The Oz Vincent Review

Edition #91 September 2021

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Welcome to the latest edition of OVR. This month the cover features two OVR readers, Chris Horner and Phil Pilgrim, taking in the sun after cresting Mount Hotham in the Australian Alps. Oh, those are the long missed pre-Covid times!

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

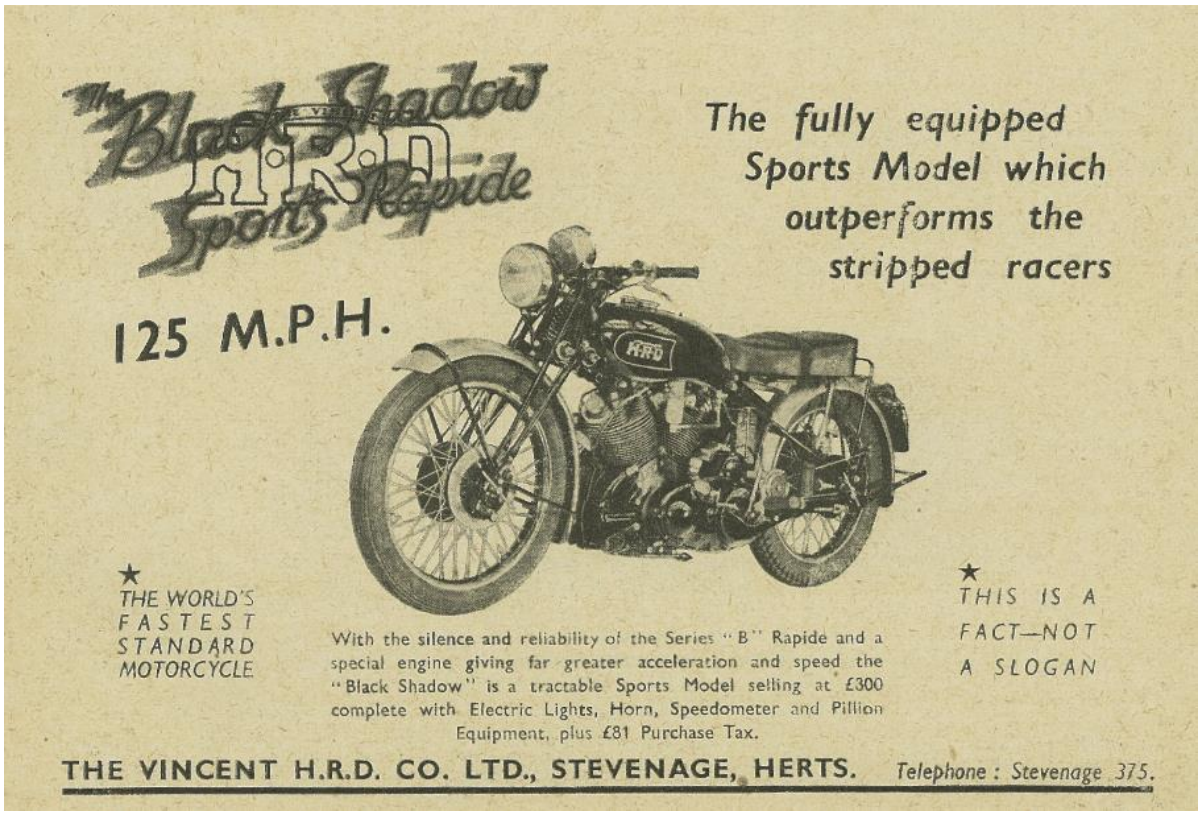
Martyn

Melbourne, Australia.
Email : Ozvinreview@gmail.com

Letters to the Editor

Hi Martyn,
Hopefully you can access this and use it in the review at some point. It's from a 1948 issue of Motorcycling.
Cyborg. UK

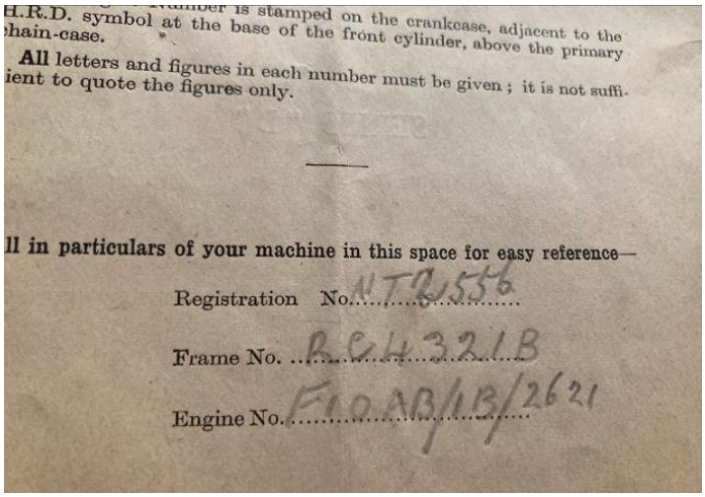
You bet I can Ken, here it is!



Hi Martyn,
It is with regret that after 50 something years of riding and fettling Vincents and other lesser makes health issues have forced me to stop. All my Vincents and associated paraphernalia have been sold to another VOC club member but I doubt they will see much use on the road, but at least they will be cherished and cared for. I would like to thank your good self for all your hard work putting together the Oz Vincent review; in my opinion an excellent, refreshing, alternative slant on very mature products, never an easy task. Therefore would you please remove me from the mailing list with effect from January of next year when I intend to go cold turkey from the whole motorcycling experience. I wish you all the best for the future and thanks again, well done cobber!
Regards William Long, also known as the Old Bill.....

***Bill** you can do it yourself – just click on the unsubscribe link at the bottom of the OVR email when you are ready, Martyn*

Hello Martyn,
Great item in the last OVR with the works letter about oil pump failures. Please see attached images. This is a page from the handbook of the bike in the photo, then owned by Jeff Holt, he incorrectly entered the rego number as 2556 instead of 2665.


H.R.D. symbol at the base of the front cylinder, above the primary chain-case.

All letters and figures in each number must be given; it is not sufficient to quote the figures only.

ll in particulars of your machine in this space for easy reference—

Registration No. NTP 556

Frame No. RC4321B

Engine No. F10AB/1B/2621

This is the bike mentioned in that works correspondence from 1949! This bike is the one owned for many years by Ken Butler. I met Ken on the 1983 International Rally and when I showed that pic he told me it was in his possession, he had a pic of the rego plate.

He has since sold it, it was still in Oz after that, I think Simon told me the current owner is not in the club, I will check my emails shortly re that.

I enjoy the Review,
Kind regards
Don McInnes, Australia

Back then Vincents were work horses of the Australian outback. Pictured is Jeff Holt astride, crash bars askew, knobby tyres at both ends and a kangaroo carcase across the pillion seat! [editor]

Hi Martyn,

I'm in the process of buying a 1954 Comet from the UK and would be interested in meeting up with any Vincent owners over this side of the Nullarbor in Fremantle/Perth, Western Australia. Do you know of any?

As it happens, I was over in Victoria last week and am now paying the price with a two-week stay at home. I see that the organised rides and some of the services providers are in the area I was last week. I had meetings over in Gippsland, Maybe next time I'll combine business with pleasure. Keep up the very good, and most welcome, work with the magazine.

Ian Lambert. *Ian may be contacted by email ilambert@mac.com (editor)*

Hello Martyn, A photo for OVR.

Ian Hamilton and crew (classic white lab coats) in conversation with John Surtees who got his start road racing a Vincent Grey Flash in 1950. In 1988 Ian and crew flew across the pond to race at Daytona. Ian rode his Egli Vincent at the classic road races at the speedway that year.

Regards, Carleton Palmer.

Vale: Johnny Astley 1923 - 2021

Possibly not a name familiar to today's Vincent enthusiasts, John (always known as Johnny) Astley nevertheless holds a special place in Vincent HRD history in Australia. Johnny was the first man to win a solo race at Bathurst on a post-war HRD when he took out the Mount Panorama Senior Grand Prix for Clubman riders at Easter 1949. In 1947 Les Warton took the first win for Vincent HRD at the circuit in the Sidecar NSW TT, a feat he repeated in 1948. However, it was not until 1949 that the Series B models arrived en masse in the solo classes, no fewer than nine entered for the Clubman's race and two (for Lindsay Nixon and Jack Carruthers) for the main Senior Grand Prix.

