deeply into the cases making for a very rigid structure.

Strangely, in view of the need for sustainable power, the engine was not through-bolted. The cylinder head cast in bronze, had an inlet port with 12˚ of downdraft and offset to the left in usual JAP fashion by 45˚. The single exhaust port poked out to the right. Hairpin springs were specified but conventional coil springs could be substituted and enclosed Speedway-style.
Valves were of equal diameter and were lubricated conventionally by oil from the rockerbox via short external pipes. Tests carried out at the factory showed a decrease of 6.6˚ in running temperature at the exhaust valve.

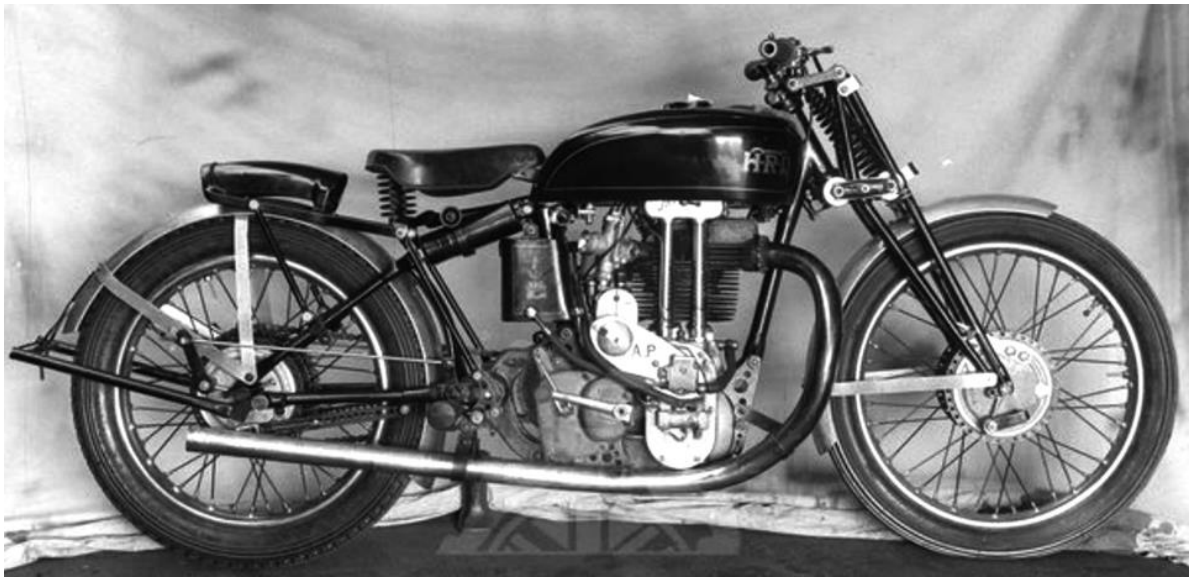
The bottom end of the engine was particularly rigid with a lubricated drive-side outrigger bearing supported at the end of the crankshaft. All main bearings were of the roller type with double row on the drive side. The timing chest was redesigned to include an idler pinion between the mainshaft pinion and single camshaft spindle. This enabled the followers to sit high in the timing chest so the pushrods would be as short as possible, closely following Velocette “M” Series practice.

The engine was undoubtedly more advanced than previous years' but an undesirable consequence was increased height and weight.

A 350 version was more or less a scaled down version but although a new 250 was also promised, it did not eventuate.

The new engines were supplied exclusively to OK Supreme and HRD.

1934 HRD fitted with the revised 1934 JAP engine and a Burman gearbox



There was another new JAP 500 engine designed and developed by Alan Bruce for Excelsior. It was based on the 1932 500 single port engine with bronze cylinder head but with an aluminium barrel. It had two magnetos mounted where the timing chest normally resided to fire two spark plugs.

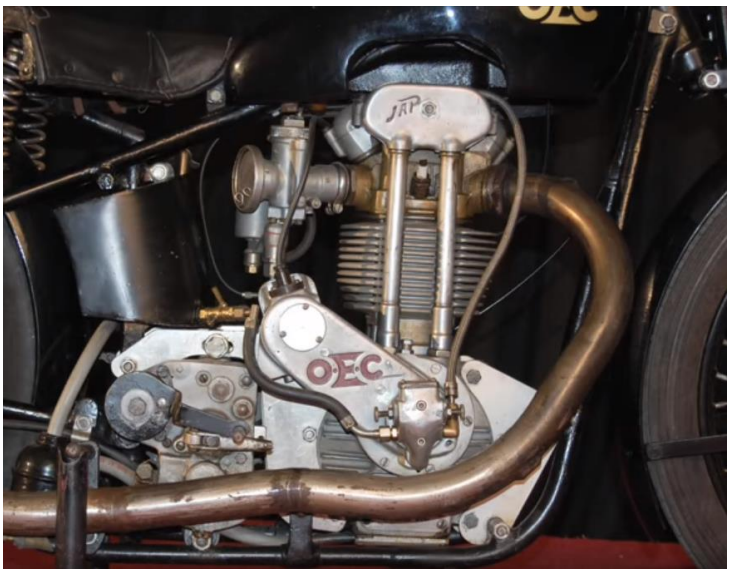
1935

After the disappointments of 1934, JAPs racing program was wound back. The 1935 engines were almost identical to the '34 jobs with minor upgrades including deleting the drive side outrigger bearing which was of dubious value. In compensation the drive side main bearing now comprised ball and roller bearing. With overheating a real problem for 1934, the cylinder head to barrel arrangement came under some scrutiny with a 3 fin aluminium base shrunk onto the head in order to insulate the barrel. Perhaps the major change was carburation. The downdraft angle of the inlet ports was reduced to 2.5˚ and the port bifurcated to enable the use of twin carbs. It also had a twin plug head.

It was tested by HRD against their new Irving/Vincent high cam engine at the 1935 Senior TT and its results were marginally inferior to HRD's own engine. The engines were returned to the factory.

JAP also built a special 250 engine for Cotton. Although of conventional design, it featured magnesium crankcases and bronze cylinder head. It looked the goods all right but sadly, failed to live up to expectations.

Although several of the design details were soon incorporated into road engines, JAP's TT tilt had run its course.



1936-38

A limited number of 1935 type TT engines but with conventional porting and a single oil pump were produced between 1936 and 1938. Zenith was the only British manufacturer to offer a complete machine with this engine. It had an iron head.

Privateers and the like could place orders with the factory for pukka bronze head race engines but it seems that few if any took up the opportunity.

These last gasp hi-cam race-spec engines are a rarity. Only two were thought to survive; a 350 engine from 1934 and a 500 engine in an OEC race chassis (pictured above). Two more have since surfaced; an iron head single ort engine and a twin spark, twin carb bronze head engine.