1st Snr Club win 1949

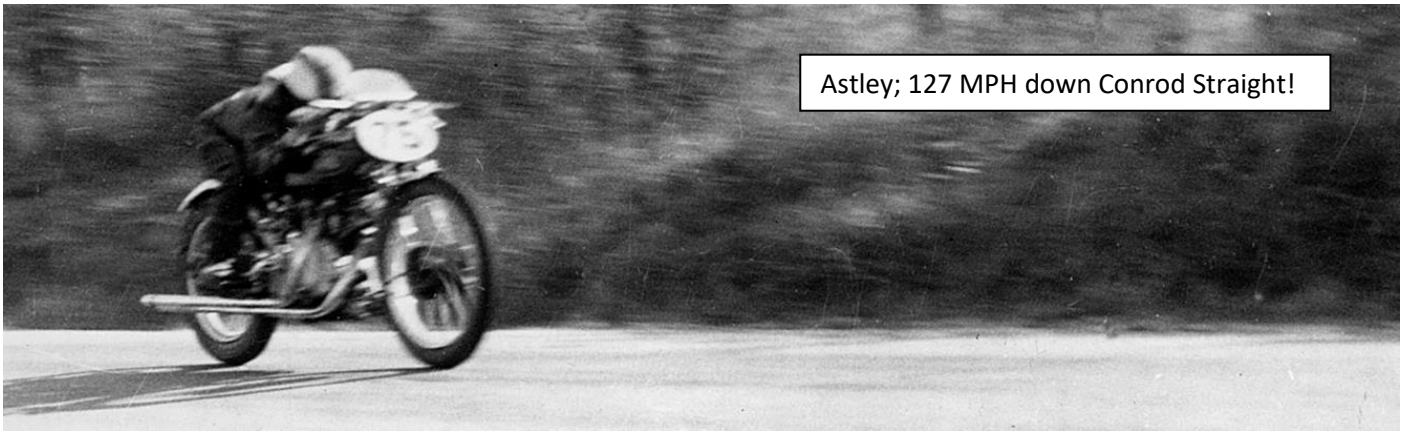
Two heats were necessary to whittle down the 24 starters for the Clubman's final, with Astley powering away from the start and never headed. The battle for the minor placings was resolved on the final lap when Victorian George Campbell (brother of 1957 World 350cc Champion Keith Campbell) finally managed to get past J. Bennett, making it a Vincent 1-2-3. Later in the day, Jack Carruthers finished 6th in the Senior Grand Prix.

Astley missed the 1950 Bathurst meeting, but returned with his Vincent in 1951 where he contested the main Senior Grand Prix. Although unplaced, he recorded the fastest time through the new electronic speed trap on Conrod Straight at 127 mph (204 km/h). He continued racing into the 'fifties on a 500cc Manx Norton and in scrambles events on a 500 Matchless. He also raced both solo and sidecar in Miniature TT (Short Circuit/Dirt Track) events. In 1955 he placed second outright in the Mount Druitt 24 Hour Race for production motorcycles, riding a Matchless Super Clubman twin.

L-R Astley, Harmon & Godfrey at Mt.Druitt

One of the original members of the Willoughby District Motor Cycle Club in Sydney, Astley was an extremely versatile and highly talented rider across virtually every discipline of the sport. In later years Astley moved to Newcastle where he ran a service station, and finally to Lennox Head on the NSW North Coast. It was here on 18th August, 2021 that he passed away in a nursing home, aged 98.

Jim Scaysbrook
Editor


Astley; 127 MPH down Conrod Straight!

Flat Hunting or … chronic exasperation.

In the course of a long and varied motorcycling career one comes across a number of myths and prejudices which. when submitted to rational examination, do not stand up. I need only allude to the sempiternal debate that rages between supporters of British machines and Japanese machines; to that which divides Vincent owners from Triumph owners: and that whereby those who can and do mend punctures are forever segregated from those who cannot and do not.

It is with this last that I will concern myself here, for it is time that the misleading impression that a puncture is only to be tackled by one possessing the genes of Vulcan was dispelled. There are some— and until recently I was one myself — who will find this hard, if not impossible, to believe. To them I say, have faith. By following certain very simple ground rules, puncture mending can become far more than just a way of keeping air in your inner tube. It can become a most pleasurable and even satisfying pastime, and one which, if not exactly to be pursued for mere fun, can render a general sense of wellbeing to the puncturee.

The first rule is always to pick a pleasant spot in which to have a puncture. Many novices make the mistake of assuming that a puncture can happen just anywhere, and that in all cases they are infernal nuisances. This is not so. An ill sited puncture can ruin a good day's riding, while one undertaken in a convenient spot can only add to the enjoyment. I myself have chosen some remarkably inopportune places to collect a nail in the tyre or stretch a patch beyond its abilities.

Perhaps the most common illusion is that a good place is the same as a pretty or a scenic or a romantic place.

One of the worst places I have ever chosen to have a puncture was in the Outer Hebrides. I was riding a degenerately modern bike at the time (and one of oriental provenance) and had it not been for the thoughtful provision of a rider's handbook alongside the tool kit I would not have had the slightest idea of how to remove the rear wheel (this topic, by the way, is covered in more detail later). Furthermore, I had not equipped myself with a set of tyre levers or a patch kit and had it not been for the fact that I was travelling with a companion on another bike, I would have had to walk to the nearest centre of civilisation (some miles distant) carrying an excessively heavy cast-alloy wheel.

As it was, I had to perch on the pillion with the unwelcome object on my lap. And then, when we reached the only garage on the island (thankfully it was open) they did not have a new tube of the right size, and had to patch the old. This may be considered safe on a light, low to medium power machine, but the four-cylinder

monster I was using weighed over 5001b and was claimed to produce nearly 100bhp! This was not a good place to have a puncture, and I cannot recommend anyone to try it unless they are well equipped, know their machine, and pick a time when it is not raining. This last is more difficult than it sounds in the Outer Hebrides in spring.

By contrast, one of the best places I have ever been visited by a puncture was in the middle of a field in the middle of Switzerland. The fact that I was surrounded by hundreds of motorcyclists all on old British bikes helped. The fact that they all offered advice and tools and even a usable inner tube (as mine turned out to be an 18 incher stretched onto a 19 inch rim) helped even more. But best of all, it was a glorious day, the birds were singing, the fish were swimming, the refreshment was flowing, and there was nowhere to go in a hurry. These are the ideal circumstances in which to have a puncture, and I thoroughly recommend all puncturees to try them.

Before moving on to more practical matters, I must relate one more event. This was a place which appeared at first to be bad, but turned out excellent - the A1! Now normally, I would not

recommend anyone to have a puncture in the fast lane of the Al rather, I would say it is an event devoutly to be avoided. As I fishtailed towards the grass verge, wondering at which precise instant I should jump off, my life passed before me. Had I been unkind to the cat? Had I not sufficiently thanked the traffic warden for giving me a parking ticket? No matter.

Somehow I managed to come to a halt without spilling, and once my knees stopped shaking I took stock of my surroundings and decided that one of my experience should never have allowed a puncture to occur in that place. Against me were a geographical remoteness from anywhere dealing with tyres, a lack of repair equipment (once again it was a loaned machine), the indifference of traffic speeding by, a lack of familiarity with the machine (see above), and an appointment in London. In my favour, it was not raining and it was not night. However, one minute later a lorry pulled up and the driver (who had seen my plight from a layby) lowered the tailboard and delivered me and the bike to the nearest tyre centre, where the manager would take no money for mending the tube. If not ideal, these circumstances at least renew one's faith in human nature.

The bare essentials, if one is to affect a repair, are a pair of levers, a patch outfit and a spanner with which to remove the wheel. As far as the latter goes, one should always choose a bike such as a Vincent with quickly detachable (or at the very least easily detachable) wheels, and keep the detaching mechanism greased and in good repair. One should also be knowledgeable about the bike, or sufficiently so to be able to tackle a simple wheel removal.

Tyre levers come in all shapes and sizes. The best I have used came from the tool kit of a BMW motorcycle, but my normal kit—perfectly adequate — is a pair of the flat type, roughly seven inches long, by one inch wide stamped 'Dunlop' ; known as K13's in the standard Vincent tool kit. I have never used one of the proprietary tyre removers, not because I disapprove of them, but because levers are cheaper and simple to use.

The puncture repair outfit should come from a reputable manufacturer and should contain a good assortment of patches of different sizes, a tube of fresh glue and various sundries, such as a piece of emery paper or small grater, french chalk and a wax crayon. Do not be

tempted to purchase a kit intended for use on bicycles. A motorcycle kit will take up no more space than a' baccy tin, but will contain more and larger patches.

The next stage, after you have collected the puncture in your chosen spot is to make sure that you really do have a puncture and not just a faulty valve. Reinflate the tyre with your trusty handpump (which should be stowed on one of the frame rails) lick your finger so it is dripping and deposit a globule of spittle over the valve. If it blows bubbles at you, look no further. If it does not, you must remove the wheel and get the tyre off.

Remove the valve core (with either the end of an old fashioned valve cap, or insert from the top of a tyre pressure hand gauge, or a special tool) and keep it in a very safe place. Loosen the valve retaining collar by half its length, and undo any security bolts you may be unfortunate enough to have.

The tyre must now be pushed down off the rim, into the well of the wheel. This sounds simple but is not always so, and the puncturee may have to put the wheel on the ground and stamp on the tyre if it proves recalcitrant. During this delicate operation, some attempt should be made to protect the spindle and bearings from grit and dirt — a cloth or piece of wood or material under the vital spot should do the trick.

Once the tyre is in the well, keep it pushed down (the ability to use one's hands, feet and knees in conjunction is a decided advantage) and insert the first lever under the bead close to the valve. Be careful not to pinch the inner tube, and ease the bead over the rim. If it will not come with reasonable force (redness around the collar but not in the face), stop and make sure the rest of the tyre — particularly in the area opposite the lever — is in the well. Most problems with tyre removal can be traced to this.

When the first bit has slipped over the rim, keep a firm hold on the lever and insert the other lever on the other side of the valve. Do not attempt to take a large bite, as it were, be content to slip even the smallest area over the rim. Once both levers have made an impression, the worst is over. Some people claim that a third lever is needed at this stage, but it is an unnecessary encumbrance. Hold the ground gained with one of the levers, extract the other and work some more bead over the edge, always taking care to keep the opposite side in the well. Work around evenly, ending up more or less opposite the valve.

Undo the retaining collar and, with care, pull out the inner tube. It is not essential to take the other sidewall of the tyre off the rim, but two checks should be made: feel all around the inside of the tyre for foreign bodies or sharp objects, removing same if found (and remember there may be more than one); and have a look at the rim tape— that piece of rubber which is circumjacent to the centre of the rim, covering the spoke ends. There must be one, and it must conceal the nipples effectively. If there is any problem, a solution can be affected by wrapping insulating tape around the centre, making a suitable hole for the valve.

Examination of the tube is made easier if there is a handy bucket, sink or horse trough of clear water available. If not a ditch

or something similar may provide an aqueous solution, the purpose of which is to indicate the vicinity of the puncture.

Inflate the tube, immerse it in, or cover it with water and watch for bubbles. Mark the bubbling area with crayon or keep a finger on it. If no water is available, inflate the tube considerably and hold it close to your ear. Rotate it (no not your ear!), listening for air escaping. This can be very difficult if the tear is a very small one. Another method is to hold the tube close to the upper cheek, where the skin is sensitive and escaping air can be felt.

When you have located the escape, deflate the tube and dry it thoroughly. Roughen and clean the area around the puncture and apply some glue, which must be allowed to go off. The kit instructions will be more specific, but what follows next is that you crack open a patch of the correct size and apply it to the glued area, covering the puncture. French chalk may be dusted over the area to absorb excess glue and prevent gumming the tube up.

You will know straight away whether or not the patch has taken. Following the instructions should ensure a one hundred percent success rate, but it is just possible that ambient conditions may affect the curing process — an excess of damp or heat can have a deleterious effect.

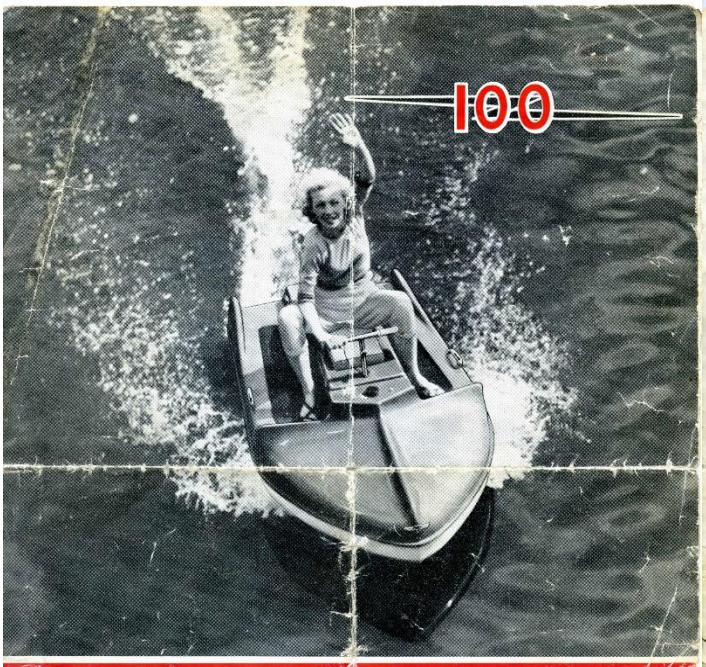
Replacement is as simple as removal, but with the frisson added by the knowledge that if the tyre lever pinches the tube it will have undone all your good work! Inflate the inner tube very slightly, so that it just assumes a circular shape, and insert it into the tube and onto the rim, doing up the retaining collar by only a couple of threads.

Starting opposite the valve, ease the bead over the rim and, working around evenly, slip the tyre onto the wheel. As with removal, keep the tyre pressed well into the rim well and when you reach the valve, keep it pushed high in the cover. When the final portion has been eased over the rim, go round the tyre to ensure that the bead has seated equally, pull the valve down, tighten the collar, insert the core and inflate. If you have done everything right, replace the wheel and continue on your merry way.

[This item was first drafted over 20 years back. Next months OVR will look at some modern tools]

810 MOTOR CYCLING April 18, 1957

Rumours have been rife about a new Vincent scooter, and here it is! Manufactured by the famous Stevenage engineering concern for Aero-Marine Sales (London) Ltd., the "Amanda" water-scooter has a glass-fibre reinforced plastic body, and a 75 c.c. two-stroke Vincent engine. This particular example boasts more than that, but, sticking firmly to the technical side, we can say that a faster version is shortly to appear, powered by two 100 c.c. Vincent engines, each driving a separate screw, and controlled by its own twist-grip for steering purposes. It is stated that this twin-screw model is capable of planing at a very respectable speed, and this, coupled with the very shallow draught should endow it with a utilitarian aspect as a yacht tender or river runabout, as well as being an exciting pleasure craft. Just the thing for "Motor Cycling's" man at the F.I.M. Venice conference—do you overtake a gondola on the port or starboard side?



WATER AMANDA SCOOTER

A product of

AERO-MARINE SALES (LONDON) LTD.

QUALITY HOUSE, 1-2 WARDOUR STREET, LONDON, W.1. (GER 9921)

Star Features of the '100'

- ★ EXCEPTIONALLY STABLE.—Buoyancy blocks of expanded plastic inside the hull render the craft virtually UNSINKABLE!
- ★ ENORMOUSLY STRONG HULL despite light weight!
- ★ All parts RESISTANT TO CORROSION by salt water!
- ★ AUTOMATIC CLUTCH works off accelerator and disengages if rider should dive or fall off, bringing boat to a complete standstill!
- ★ NO EXPOSED MOVING PARTS inside hull!
- ★ CARRIES TWO PERSONS (max. load 260 lb.), sitting astride as on land motor scooters!
- ★ LIGHT AND EASILY TRANSPORTABLE, can be carried on top of a car or inside a station wagon!
- ★ SIMPLE TO LAUNCH — EASY TO START at any normal temperature!
- ★ EASY TO DRIVE — only one control!
- ★ FEATHERLIGHT AND ACCURATE STEERING — even a child can drive!
- ★ ECONOMICAL ON FUEL — two PINTS an hour at full speed!
- ★ THIEF-PROOF. Inboard Vincent engines can be removed for safe-keeping as easily and as quickly as outboards!

The AMANDA '100'

Water Scooter

IMAGINE THE exhilarating thrill of skimming over the sea, lake or river on a powerful and superbly expensive-looking motor-boat! The Amanda '100' Water Scooter provides you with the glamour and excitement of high-speed water ski-ing at the lowest possible cost. Speeds up to around 14 m.p.h. (22 km.p.h.), according to load. Fuel consumption only two pints an hour! This most exclusive new water scooter comes straight to you from one of Britain's foremost marine engineers who have designed it for impressive performance, utmost durability and beautiful appearance.

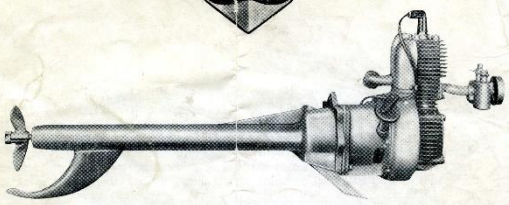
The Amanda '100' is virtually unsinkable, making it safe for riders of all ages. Although totally enclosed, the engine is air cooled by forced draught through carefully placed air inlets and even in choppy water the craft has an unusual margin of stability by virtue of the fact that water has no easy access. Simple to drive too; only one engine control—a twist-grip throttle. An automatic clutch engages as engine revolutions are increased—just like a modern car—and automatically disengages should the rider release the grip. The magnificent streamlined hull is constructed of sea water resistant, high gloss plastic, reinforced with glass-fibre, and of the greatest importance to most users, the Amanda '100' is so easily transportable on land, by car or other means. Length 7 ft. ; width 3 ft. 10 in. ; weight 120 lb.