The following manufacturers achieved TT wins with JAP engines (in alphabetical order):

Excelsior, 1929
HRD, 1925, 1927
Matchless, 1907, 1909, 1910
New Imperial, 1924. 1925
NUT, 1913
OK Supreme, 1928

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Event Calendar

2018	
Sept 18 - 24	VOC Austria Rally. Said to be the best ever – too good to miss. Contact Michi for more info schartner.m@sbg.at
November 16-19	VOC NZ Annual Riders Rally, Northland, NZ. Email to beatin@xnet.co.nz for further details
2019	
March 22 -24	VOC NZ 2019 Annual Rally @ Otago. Email beatim@xnet.co.nz for more info
June 3 - 19	VOC International Rally; Belgium and Austria. More info to follow also see MPH
2020	
tba	International Jampot Rally in Nelson, New Zealand for AJS & Matchless bikes. Contact nipper@nipper.net.au

Setting Up A Lucas ATD

A OVR contribution from Paul Standdeven

Factory ignition timing on a Vincent is 38 degrees BTDC. The Lucas ATD has an advance range of 34 degrees, giving idle speed timing 4 degrees BTDC. Current good practice is full advance at 34 degrees, so we need an ATD with a 30 degree range.

Several years ago, I bought a Roy Price ATD. His late ones had a reduced advance range, but I didn't know what it was. Simple answer, fit it to the engine and check. It came out as 26 degrees. It's a lot easier to increase the range by removing metal than to reduce range by adding metal....

To adjust the timing range, the ATD has to be dismantled. What I did was support the ATD on a bench vice, with the round steel flange of the mechanism resting on its jaws (not the fibre gear), just loose around the weights. Find a suitable drift - I used an old Girdraulic spindle, and gently tapped the lock ring off. Be careful not to hit too hard - the mechanism could fly through, and scatter the parts across your workshop, never to be seen again.

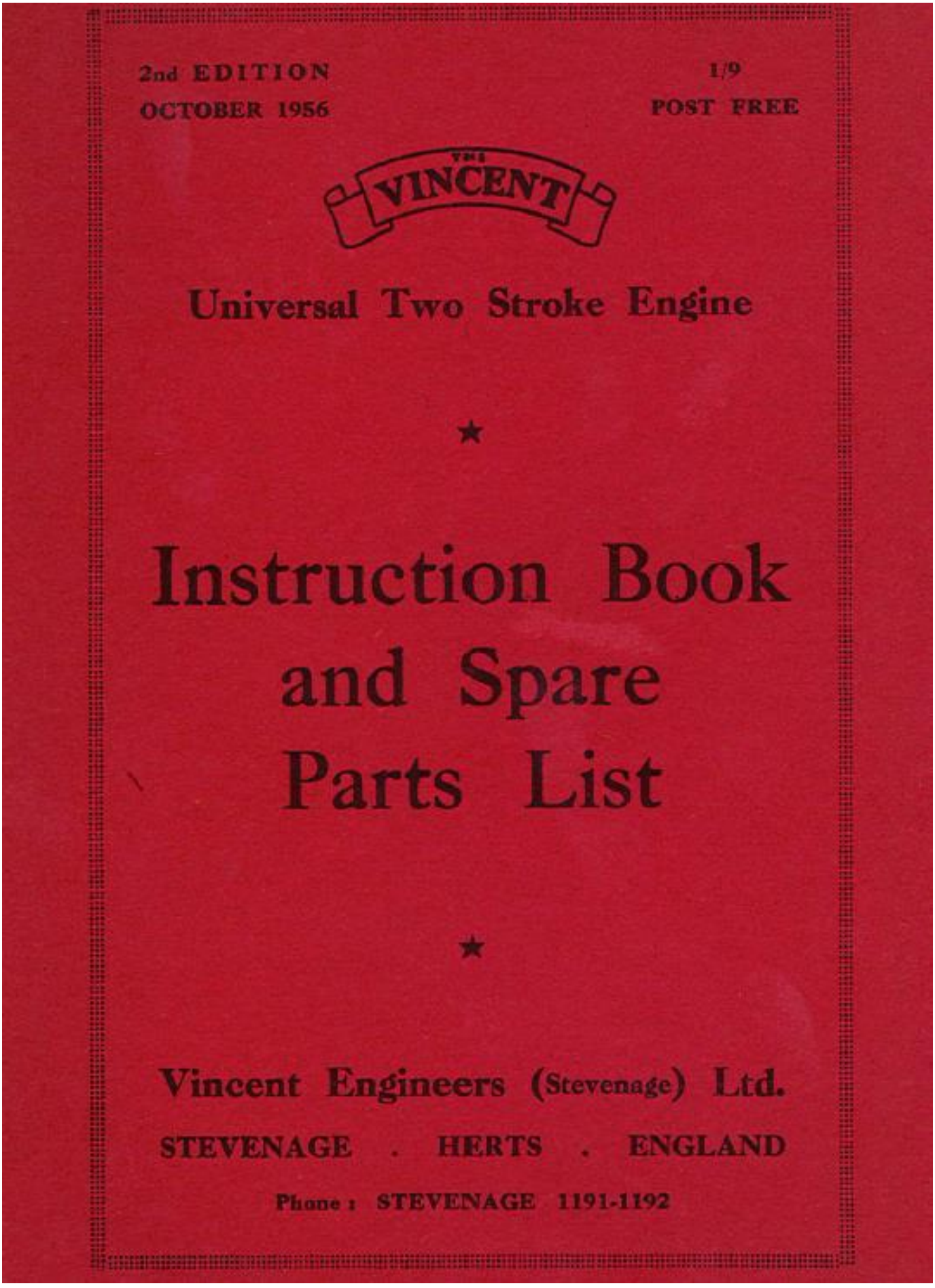
The ATD is 61mm diameter. To work out how much metal to remove, I calculated how wide 1 degree (giving 2 degrees at the crank) is at the circumference. It came out as 0.020" or 0.5mm. So I aimed to remove 0.016" as a first try, measured using a feeler gauge.

I started by lightly filing the arms on the centre spindle square, and then the limit stop face on the retard side, making sure that I kept an even gap as I widened it. Once the gap reached .016", I filed the opposite arm and limit stop, until there was no gap either side.

Time to test the timing range. It came out as EXACTLY 30 degrees range. I had cut off much more metal than I estimated, because I started by squaring up the moving arms. Be careful not to file off too much!

Reassembling, I found that one of the ATD weights was tight on its spindle, so I swapped them around, and it went together easily. Pressing the lock ring back on was easy using the bench vice. One new ATD ready for service.

Thanks to the generosity of A.V. from Australia, OVR is able to bring to you in serialised form, part 1 of the reproduction of the Vincent H.R.D. Instruction Book for the Universal Two Stroke Engine originally published over 60 years past.



DIRECT DRIVE MODEL

Air cooled two stroke engine (internally mounted fan).

Bore—43 millimetres. Stroke—50 millimetres.

Cubic Capacity—72·7 c.c.

Power Output—(continuous) maximum 1.25 b.h.p. at 2,500 r.p.m. (High Power Version 1.6 b.h.p. at 3,000 r.p.m.).

Rotation—Anti-clockwise, looking at drive shaft.

Ignition—"Vincent" Rotating Magnet Magneto. Timing 25° before top dead centre. High Power Version 30° before top dead centre.

Sparking Plug—14 m.m. Short Reach K.L.G. F70 for normal use. K.L.G. F20 for light duties.

Carburettor—Bletchley Type A10. Single lever control with easy starting device and air filter. Jet No. 46. Choke 10 m.m. for normal use. For light duties, Jet No. 42, Choke 8 m.m.

Lubrication—Petroil Mixture. See page 3 for recommended lubricants and proportions of oil to petrol.

Fuel Tank—Capacity 2 pints.

Weight—with silencer, fuel tank, carburettor, 27 lbs. (12.25 kilos).

BELT DRIVE MODEL

Air cooled two stroke engine.

Bore—43 millimetres. Stroke—50 millimetres.

Cubic Capacity—72·7 c.c.

Power Output—(continuous) maximum 1.25 b.h.p. at 2,500 r.p.m. (High Power Version 1.6 b.h.p. at 3,000 r.p.m.).

Rotation—Anti-clockwise, looking at drive shaft.

Ignition—"Vincent" Rotating Magnet Magneto. Timing 25° before top dead centre. High Power Version 30° before top dead centre.

Sparking Plug—14 m.m. Short Reach K.L.G. F70.

Carburettor—Bletchley Type A10. Single lever control with easy starting device and air filter. Jet No. 46. Choke 10 m.m. for normal use. For light duties, Jet No. 42, Choke 8 m.m.

Lubrication—Petroil Mixture. See page 3 for recommended lubricants and proportion of oil to petrol.

Fuel Tank—Capacity 2 pints.

Weight—with silencer, fuel tank, carburettor, 25 lbs. (11.340 kilos).

THE ENGINE

This is an entirely new engine for industrial and agricultural purposes combining consistency of performance with simplicity of construction. The unit is designed to require the very minimum of periodic attention; the simple adjustments described in the following pages can easily be carried out by all users, even those having little or no experience in engine maintenance. The design is so straightforward that the engine can be completely dismantled and re-assembled within half an hour.

In cases where there is need for reference to the manufacturers, the number of the engine *must* be quoted. This number is stamped on the top crankcase bolt boss.

Description

The detachable aluminium alloy Cylinder Head is held to the Cylinder by four studs and nuts; there is no Gasket between cylinder head and cylinder.

A flat top Piston is fitted with two Compression Rings, each located by a peg. The Gudgeon Pin is retained by two circlips. The ground Connecting Rod is fitted with a phosphor bronze Bush for the small end and has a hardened Big End for a single track of fifteen $\frac{3}{16}$" × $\frac{3}{16}$" roller bearings which run on a hardened crankpin pressed in to the Flywheel.

The overhung Crankshaft is supported on a ball and a roller bearing.

Ignition is by a rotating magnet Magneto; the magnet is keyed on the mainshaft.

STARTING AND SERVICING INSTRUCTIONS

Starting the Engine

Fill the fuel tank with a mixture of 16 parts of commercial grade petrol (70–75 octane) with one part of lubricating oil as *recommended* below:

CASTROL TWO-STROKE SELF-MIXING OIL

The following are recommended in the *proportion of 24 parts of petrol to one part of oil*—

AGRICASTROL MEDIUM.

CASTROL XL.

If the above oils are not available, only straight, non-additive oils should be used, as a two-stroke engine differs from a four-stroke in the lubrication requirements. It has been found that many of the additives used in oils for four-stroke engines seriously aggravate

the tendency of plug points to bridge and carbon to build up in the exhaust ports. For this reason, and for trouble free running of this engine, it is emphasised that straight mineral oils, or oils with the minimum of additive be used.

Among the better known brands of non-additive engine oils which may be safely used are the following:

SHELL TALPA 30
SHELL TRACTOR 30
B.P. ENERGOL S.A.E. 30
B.P. ENERGOL TRACTOR 30
ESSO ESSOLUBE 30
PRATT'S MOTOR OIL S.A.E. 30
MOBILOIL SOVAC 330
MOBILOIL 630 TRACTOR
MOBILOIL DTE MARINE NO. 2

For very light duties where the engine is not running on full power, it is permissible to reduce the proportion of oil to 1 to 24 when using **Castrol Two-Stroke Self-Mixing Oil** or 1 to 32 when using the other recommended lubricanting oils.

Starting from Cold.

Turn the fuel tap to the "ON" position, *i.e.*, lever in line with the tap.

Open the throttle lever fully.

Wind the starting cord round the pulley on the belt drive model.

Prime the carburettor by lifting the plunger on the top of the float chamber for at least ten seconds, then release.

Then, by pulling smartly on the handle of the cord, the engine will start.

Immediately adjust the throttle lever to the required opening.

Full load can be applied almost at once, except in conditions of low temperature, when 30–60 seconds warming up should be allowed.

NOTE: Neither the Direct Drive Model or the Belt Drive Model must be started until the mainshaft nut is tightened and locked against a distance piece to take up the end float.

Hot Starting

The throttle lever may be in any position provided it is open sufficiently for the engine to run. Do not prime the carburettor. A pull on the starter will start the engine.

MAINTENANCE

Attention to the following points is all that is normally required to keep the engine in a satisfactory condition:

After 50 Hours Running:

(a) **Contact Breaker Adjustment.** The gap of the contact breaker points tends to reduce in service and from time to time re-adjustment is necessary. Remove the contact

breaker cover retained by four 4BA screws and note that this cover is fitted without a gasket. Rotate the engine anti-clockwise looking at the flywheel, until the contact breaker points are fully open. Check the points with a feeler gauge ·014" to ·016" (·4mm.) thick. If adjustment is necessary slacken off the 4BA Hex, head screw holding the adjustable contact and re-set the gap to ·014"—·016" with the aid of a feeler gauge of this thickness. Re-tighten the screw taking care not to derange the adjustment and re-check the setting. (See Fig. 1)