The Amanda '100' and other models in the Amanda series benefit from nearly twenty years' experience of designing advanced marine units for naval and air force use. Great care has been taken to ensure outstanding reliability and freedom from electrolytic corrosion effects of sea water on dissimilar metals. The same experience has been drawn upon to obtain the most favourable combination of absolute reliability with light weight.

The Amanda '100' comes in a smart colourful finish, with a clean white hull, brilliant flame red superstructure, bright yellow seat and polished chrome fittings. Amanda Water Scooters have numerous patented features or patents pending in most countries, and the overall design is also registered.

Own an '100' today and you will have the most colourful, most glamorous, most exciting small power-craft in the world.

WATER AMANDA SCOOTER



The AMANDA '100' POWER UNIT

A compact power and transmission unit has been specially designed and built exclusively for the Amanda by Vincent Engineers Ltd., the firm long renowned as the builders of the world's finest and fastest motor-cycles, machines that have established dozens of World and National speed records, including no less than three times in succession the American speed record at Bonneville, Utah. Built on a novel principle that completely eliminates all shaft alignment problems, this rugged unit is designed to give reliable service for long periods under continuous full throttle operation. Gasolene fuel. 100 c.c. 2.3 b.h.p. Vincent Marine Engines are standard equipment on all Amanda Water Scooters.

Specifications and prices subject to change without prior notice.

AERO MARINE SALES (LONDON) LTD.

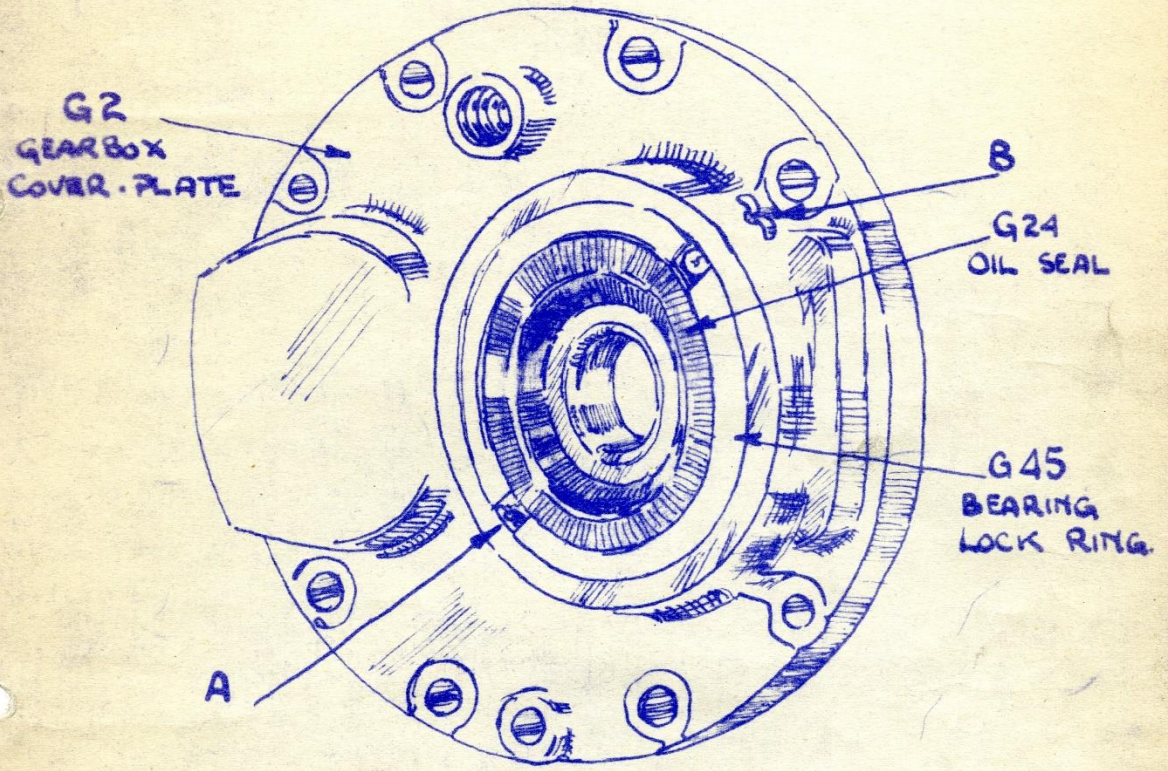
Quality House, 1-2 Wardour Street, London, W.1. (GER 9921)

MADE IN ENGLAND

This brochure was provided to OVR by the late David Bowen

Treasure from the Stevenage Works

THE VINCENT H·R·D



After tightening locking ring drill two .070" dia. holes in cover. plate (No 50 drill) at A and B using slots in locking ring as guides and insert ½" long, 1/16" dia. split-pins. (as shewn at B.)

-5 JAN 1950

PINNING OF LOCKING-RING IN GEARBOX COVER-PLATE.

M007
RWJ 2·6·47.

With thanks to OVR supporter Franco Trento, Australia

A Crown For King Vincent – monarch of the modern-day bike.

By Michael Wilkinson

First printed in the Sun newspaper, March 6, 1976

THE crowning's been a long time coming. And the king knows things have turned a bit sour. But there are no regrets. He'd' do it all again, every 500 cc powered minute of it.

PHIL IRVING with a trophy he won at a Melbourne competition in 1928. Behind is a picture of the internationally successful Repco-Brabham engine he designed in 1964-65. Picture by JOHN CLASPER.

Phil Irving, 72, is —without doubt — the monarch of the modern-day motorbike. He's the man who designed the legendary Vincent speedsters of the 1930s and '40s.

More than any other, these bikes were the forerunners of the tens of thousands of lightweight, easy-to-handle little machines now revving along our roads. Yet, for years Mr Irving's work went virtually unrecognised. He had to eke out a living designing tractor engines, and his home — in the outer suburb of Warrandyte —still is more of a working man's cottage than a palace. "I don't mind," he says. "I'm not the sort of bloke who finishes up wealthy."

But yes, he admits some recent developments have been rather pleasing. All around the world more and more people are realising the quality of the old Vincents. Enthusiasts are bidding $3,500 and more for the Black Shadow and Black Lightning models. Even the Japanese have conceded the magnificence of the Irving-designed speedsters.

"I'm not surprised at any of this," stressed Mr Irving when I called at Warrandyte this week. "The Vincents were designed with one basic aim, something that many modern-day manufacturers are Just starting to realise. " This basic essential was that the bike should be easy to handle. The average person should be able to pick it up if he falls off and there shouldn't be much damage."

The tumble-easy features of the Vincents Include engine and gearbox in one unit, fully adjustable foot and pillion rests, and specially shielded cylinders set in a V. And Mr Irving decreed that his machines should be light, wherever possible using stainless steel. The weight of the forerunner of the Black Shadow, the Rapide "C", is only 208 kg, but this doesn't prevent a top speed of well over 177 kmh. Many modern Japanese bikes capable of such speeds weigh at least 270kg. “Vincents were so good because everyone involved in making them actually rode one," explained Mr Irving. "We knew what was wanted out on the roads." He fell in love with motor-bikes here in his native Melbourne. During the 1920s he was a regular competitor at local meetings.

Then, in 1931, he arrived at the Vincent factory near London after two-wheeling it across North America with a friend. Despite such personal involvement with the machines, Mr Irving and the rest of the Vincent work team were unable to save the works from a collision. By the late 1940’s bike sales were crashing all around the world. The car was entering its heyday. In 1953, the last Vincent was assembled. The production line that had turned out up to 80 machines a week was silent.

Mr Irving and his family returned to Melbourne where he got the tractor engine designing Job, then later joined the Repco research team and in 1964-65 designed the internationally successful Repco-Brabham engine. "I never made any real money out of the Vincents or my later ideas," said Mr Irving." "I was on a salary, that's all.” Does he now have any regrets that wealth never came his way, and widespread recognition has taken so long? “Not at all," answered Mr Irving. "The Vincents have won a lot of championships and broken, many racing records. "My real regret is that this wider recognition and talk of the Vincent mystique comes when the Australian automotive designing industry is in such bad shape.

"Today, virtually all we're doing in this country is bolting together overseas designed cars and bikes. So much young talent is being Wasted. "It's a tragedy. I know one person like me can't do anything, but you still feel the hurt when you see it happening.