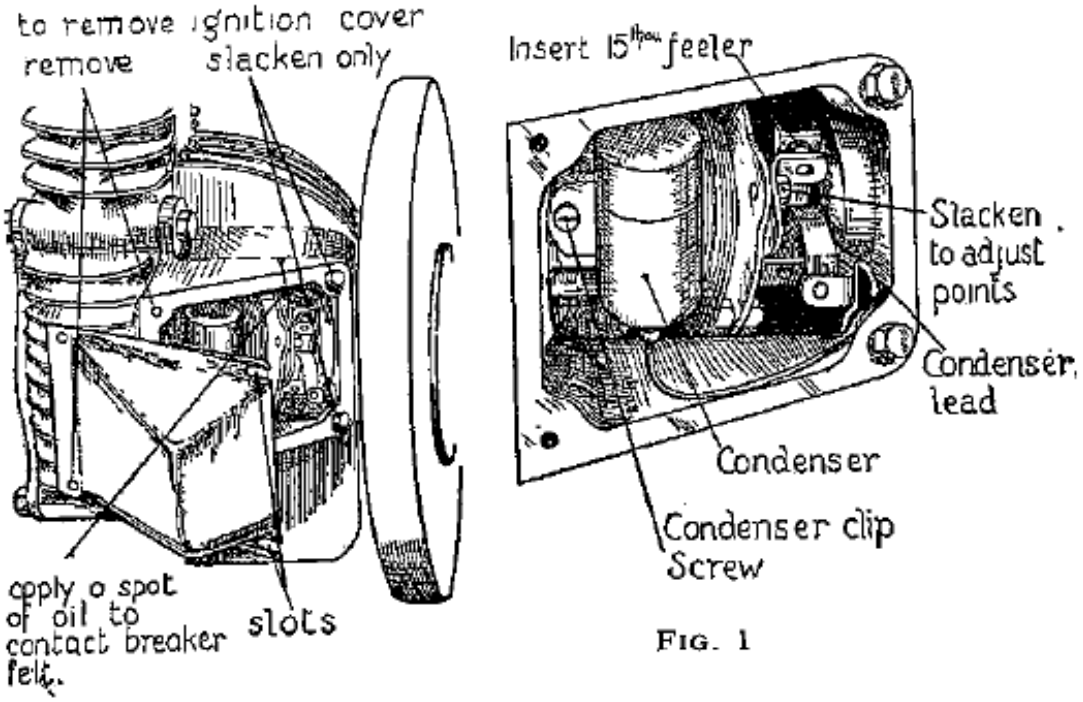


FIG. 1

(b) Contact Breaker Lubrication.

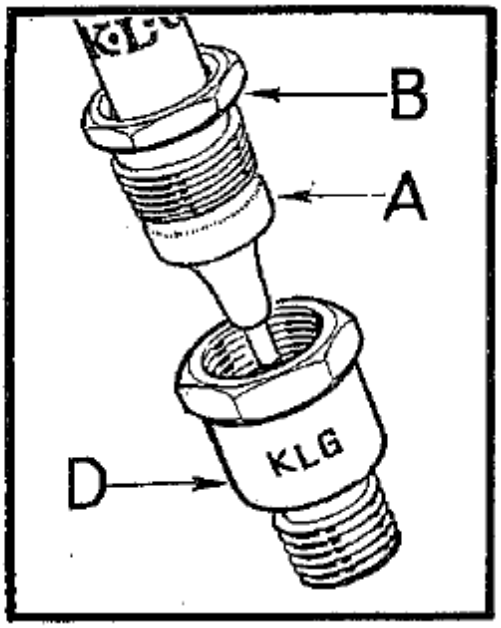
Apply a spot of SAE 30 engine oil to the contact breaker felt, taking care not to get oil on the contacts.

(c) Sparking Plug.

Remove sparking plug and clean thoroughly. If the plug is of the detachable type it should be taken apart and thoroughly cleaned internally. Non-detachable sparking plugs can be cleaned on sand blasting equipment as available in most garages. Re-set the points to ·025" – ·027" (·64 – ·69 mm.) It is important that the sparking plug is at all times a good gas-tight fit in the cylinder head; for this reason the use of a new plug washer is recommended every time the plug is removed for maintenance. (See Fig. 2).

K.L.G. PLUG CLEANING

Most K.L.G. plugs are of the detachable type and can be cleaned easily and efficiently by hand. It is best to clean them at regular intervals. To take the plug to pieces, the gland nut (B) should be unscrewed from the body (D) so that the insulated electrode assembly (A) may be withdrawn.



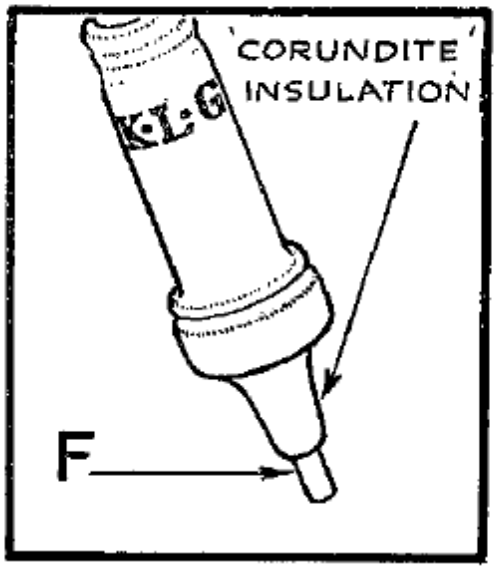
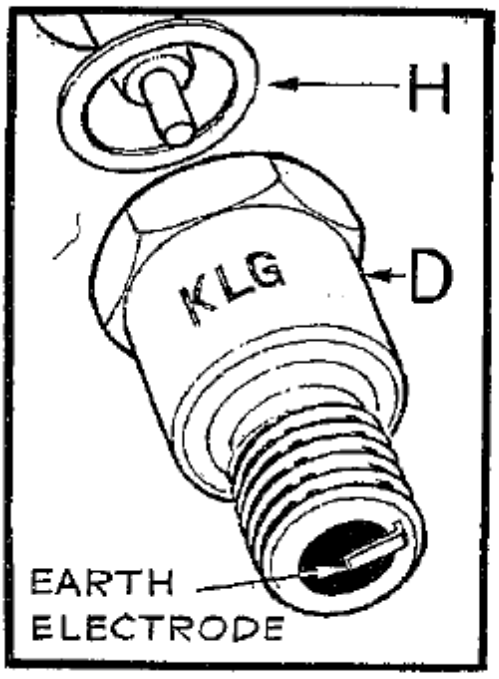


FIG. 2.

If the "Corundite" insulation is oily, first wash it in petrol or paraffin; then with fairly course glass-paper remove the carbon deposit and wash again. The firing point (F) should be cleaned with a fine emery cloth.

The plug body (D) should be scraped clean internally with a knife or wire brush, paying particular attention to the Earth Electrodes, and finally rinsed in petrol.

The internal washer (H) should be lightly smeared with thin oil. Make sure that it is properly seated in the plug body before re-inserting the central electrode assembly. Screw up the gland nut and tighten sufficiently to give a gas-tight joint.



This item will be continued in the next edition of OVR

The John Emmanuel Steering Head Modification –

An Update from Norman Walker, UK

It is worth updating the article on the John Emmanuel Steering head which appeared in the August 2018 edition of the OVR.

In the autumn of 2017 I had sold all the 60+ steering heads which had been made and still orders trickled in. I therefore published a letter saying that I wanted to move on with my life and would anyone who thought that they might want one of these conversions contact me as I would like to organise the manufacture of a final batch. Note that this is not that I mind doing this job but my real work is as a research astronomer and I have other hobbies as well as Vincents. Being one of natures disorganised people I find it time consuming, organising, assembling, packing and posting the items. Forty eight orders came in so fifty sets of parts were ordered.

Several people had asked whether it would be possible to make the steering heads in aluminium. This saves about one kilogram, two pounds weight, and so for racing is worthwhile but a significant number of people wanted these for road use and so about ten aluminium ones were made out of the batch. 7075 alloy was used as this is a highly stressed item upon which the riders' safety depends. This alloy has a similar strength to mild steel. Over twenty people also sent me their lower links to get them machined out to take Greg's modification of fitting ball races to the rear of the lower link. Gentlemen, I have to tell you that some of the lower links sent in were really rescue jobs and a great deal of work was involved.

However, eventually the parts were made, assembled, adjusted and so on. Towards the end of this exercise it became clear that the new batch of fifty would not be enough and another ten were ordered, six of which were in aluminium giving a total new batch of sixty. This together with the original sixty five means that eventually there will be over 120 Vins with modified front ends.

The company which does the machining of these items is not just sitting there waiting to do work for me and it takes two to three months from placing an order to actually getting the parts. While waiting for the parts to be made I decided that it would be nice to design a hydraulic steering damper kit to interface to the new steering heads.

Many people who have retrofitted hydraulic steering dampers have fitted them so that they lay more or less along the fore and aft axis of the bike and typically copies of the Kawasaki damper are used. I thought that it should be possible to make a neater system and eventually managed to source a short Chinese made damper which would do the job. At least two other people had used a similar type of damper but it had required some ingenuity with brackets to get it to fit.

It took some time and five prototypes before I got one that I thought would be sufficiently elegant and compact to fit into the Vincent layout and I had ten sets of aluminium brackets laser cut out of either ten or twelve millimetre aluminium sheet. As an aside this was a mistake as the finish to the edges produced by the laser cutting are appalling and hours of sanding and polishing were required before the brackets looked acceptable.

The first batch of ten sold at once and so another thirty sets of brackets were made. Ten of these have now gone without any advertising and I am well through the next ten. Any more that I get made will be cut out on a milling machine, assuring much less work for the finishing. These steering damper kits are specific to the new steering heads but one of my local Vincent riding chums would like me to design one for the standard Vincent steering head so this might happen this autumn.

Pictured is the complete steering damper kit that sells for £125 plus P&P . Contact Norman by email if you want a set; email to enw07@btinternet.com

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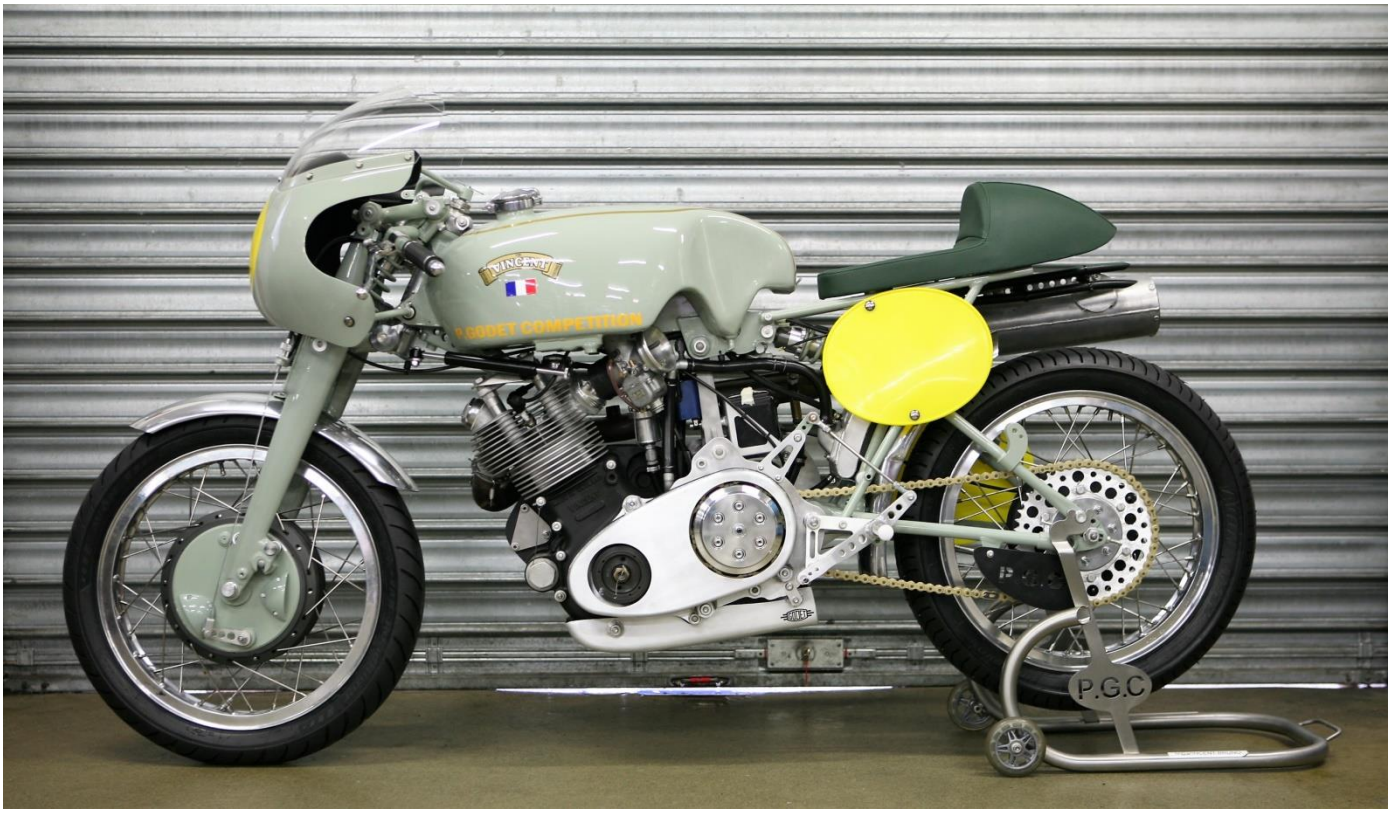
The Godet 500 Racer

Just in are the following photo's of the most recent Godet 500 racer in its final days of preparation before being handed over to the Gaulle Race Team. It's an interesting contrast the the J.A.P. engines elsewhere in this edition. *Photo's provided by Gallur Racing.*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Australian Border Force and Old Vehicle Imports

Introduction

Australia banned the importation of asbestos and ACMs (Asbestos Containing Materials) at the end of 2003. After 13 years of looking the other way, for the last 18 months, Australian Border Force has been actively targeting second hand vehicle imports looking for asbestos – and as you can only legally import a vehicle made before 1989, it means

predominantly cars and motorcycles over 30 years old. Others caught up in this are newer vehicles brought in temporarily for rallies and other events.