Contributed to OVR by Neal Videan, Australia

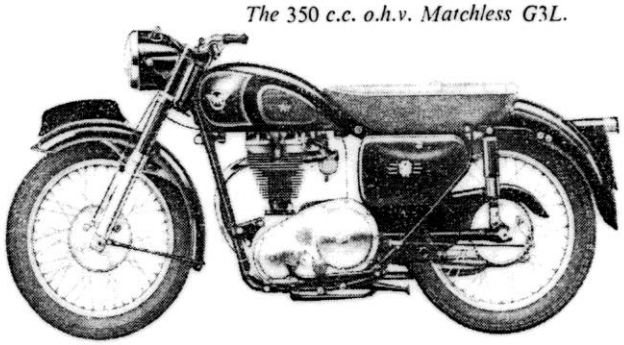
"DO-IT-YOURSELF SERIES" No. 19 - - - - by BERNAL OSBORNE

The 347 c.c. and 498 c.c. Single-cylinder

A.J.S. and MATCHLESS

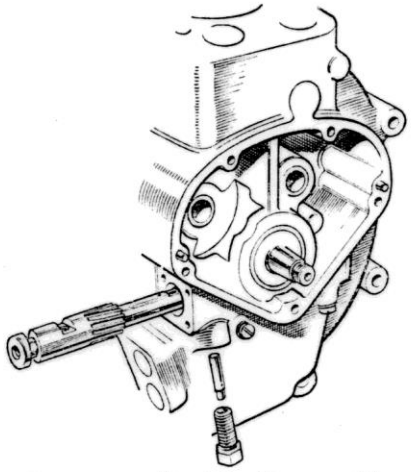
Workshop Routine for Maintaining Four 1958 Roadsters Made at Plumstead

PART I



The 350 c.c. o.h.v. Matchless G3L.

THE four-stroke single-cylinder ranges of A.J.S. and Matchless motorcycles, developed in two capacities by Associated Motor Cycles Limited, have much in common from a technical point of view. Today, these A.M.C. "singles" are probably easier to maintain and overhaul than ever before, for separate magneto and dynamo instruments are eliminated, so disposing of some



Correct assembly of the oil pump. The spiral groove at the end of the pump plunger ***must*** *mesh with stationary peg shown at the bottom of the sketch; the plunger should both turn and reciprocate when the engine is turned by hand.*

of the snags long thought to belong to "electrics." The A.C. generator is not a component calling for any maintenance at all once the rotor and stator are correctly assembled together, and the rectifier is a non-mechanical fitment. There is no C.V.C. unit with delicate cut-out and charging contacts vulnerable to temperature changes and vibration.

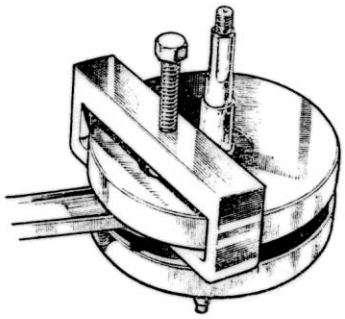
Up-to-date and in keeping with modern trends in engine design, the machines retain the simplicity inherent in "singles," so that dismantling for a complete overhaul, and subsequent reassembly work, is not beyond the ability of the novice provided that he is of a fairly technical turn of mind.

Special Tools

The maker's tool kit is adequate for most work but, while removal of the hairpin-type valve springs can be carried out by hand, a special compressing tool, Part 018276, is available on loan from A.M.C. dealers, and this device is particularly handy when it comes to refitting the springs. A set of ring-spanners is a useful reinforcement to the tool kit; or, in the absence of a complete set, one ring spanner, sufficiently long to provide good leverage, should be added to the workshop equipment. This tool must be suitable for the $1\frac{3}{16}$-in. across-the-flats crankpin nuts. The crankpin flywheel assembly is screwed up very tightly, but must be taken apart if big-end renovation is contemplated.

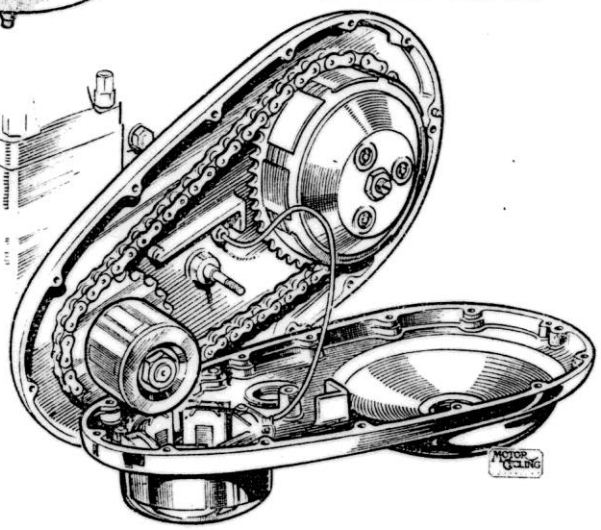
Dismantling Procedure

Take away the petrol tank, remove the three nuts and fibre washers retaining the rocker-box side cover, disconnect the oil feed to the rocker box and operate the kickstarter crank until both valves are completely closed. There is an engine-steady bracket which must be removed, followed by the nine rocker-box retaining bolts. Take off the valve-lifter cable and tilt the rocker box into a position in which the push-rods can be extracted through the side aperture.



(Above) Service tool for pulling the flywheel off the interference-fit crankpin.

(Right) Components of the Lucas RM15 generator are accommodated in the chaincase. The stator is a bolted-up fixture within the cover.



Dismantle the exhaust system and the carburetter—which can be lifted away complete when the retaining nuts and air filter connection are out of the way. The cylinder head is retained by four bolts and its removal is simple. At this stage, the push-rod tubes also will come away and attention should be paid to the condition of the oil seals at top and bottom. Packing rings, with a depth of either $\frac{1}{10}$-in. or $\frac{1}{8}$-in. to provide for alterations in compression ratio, are located with the oil seals and washers at the top of each push-rod tube. If the c.r. is modified by the removal or insertion of a compression plate, the packing rings must be correspondingly changed to avoid distortion and consequent oil leaks when the engine is reassembled. A plate can only be removed after reboring or the fitting of a service barrel, otherwise the top piston ring would foul the step at the top of a worn cylinder and would break.

Removal of the cylinder, retained by four base nuts, is an easy job. Special pliers included in the tool kit are applied to the Seeger-type gudgeon-pin circlips, but one circlip only need be taken out and the free-fit-when-cold gudgeon pin, then pushed through. Over-size piston rings are available, but should be fitted only in conjunction with an over-size piston when the cylinder is re-bored. That work can be carried out twice, i.e., to plus .020 in. or .040 in.

Apart from cleaning the fins and checking bore wear, there is no further work to be carried out on the barrel, but the cylinder head and, in particular, the valve guides

(*Continued on page* 164)

REFERENCE DATA

CYLINDER-PISTON GROUP

	350 c.c.	500 c.c.
Bore:	69 mm.	82.5 mm.
Stroke:	93 mm.	93 mm.
Swept volume:	347 c.c.	498 c.c.
Compression ratio:	7.5 : 1 or 6.5 : 1	7.3 : 1 or 6.3 : 1

Rebore to: .020 in. O.S. when maximum wear exceeds .008 in.

Piston diameters:

At top land:	2.684 in.	3.2166 in.
At ring lands:	2.684 in.	3.2166 in.
At top skirt: 2.7042/2.7176 in.	3.2315/3.2490 in.	
At bottom skirt: 2.7173/2.7180 in.	3.2451/3.2494 in.	

Piston ring gap: .006 in.

Piston ring width (compression): .0615/.0625 in. .0615/.0625 in.

Piston ring radial thickness: .092/.100 in. .108/.116 in.

Piston ring width (scraper): .124/.125 in. .124/.125 in.

Piston ring radial thickness: .092/.100 in. .108/.116 in.

Gudgeon pin diameter: .8737/.874 in.

Small-end bush diameter: .87425/.87475 in.

VALVES AND VALVE GEAR

Valve stem diameters:
Inlet .372/.373 in.
Exhaust .3705/.3715 in.

Bore of valve guides:
Inlet/exhaust .3735/ 375 in.

Seat angle: 45°

Free valve-spring height: 2.084 in.

Timing wheel bush bore: .4995/.5005 in.

Tappet guide bore: .5620/.56325 in.

Valve timing (tappets set at .016 in. clearance):

Inlet opens before T.D.C.	36°	18°
Inlet closes after B.D.C.	51°	69°
Exhaust opens before B.D.C.	50°	50°
Exhaust closes after T.D.C.	30°	30°

Normal tappet clearances: Nil (engine warm)

CRANKSHAFT GROUP

Crankpin diameter: 1.2035/1.20375 in.

Timing-side shaft diameter: 1.2275/1.123 in

Drive-side shaft diameter: .9994/.9997 in.

Con-rod big-end eye diameter: 1.7035/1.7037 in.

Type of big-end bearing: Three rows $\frac{1}{4}$ in. × $\frac{1}{4}$ in. (30 off) in duralumin cage.

Main bearings:
Timing-side bush bore 1.125/1.1255 in.
Driving side outer ball bearing SKF type RLS8, 1 in. bore by $2\frac{1}{4}$ in. O/D by $\frac{5}{8}$ in.
Driving side inner ball bearing SKF type RMS 8, 1 in. bore by $2\frac{1}{4}$ in. O/D by $\frac{3}{4}$ in.