They are not only looking in the obvious places, like brakes, clutches and gaskets, but also in wiring loom insulation, headlining, under body sound deadener (sealer), door frame padding, windscreen caulking, windscreen washer bags, and body items like air scoops, seat materials and ducts. The technique used is called, for good reason, "**destructive testing**", and entails removal of material for testing, thereby irretrievable destroying the originality of the vehicle. It has also been reported that sealed compartments eg double firewalls and motorcycle frames, have been drilled to see if any asbestos is contained in the sealed cavity.

ABF don't actually get their hands dirty, but direct it be done by external "hygienists" etc.

This has stopped many old vehicles coming or returning to Australia, both temporarily and permanently. The debacle over the 6 asbestos-free classic Maseratis being turned around at the wharf made news around the world. Two of these were Australian-based cars which had been sent overseas to be restored with asbestos-free components. People wanting to take their pre-2004 vehicles overseas for rallies now cannot do so because they may not be able to bring them back. It also prevents people repatriating some of the great Australian vehicles we have lost, and has resulted in the cancellation of a number of international events which would have seen enthusiasts bring their old cars and motorcycles here for the event. The injection of funds to the communities through which these events travel is substantial – but now lost.

The ABF professes to be doing so out of concern for "public safety" and "protecting the community". They make statements about "deadly" or "lethal" asbestos being found in classic vehicles. This article examines the validity of these propositions.

According to the ABS, in excess of 9 million pre-2004 vehicles (which could legally contain asbestos) are still registered and on the road. It is estimated that at least 6 million vehicles still retain asbestos-containing (AC) components. These present no risk to anyone, including mechanics, provided long established simple, cheap practices are followed. Last financial year, the ABF detected 60 second hand vehicles being imported which contained some asbestos. Unless there is a concerted campaign to remove asbestos from the 6 million AC vehicles still safely using our roads, what is the point in stopping 60 equally safe vehicles a year? And would the community be "protected" and the public be any "safer" if they did?

The answer is no!

Background

In the 1970s Australia had the highest usage of asbestos of any country in the world. This was because we had abundant naturally occurring supplies which were mined, and it was processed in most capital cities. It was used primarily in building materials and eventoday, 1 in 3 Australian homes contain asbestos in their building and insulation materials.

This has been identified, time and again, as where the real risk of asbestos-related disease comes from, not old vehicles. Those now at greatest risk are the DIY home renovators and their families. Asbestos is only harmful if breathed in, and so while it remains bonded into products, such as fibro, it does not present a risk. It is only when disturbed, by fracturing, cutting, drilling, sanding, demolishing, and building fires etc that respirable fibres are released.

Asbestos has also been the subject of extraordinary publicity in Australia, and properly so, with the various scandals like James Hardie Industries (and the antics it engaged in to avoid asbestos liability), the CSR blue asbestos mine at Wittenoom, Mr Fluffy insulation in the ACT, and the innumerable inquiries, reviews, and national assessments of asbestos related issues. There are a number of Australian State and Federal bodies whose sole reason for existence is asbestos and the threat it represents.

From 1 January 2004, Australia banned the importation and new use of asbestos and ACMs – asbestos containing materials. Until then, it was legal for manufacturers of motor vehicles to use asbestos in new cars. The Australian Bureau of Statistics conducts censuses and surveys on motor vehicle numbers and use. In 2017, there were 18.8 million vehicles registered for use in

Australia, with an average age of 10.1 years. Based on similar number from 2015, the Asbestos Safety and Eradication Agency (ASEA) estimated in November 2017 that half these vehicles were made before 2004. This means over 9 million pre-2004 vehicles are still on the road.

The Australian Historic Vehicle Interest Group (AHVIG) estimates that of these, around 900,000 are pre-1989 vehicles (ie over 30 years old). While some pre-2004 vehicles may have had every AC component replaced, probably 2/3, or 6 million still contain some original asbestos-containing components. Obviously, the higher mileage vehicles will have had brake pads and linings replaced with non-AC components, and perhaps clutches, but the other AC components will probably still be in place. For those over 30 years old, unless a vehicle has had a complete restoration with every component replaced, almost all will still contain asbestos.

The question therefore is: what risk do these components represent for owners, passengers, mechanics and the general public?

There are 3 categories of people to consider: those who travel in or on these vehicles, those who work on them, and the general public. And 2 categories of asbestos-containing material, that which is bound into, and remains in a matrix, such as gaskets, insulation in various forms, and those where release of asbestos fibres can occur, such as brakes and clutches in normal use.

Gaskets and other items where asbestos is bound into a matrix

Numerous scientific publications all reach the same conclusion: unless fibres in gaskets and other items are abraded, there is negligible risk to anyone from what is termed nonfriable asbestos.

In 2012, the Australian Competition and Consumer Commission (ACCC) looked at the illegal importation from China of almost 25,000 Great Wall and Chery cars which had asbestos in their engine gaskets. It could have ordered a recall of all 25,000 vehicles, but did not. Instead, it looked at whether these gaskets presented a hazard to anyone – owner, driver, passenger, or people working on such vehicles.

Based on expert opinions from Occupational Health and Safety Consultants (Hibbs and Assoc.) and its own knowledge that automotive workshops were well used to safely managing asbestos in pre-2004 vehicles, it concluded:

1. There is no asbestos-related health risk to the driver/rider or any passengers who use the vehicle. The gaskets are tightly embedded in the vehicle and present no hazard during normal operation of the vehicle.

2. Caution must be taken if carrying out maintenance. Procedures have been prepared and implemented to ensure that the gaskets are handled correctly by mechanics during maintenance of the vehicles. Any work involving these gaskets should be carried out by an authorised Chery dealer or a licensed motor mechanic who has been made aware of these procedures.

3. Many vehicles built before the asbestos ban contain the substance in similar gaskets, and it was commonplace in friction components such as brakes and clutches, meaning the vehicle service industry is well versed in managing the risks. However, consumers and automotive repairers must be made aware that the risk may be present in these much newer vehicles.

4. Consumers with other older vehicles are therefore also advised to take precautions when performing do-it-yourself maintenance that might disturb gaskets. A work safety guidance note is available from www.worksafe.vic.gov.au .

The ACCC therefore saw no need to recall and replace all gaskets – a warning sticker that the vehicle contained asbestos was sufficient. The above conclusions were the same as those reached earlier regarding the importation of another Chinese brand – Geely, where a different expert provided the same opinion.

In short, these items represent no risk to anyone, provided those working on such components follow simple, well known procedures.

All Australian States have similar published procedures for safely working on vehicles which contain asbestos – in particular, the "Wet Method" can be utilised by home DIY mechanics simply and cheaply. See eg

https://www.worksafe.qld.gov.au/__data/assets/pdf_file/0011/58169/how-to-manage-control-asbestos-in-workplace-cop-2011.pdf

The essence of the Wet Method is to wear gloves and disposable coveralls and a disposable P1 or P2 respirator mask (from eg Bunnings), cover the ground under eg the brake components with plastic sheet, don't blow out brake components with compressed air or high pressure water (eg from a garden hose) but use a low pressure spray bottle (like you get for $2 from Coles) to wet everything, wipe everything down with wet rags, dispose of them, the plastic and the gloves and coveralls carefully in sealed bags marked asbestos, and take them to the tip where dedicated facilities exist for receiving asbestos waste.