Left-hand threads on engine components: Valve-timing pinion nut.

Location of contact breaker: In timing-side crankcase housing.

GEARBOX

Mainshaft bearing at clutch end: SKF RLS 9Z/$1\frac{1}{4}$, $1\frac{1}{4}$ in. bore by $2\frac{1}{4}$ in. O/D by $\frac{5}{8}$ in.

Mainshaft bearing at k.s. end: SKF RLS5, $\frac{5}{8}$ in. bore by $1\frac{9}{16}$ in. O/D by $\frac{7}{16}$ in.

Layshaft supported by SKF 6203 ball bearing, 17 mm. bore by 40 mm. O/D by 12 mm.

Kickstarter bush (inner): 1.124/1.126 in.

Mainshaft second gear bushes: .8115/.8125 in. bore by .935/.936 in. O/D.

Main gearwheel bush: .81200/.81325 in.

Layshaft third gear bush: .8115/.8125 in. bore by .935/.936 in. O/D.

Kickstarter axle bush: .6865/.6875 in.

Layshaft bottom gear bush: .68700/.68825 in.

Kickstarter bush (outer): .999/1.001 in.

Gearchange outer bush: .6270/.6275 in.

Gearchange inner bush: .6285/.6290 in.

Camplate and quadrant spindle bushes: .503/.506 in.

Internal reductions: 1.35, 1.77, 2.67 : 1.

Left-hand threads on gearbox: Sprocket lock-nut.

TRANSMISSION

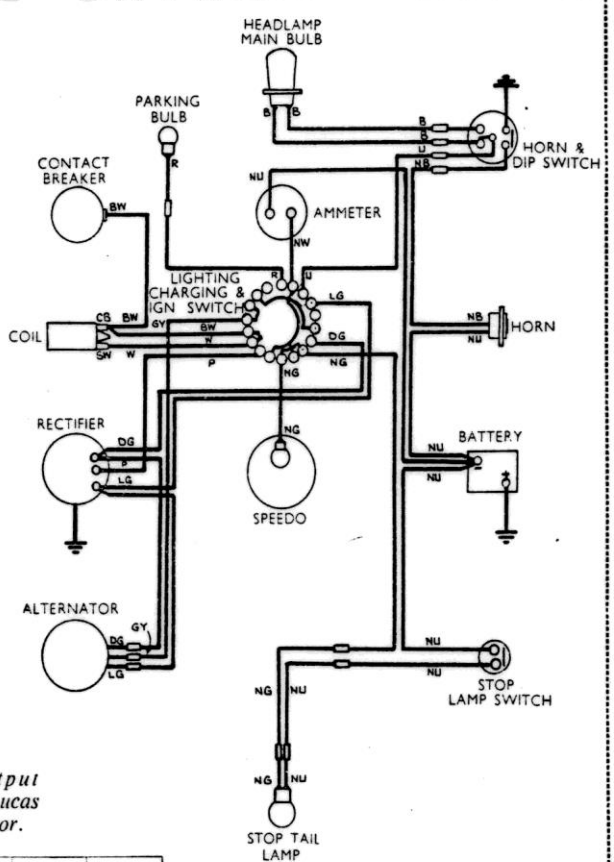
	350 c.c.	500 c.c.
Sprocket sizes:		
Engine	19t	22t
Clutch	42t	42t
Final drive	16t	16t
Rear wheel	42t	42t

Gear ratios:
350 c.c. 5.8, 7.8, 10.3 and 15.5 : 1
500 c.c. 5.0, 6.8, 8.9 and 13.4 : 1

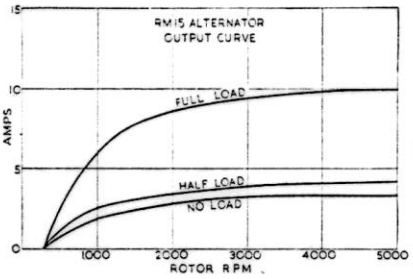
Wiring diagram for A.J.S. and Matchless "singles." Key to colour code:

B = Black
U = Blue
N = Brown
G = Green
P = Purple
R = Red
W = White
Y = Yellow
D = Dark
L = Light

The stop lamp is fitted to special order only.



(Below) Output curves for the Lucas RM15 generator.



Primary chain: Renold 110046, $\frac{1}{2}$ in. by .305 in. by .335 in. (350 c.c. 67 links; 500 c.c. 68 links.)

Secondary chain: Renold 110056, $\frac{5}{8}$ in. by .380 in. by .400 in. (98 links.)

WHEELS

Front: WM 2–19
Brake diameter: 7 in.
Spokes: $5\frac{13}{16}$ in. by 11G (straight, 20 each side).
Hub bearings: SKF 40399/W 6669 taper roller, 27 mm. bore by $1\frac{1}{4}$ in. O/D by $\frac{1}{2}$ in.

Rear: WM 2–19.
Brake diameter: 7 in.
Spokes: $6\frac{5}{16}$ in. by 10G (straight, 20 each side).
Hub bearings: SKF K.1178X/K1130 NI. taper roller two-part bearing, $\frac{5}{8}$ in. bore by $1\frac{3}{4}$ in. O/D by $\frac{15}{16}$ in. (2 off).
SKF 6205, 15 mm. bore by 52 mm. O/D by 25 mm.

FRONT SUSPENSION

"Teledraulic" forks carried on ball-and-cup race type head bearings, comprising 28 $\frac{3}{16}$ in. diameter balls with $1\frac{3}{4}$ in. pitch circle.

Three-rate compression springs: Solo, 218 lb. Sidecar, 280 lb.

Head angle: 62 .

Trail: $2\frac{15}{16}$ in.

Slider bush dimensions:
Bottom bush (steel): 1.2495/1.2500 in. bore by 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 $1\frac{1}{16}$ in.

REAR SUSPENSION

By swinging fork and Girling S/B 3.5/201 suspension units, with cast light-alloy bottom yoke and light-alloy collets at top location with the fixing eye.

Pivot bush: "Oilite," 1.000/1.00025 in.

CARBURATION

350 c.c.:
Amal "Monobloc" type 376/5; $1\frac{1}{16}$ in. choke; 210 main jet (200 with air filter); No. $3\frac{1}{2}$ throttle slide; centre notch needle position; .1065 needle jet; 30 pilot jet.

500 c.c.:
Amal "Monobloc" type 389/1; 1 5/32 in. choke; 260 main jet (250 with air filter); No. $3\frac{1}{2}$ throttle slide; centre notch needle position; .1065 needle jet; 30 pilot jet.

LUBRICATION

Dry sump system, with gravity feed from tank to rotary reciprocating plunger pump in timing-side crankcase cover. Pressure feed from pump to big-end bearing, o.h.v. rocker mechanism and valve guides, with return flow through push-rod tubes to timing gears and sump. The system embodies one metal filter, one felt filter and a magnetic filter located in the crankcase.

ELECTRICAL EQUIPMENT

Lucas RM 15 alternator with "Sentercel" full-wave rectifier charging Lucas 6 v. 13 a.h. battery. Ignition equipment comprises a Lucas MA 6 coil, and CA1A contact-breaker and A.T.D. unit housed in the timing-side cover. Complete A.C./D.C. circuits, including emergency start, controlled by a single headlamp switch and ignition key.

Bulb ratings:
Headlamp, 6 v. 30/24 w.
Pilot, 6 v. 3 w.
Tail, 6 v. 18/6 w.
Speedometer, 6 v. 1.8 w.

"DO-IT-YOURSELF SERIES" - - - - - - Continued from page 162

may require attention. Provided that lubrication to the inlet valve has been satisfactory, the adjusting needle should not be interfered with. Once the valve springs, the collar and the two split collets of each valve stem have been removed, the valve is free to be withdrawn through the guide. Two important points should be noted. The diameter of the 347 c.c. inlet valve head is greater than that of the exhaust and, therefore, there is no interchangeability. On the bigger model, valve-head dimensions are identical, but the valves are of different materials and, therefore, care should be taken to see that they are not accidentally changed over.

If there is more than just perceptible play in the fit of the valves in their guides, new parts should be fitted. Gently heat the cylinder head and drive the guides out downwards; but note that because the exhaust-valve guide is circlip-retained it must be tapped through from the inside of the head, just far enough to permit the circlip to be removed, before exerting any downward pressure. This means of location ensures a projection from the head of ½ in., and it is important to see that the inlet valve guide, when refitted, projects a similar distance, and that the oil-holes in the guides are lined up with the drillways in the head casting.

There is a copper gasket between the barrel and cylinder head and a paper gasket between the head and rocker box. If the condition of either is doubtful, a new one should be used. The rocker box gasket is particularly difficult to cut and the amateur can easily overlook the need to provide holes for the inlet- and exhaust-valve oil feeds.

A much-used engine should be fitted with new valve springs (see "Reference Data" for normal valve-spring "free length") and the head laid on one side pending assembly.

Hitherto (i.e. on pre-1958 models) it has been possible to take off the timing-side cover and slacken the left-hand-threaded mainshaft nut to release the timing pinion, which is a taper fit and keyed to the timing-side shaft. Sometimes the pinion could be freed by the careful application of levers, though a special extractor is used at the factory and by many dealers. On 1958 models, however, it is first necessary to draw off the contact-breaker cam-cum-A.T.D. unit, which is located on an extended shaft from the inlet cam wheel. The unit is a taper fit, and a 2 BA threaded extractor bolt, Part No. 024328, screwed in the place of the normal fixing bolt, facilitates this work.

The contact breaker and the condenser—listed now as a capacitor—are carried on a circular plate with a single connection to the "C.B." side of the high-tension coil. Because this connection can become "live," due to the accidental moving of the switch, it is a good idea to break the connection between the positive side of the battery and earth at this stage.

Long through-screws clamp the C.B. housing to the face of the timing chest. Removal of the housing permits continuation of the work on the crankcase, i.e., the extraction of the pinions and, on the other side of the engine, the taking-down of the primary drive-case components, which include the stator, bolted in the outer chaincase cover; the rotor, which is keyed to the engine shaft; and the sprocket, splined to the shaft.

It is necessary to remove the clutch complete and to disconnect the sleeved electrical lead between the output side of the generator and the wiring harness. This covered output cable splays into three separate leads with snap connectors located between the rear engine plates. The inner chaincase cover, integral with the nearside crankcase casting, comes away with the crankcase, which may now be removed from the machine after taking out all engine bolts.

Obviously the transmission side could receive attention first and the entire engine be lifted out at an earlier stage but, generally speaking, the less bulky and weighty the job, the better; and by dismantling piecemeal down to the crankcase the job is made easier for a man working alone.

(To be continued)

CLUB DINNERS

LOUTH CLUB'S SILVER JUBILEE

OVER 200 members, guests and friends sat down to the Louth and D. M.C.C.'s dinner held last Friday evening in the Town Hall, Louth, and many more came in later to take part in the dancing and entertainment which followed. After the excellent meal, the Loyal Toast was proposed by the club's president Freddie Frith. Following a short interval toastmaster Alan Disney rapped the table for silence for T. L. (Tommy) Wood who proposed "The Club and The Sport." He apologized for "losing his voice" and in a short speech mentioned his happy association with the club's race circuit at Cadwell Park, an association which began 23 years ago. Responding, the president mentioned especially the excellent work done by the St. John Ambulance Brigade and Drs. Greenwood and Friskney—these "mentions" were greeted with huge cheers. Freddie Frith went on to recall that the club's own home-town resident Jack Beeton was to be congratulated on winning four replicas in four sidecar T.T.s, the only all-British outfit to achieve this honour.

The toast to the Press was proposed by R. "Dickie" Davies, of Dunlops, who said that it was the first time he had ever had that task to perform. Replying *Motor Cycling*'s John Griffith spoke highly of the excellent facilities always given to Press people at the Louth club's events. Finally Freddie Frith proposed "The Visitors and Guests" in a very witty welcoming speech, to which, at short notice owing to the absence due to illness of Graham Walker, Eric Bowes replied. The award presentation which followed was made by Mrs. "Ginger" Wood and possibly the greatest acclamation was reserved for Bernard Codd, who hobbled up on crutches to collect his silverware. Dancing and entertainment until 2 a.m. brought the event to a close.

SOUTHAMPTON AND D. M.C.C.

NOTABLE extensions are to be made to the Montagu Motorcycle Museum at Beaulieu Abbey, Hants, said its curator, Graham Walker, last week; many famous machines are to be included as well as several prototypes which were never produced for the public. The occasion of this announcement was Southampton and D. M.C.C.'s annual dinner and dance at the Polygon Hotel, Southampton, last Wednesday when Mr. Walker was welcoming the guests among the 200-odd diners. These included Lord Montagu himself, Tommy Wood, Brian Martin, George Allan, Cyril Quantrill of *Motorcycle News*, *Motor Cycling*'s Norman Sharpe and 29 representatives of manufacturers, oil and accessory concerns. First speech of the evening after Chairman C. S. Henwood had proposed the Loyal Toast was the toast to "The Club" given by the A.-C.U.'s F.I.M. delegate Vic Anstice who thanked its members and particularly secretary Neville Goss for the way in which they had run the Union's I.R.R.M. last August. Replying, Mr. Goss said he was pleased that the A.-C.U.'s meeting would again be run at Thruxton in 1958 but that some way had to be found to make the Nine-Hour Race a practical financial proposition. He also appealed to riders not to extend to club organizers the demands they are making for the return of start money by professional promoters, pointing out that last year the club had received £147 in entry fees and had paid out £174 in riders' insurance. The reply to Graham Walker's speech—which was made after the awards had been presented by Mrs. Henwood—came from R.A.C. Motorcycle Manager Aubrey Thompson deputizing for Harry Louis, editor of *The Motor Cycle*, who had been unable to attend. After the dining room had been cleared dancing until 1 a.m. concluded the very enjoyable party.

NORTH HANTS M.C.

CONSIDERABLE "changes in programme" marked the 32nd annual dinner of the North Hants M.C., held on "The Night of the Great Fog"—Wednesday of last week—at Rotherwick, a rural hideaway near Hook, Hants. Down to propose the toast of "The Club," Mr. J. C. Lowe, chairman of the South Midland Centre, was weather-bound in North London; for the first time in living memory, vice-president Len Heath, billed to offer a toast to "The Guests, Ladies and Press," was a non-starter; due to reply, Cyril Quantrill (editor, *Motorcycle News*) was another unable to attend; a telegram was received from George Wilson (assistant editor, *The Motor Cycle*) that he couldn't make it; there were a number of other non-arrivals but some 150 out of the 162 "entries" turned up despite the appalling conditions. Deputizing at a moment's notice for Mr. Lowe, C. P. Read (assistant editor, *Motor Cycling*) recalled his personal and sustained associations with the club from its early, Bramshill scramble, days up to its present "Tweseldown period," adding that it was generally believed that it was a club member, still on the strength, Arthur Sparks, who had "invented" the scramble in about 1922. The recent passing of that great sportsman and friend of the club, the late president, Sir Fitzroy Goff-Calthorpe, who had come to the club's rescue with the Elvetham Park course when they lost Bramshill, was much regretted. The chairman, Mr. J. C. Archer, eldest of the famous Aldershot motorcycling family which was present in great force, responded, mentioning the considerable distances travelled by the club's moto-ball team to play at spots as far apart as Ipswich, Rochdale and Worcester. "The Presidents and Vice-presidents" was the subject of Mr. H. E. M. Kingdon's toast, to which the president, Lt.-Col. A. B. Knight, replied. Finally, L. J. ("Middle Les") Archer spoke as stand-in for Len Heath and Harry Cornwell, representing the A.-C.U., made an omnibus response for all three sections of the toast. The most enjoyable evening wound up with dancing to the music of Chic Henderson's orchestra, there being an interval during which the president's lady presented the competition awards.

THE WESSEX CENTRE

THE annual dinner, dance and presentation of awards of the Wessex Centre was held in the Grand Hotel, Bristol, last Friday. Opening the speeches—to an assembled company of 190—Mr. S. T. Huggett, secretary of the A.-C.U. mentioned the steady progress for which the Centre had been noted over the past 25 years, during which period its membership had doubled. He congratulated the Centre, in particular, on running its Castle Combe race meetings this year, despite difficulties due to fuel rationing.

A president's badge of office was presented to the Centre by Mr. V. C. Anstice, and this was almost immediately placed around the donor's neck by secretary Wally Vowles, to the accompaniment of the loudest cheers of the evening. President Anstice replied to Mr. Huggett's toast of "The Centre," mentioning in the process that, for 1958, the Knut Trophy trial has been added to the national events customarily run by "Wessex." Centre chairman, J. Parkin, proposed the health of "The Visitors" to which Mr. Charles Mason of The Avon India Rubber Co., Ltd., replied; at the same time, he presented the Centre with a new Avon trophy—a silver cup. "The Press" was proposed by Mr. H. C. Croft, and responses came from Geoff Kendall (Temple Press Limited) and Cyril Quantrill (*Motorcycle News*). R. A. B. Cook (*Motor Cycling*) and Jimmy Simpson, Jnr. (*The Motor Cycle*) were also present.

The presentation of awards by Mrs. Anstice followed, and then the assembly "fell out" for dancing to the Len Roy band until 1 a.m.