As gaskets do not pose any risk, the same must apply to all other components where the asbestos is bound within a matrix, basically, everything apart from friction components such as brake and clutch parts, which create dust in use.

Brake and Clutch Components

What risk do brake and clutch components represent? None of the Australian institutions devoted to asbestos safety, such as ASEA, suggest they represent a risk to anyone other than those who work on such vehicles. There is no suggestion of risk to owners, drivers, passengers or the general public. Their focus, appropriately, is on exposure to asbestos from building materials. Around 1/3 of all dwellings contain asbestos, which becomes dangerous when disturbed.

The science also supports the view that the general public is not at any risk from asbestos dust caused by using brake and clutch components containing asbestos. The World Health Organisation report in 2014 referred to an Australian survey conducted in 1976 (when every brake lining and pad would have contained asbestos) which found airborne asbestos levels to be very low (0.5 particles/mL) in the immediate vicinity of the intersection braking area of the Tullamarine (SE exit) freeway. At a different location (30 metres from the nearest traffic), levels were below the limits of detection.

The same "wet method" is recommended not only for gasket removal but also – and more specifically - for brake and clutch work.

As asbestos in pre-2004 vehicles presents no risk to owners, passengers, the general public, and is only a risk to mechanics who do not use simple proven methods to eliminate risk, what is the point in stopping the import of pre-2004 vehicles? Especially when there are at least 6 million such vehicles being used here already, with all risks properly managed?

The answer may be because the ABF has been frequently criticised for failing to detect asbestos in a range of imported products – not only the 25,000 Great Wall and Chery cars - but multiple building products such as those used in Queensland's new Executive Building in George St (the Tower of Power) and the Perth Children's Hospital. When in 2016, an external review of the ABF's handling of asbestos found some was still getting in, the unions and the Qld Labor Government wasted no time in using the ABF as a blunt instrument with which to attack the Commonwealth.

Pre-2004 vehicles are an easy target - with the ABF reporting on 18 June 2018: "This financial year, imported secondhand vehicles continue to dominate asbestos detections, with more than 60 cars and motorbikes found to have asbestos-containing parts. There have also been four detections of asbestos in building materials to date."

So while the ABF is entitled to look for asbestos in old vehicles, it is misleading to paint the asbestos they contain as dangerous, or suggest they are doing so out of concern for public safety

and community protection. Unfairly demonising old vehicles also needlessly harms the old vechile movement, and those who depend on it for their livelihood, across Australia.

The Historic Vechile Movement

There are around 900,000 vehicles over 30 years old in Australia. All were obviously made well before the asbestos ban came into effect. Unless the vehicle has had a complete nut and bolt restoration since 2004, with every brake lining, brake pad, clutch plate, and every gasket replaced, it will contain asbestos. This presents no risk whatsoever, provided those working on them follow the long-established simple procedures.

I believe that the movement should:

1. Seek to educate its DIY members in safe asbestos-handling techniques, and

2. Oppose the Government position on asbestos in pre-2004 vechile imports, and seek a legal exemption for them.

What needs to be changed?

There is no point in trying to get the Australian Border Force to change its stance. While everyone has known that all pre-2004 vehicles could contain asbestos, the ABF chose not to target them for 13 years (2004 – 2016 inclusive).

There is also no point in trying the get Ministerial exemptions, as the asbestos used in vechile components is exclusively white asbestos, or chrysotile. The Minister can only exempt the import of white asbestos if the purpose of importation is for “research, analysis or display”. Vehicles which will be used on the road are unlikely to qualify.

The prohibition on the importation of asbestos is in Regulations made under the Customs Act 1901. The only way therefore to achieve change is to persuade both houses of Federal Parliament to change the law.

Closing comments

1. Unless and until the Commonwealth funds the removal of asbestos from all pre- 2004 vehicles it allowed to be sold here – cleans up its own backyard, as it were – than it can hardly take the high moral ground on imports of identical vehicles. Only the ABF is taking the extreme position of ignoring the 6 million “elephants” already in the room.

2. There is no coherent policy across all Federal agencies and Departments. The ACCC has the most realistic and practical approach, focussing as it does on avoiding “consumer detriment” and this should inform the policy to be adopted by all agencies and Departments.

3. There is no demonstrated risk associated with asbestos in pre-2004 vehicles and there is no detriment is allowing such vehicles to cross our borders freely.

4. Given there are at least 6 million vehicles containing asbestos on the road, which present no risk whatsoever, stopping a handful at the border is an extraordinary waste of tax payer funds which could be better spent looking for drugs and other substances which are truly hazardous.

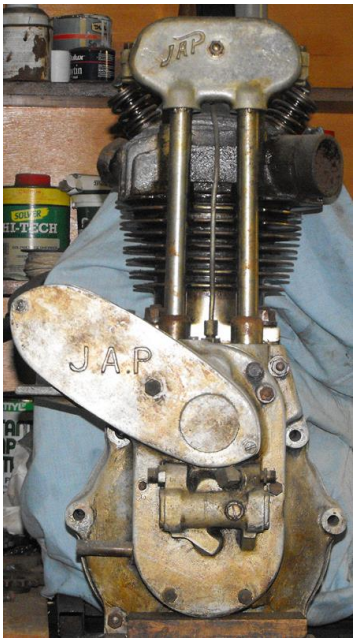
Doug Young. Chairman, AHVIG (Australian Historic Vehicle Interest Group)

Editor: Our peak Australian motoring bodies have totally failed all their clubs in countering the paid government departments relating to the asbestos issue in vehicles. Many thanks to Doug for all his work in presenting the real facts of the issue. Let's hope common sense prevails. *This item originally published , August 2018, in “The Vintage Car” newsletter of the Vintage Car Club of Queensland.*

Buy, Swap n' Sell

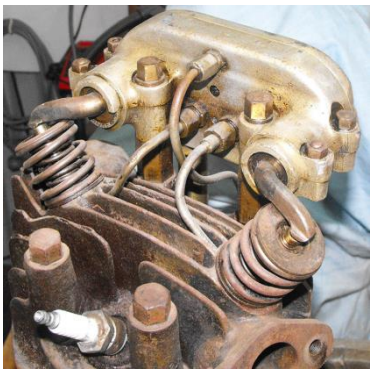
If you have anything that you want to buy, swap or sell you can now do so, free of cost, in this section of OVR. All you need do is send a email to the editor of OVR with the text of your advertisment. OVR will NOT be providing any editorial or corrections. Of course OVR cannot accept any responsibility 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: JAP Eng No JOR/V 47488/S



Through the teens and 20s, JAP provided the power for countless TT winners and place getters. Its last TT win was in the 1929 Lightweight for Excelsior. After that, a drought followed as AJS, Excelsior, Norton, Rudge and Velocette developed more powerful, more reliable engines.

JAP slipped further and further behind. In 1934 JAP decided to give it one more great effort and the hi-cam JOR-series engines was the result. This engine is not to be confused with their road hi-cam engine available in '37 and '38 which superficially looks similar but is easily differentiated by its single pushrod tube. JAP's designated Works teams for 1934 was OK Supreme and HRD. JOR/V 47488/S is a production racing engine derived from these engines. 3 x 350cc engines were also built of OK Supreme. The Senior engines were under developed and all failed to finish mainly due to cylinder head heat dissipation problems. The engines were revised for the following year. Because of the failure of the JAP engine 12 months earlier, HRD had in the meantime, designed their own engine.



At the TT, HRD entered 6 machines in the Senior race. 3 were fitted with the JAP engine and 3 with their own. It was to be a comparison test. The HRD engines slightly outperformed the JAP engines and that was that.

With most of the smaller British manufacturers concentrating on the 250 class due to the dominance of Norton and Velocette, both of whom had their own power-plants, the big hi-cam JAP racing engines were not taken up by any manufacturer, save for one, Zenith (although it could still be bought by privateers).

The top-of-the 1936 Zenith range a machine with this JAP racing engine. Known as the Super Sports, it remained in Zenith's catalogue for until 1938 when JAP could no longer supply the engine due to War Department contracts.

Although it could have been sold separately, I suspect JOR/V 47488/S may have been a Zenith engine. Either way, it is extremely rare. Prior to the discovery of this, only two hi-cam JAP racing engines of this type were thought to survive. The other is fitted to a racing OEC which at one time was owned by the Mason Brothers in Melbourne.

JOR/V 47488/S seems in good general condition. I have lifted the cylinder head and it has a new hi-compression piston fitted (81mm bore). It also has new valves. The fasteners are also in good condition which to me is a strong indicator of condition. The barrel fins have a couple of small pieces broken off and the inner timing cover is damaged but are easily repaired by a good welder.

As an indication of value, a circa 1931 POR 250 race engine in similar condition achieved $8,000 on UK Ebay. Last year, I sold a 1931 350 IOR engine for $11,500 and the year before, an incomplete 1933 JOR engine sold on UK Ebay for about $11,000.

This engine is much rarer than any of those. Please keep in mind the above prices when submitting an offer to Mitchell Barnes, email barnes2@iinet.net.au who is happy to provide more info and pictures plus will facilitate shipping world-wide.

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 nvidean@optusnet.com.au

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

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

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

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

Union Jack Motorcycles, Australia: Full range of Triumph, Amal and control cable parts, plus an extensive range of Vincent parts. Ships worldwide. More info at the website www.unionjack.com.au

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 www.norbsa02.freeuk.com

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

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

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

Nuts n Bolts:

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

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

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

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

Restoration Services:

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

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

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

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

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

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

General Services :

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

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

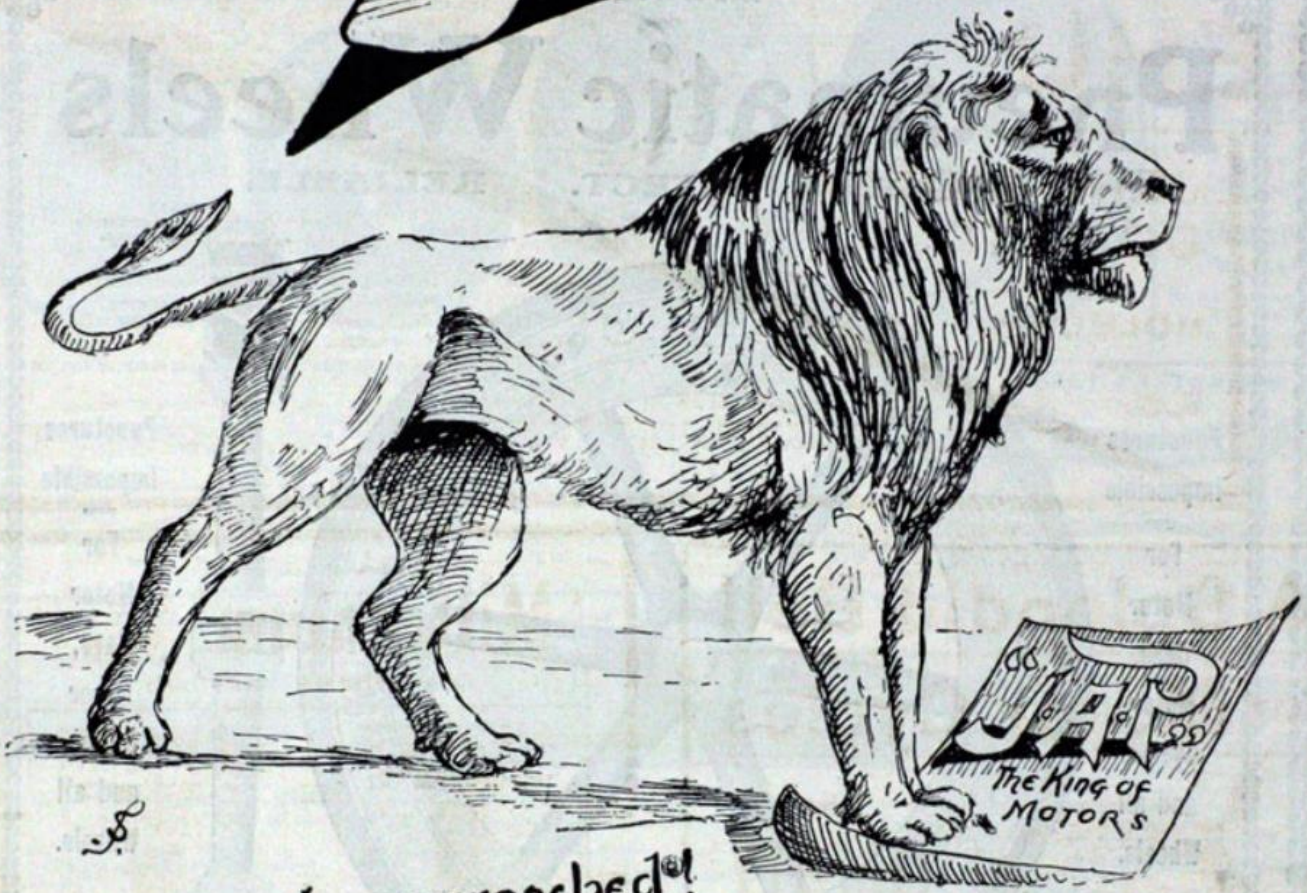
Ringwood Speedometer Service, Australia: Experts in the repair and restoration of all motorcycle, automotive and marine instruments. Smiths cronometric specialists. Telephone (03) 9874 2260

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

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

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

"J.A.P."



It cannot be approached!

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Telephone: 55, Tottenham.