(More club dinner reports on page 180)

"DO-IT-YOURSELF SERIES" No. 19 - - - - by BERNAL OSBORNE

The 347 c.c. and 498 c.c. Single-cylinder

A.J.S. and MATCHLESS

Workshop Routine for Maintaining Four 1958 Roadsters Made at Plumstead

PART 2

REMEMBER that while for routine maintenance purposes the pump plunger and guide screw should never be disturbed, these parts *must* be removed before any attempt is made to split the crankcase halves. The oil pipes must come away and the unit, complete with flywheels, removed from the machine. The crankcase contents of the 350 and 500 c.c. models vary only dimensionally. Both types of machine have the mainshaft supported on the drive-side by two ball journal bearings (see " Reference Data " for details), with a spacer between them, and an oil seal and distance piece between the outer bearing and the primary-drive sprocket.

Both shafts are an interference fit in the flywheels and are locked by hexagon nuts. It is important that the timing-side shaft, if it has been removed, should be reassembled by means of a special jig so that its position shall be correct for the timing operations to follow; oilway alignment, too, will then be automatically obtained. That warning applies equally to the location of the crankpin, which is also a parallel interference fit in the flywheels.

Dimensional details of the big-end assembly and the small-end bush in the connecting rod are listed under " Reference Data." Although the manufacturer offers .001-in. oversize rollers for the big-end cage, these can only be fitted by main agents with special equipment for honing or lapping the big-end eye to size and truly circular. Both the crankpin retaining nuts are right-hand threaded; all crankshaft nuts are $1\frac{3}{16}$-in. across the flats.

The drive-side bearings can be jarred out after discreet but adequate application of heat to the surrounding metal, and the timing bush driven out similarly after heating. The last named, and also the small-end and camwheel bushes, must, after fitting, be reamed to the manufacturer's fairly critical dimensions; and if there is any doubt about the method to adopt or the equipment available, this work would be better left to the factory Service Department.

Assembly

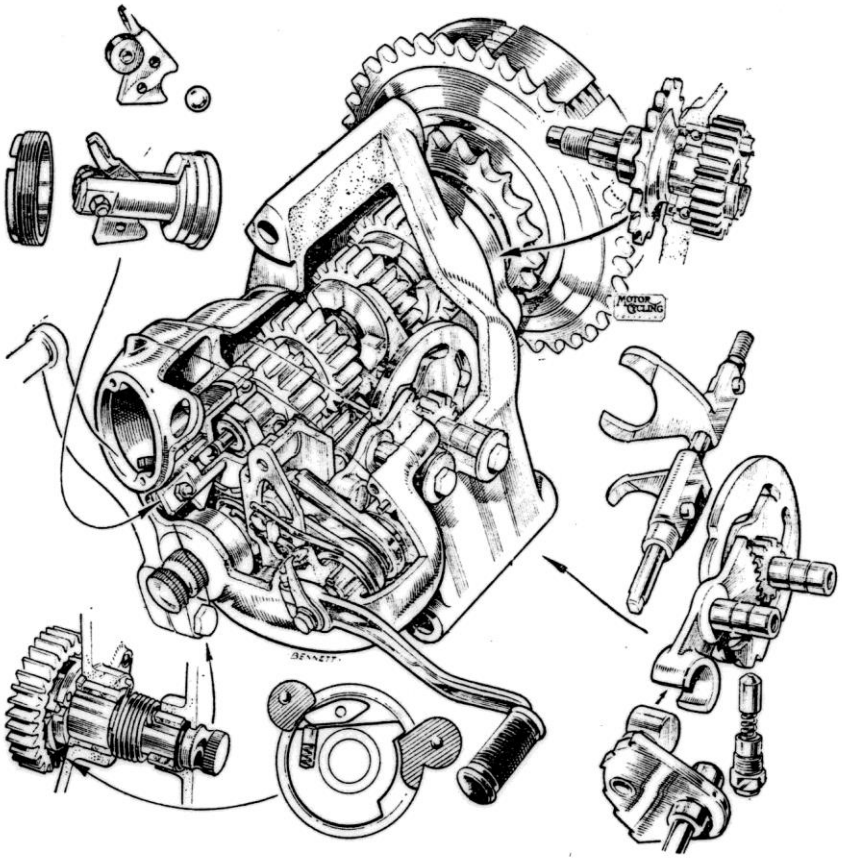
Precision truing of reassembled flywheels is another vital requirement and the work cannot be carried out with makeshift equipment. Mention has already been made of the critical timing-side mainshaft locations, but, if all is in order, reassembling the flywheels in the crankcase presents no major difficulty.

Again bearing in mind ease of handling, it is a good idea to return the crankcase to the frame at an early stage and build up by attaching the piston, sliding on the barrel, refitting the assembled head complete with push-rod covers, push-rods and new oil seals. Remember the distance rings, complementary to compression plates.

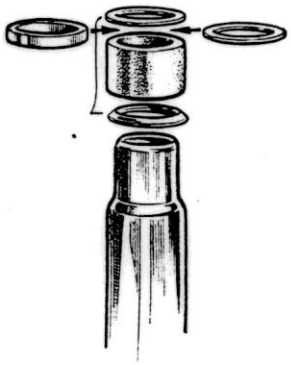
Probably the primary transmission, generator components and clutch will have to be left until any work on the gearbox is completed, but when the time comes, these parts all go together quite easily. Because the stator of the RM 15 generator is a bolted-up fixture within the chaincase cover, which itself is screwed to the back-plate, the vital air gap between the rotor and pole shoes is established and maintained without the need for adjustment.

Valve timing is obtained simply by aligning the appropriate marks, to be found on the cam wheels and half-time pinion.

Ignition timing is set by refitting the A.T.D. according to the sketch, i.e., so that the gap formed by the bob-weights is lined up with the two tapped holes in the contact-breaker mounting plate. The peak of the



General arrangement of the gearbox. Insets show: (Top left) Floating toggle mechanism for clutch actuation. (Bottom left) Two views of the kickstarter ratchet mechanism and return spring. (Bottom right) Cam-plate and selector fork assembly.



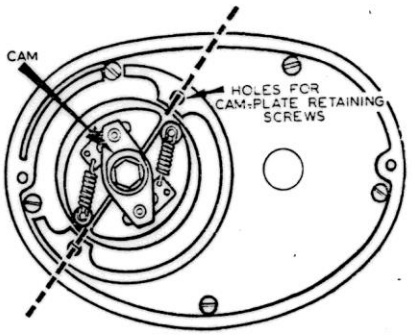
Packing rings of alternative thicknesses at the top of each push-rod tube compensate for removal or insertion of compression plates.

cam is then approximately in the 12 o'clock position. The timing is then locked so that the points are just breaking from the fully closed position when the bob-weights are thrown open and the piston is ¼ in. *before* T.D.C. on the compression stroke; it is advisable to check this after tightening. With the A.T.D. fully advanced, that setting results in the standard 39° ignition. If timed with the head off, make sure that the cam followers are on the base circles.

Transmission

The general layout of the gearbox is illustrated. Parts likely to wear are the ball journal bearings which support the mainshaft at both ends. The layshaft is carried in plain bushes and details of reamed bore dimensions after fitting are set out in the "Reference Data." Access to the gearbox internals calls for the removal of the K.S. crank (the gear lever can be left in position), the oil filler and inspection plates, the gear indicator mechanism and the five screws securing the polished outer cover. Before the cover is completely freed, make a scriber mark on the outer face of the gearbox end plate indicating the working angle of the clutch thrust arm. By this means you will have a guide, when reassembling, to line-up the arm and the slotted arm holder.

The two hairpin springs, the ratchet and pawl mechanism and the camplate are components in the gearchange and selector mechanism vulnerable to wear after long periods of service. When replacing the clutch, the centre nut, with its spring washer, should not be overtightened.



Method of setting the ignition timing: the gap between the bob-weights is lined up with the holes in the c.b. mounting plate.

Suspension

"Teledraulic" forks can be dismantled completely. After taking out the wheel, remove the bolt at the head of each stanchion and tap up the cast-alloy handlebar lug to clear the stanchions and steering column. Withdrawing the forks through the bottom crown releases the complete assembly for further work, which can be carried out on the bench. The forks are carried in loose assemblies of 28 balls at top and bottom, with frame races of the floating, self-aligning type. The balls will escape when the forks are withdrawn in the manner described. Alternatively, each of the stanchions, complete with a slider extension, can be taken down separately, leaving the steering column and head bearings intact. This is the more usual procedure—the one called for in t case of failure of the oil seals in one "leg

As indicated earlier, the damper mecha ism can be removed only after a retaini bolt in the base of the slider casting h been taken out.

The rear swinging-fork assembly bears flanged parallel "Oilite" bushes assembl in the frame lug with an interference f The annular space between the bushes filled with 1½ fl. oz. of heavy gear oil duri assembly and, although it is seldom nec sary to replenish this lubricant, an orifi with a screw cap is provided in the righ hand end bearing cover for the purpose. F those contemplating the job of replacing t fork pivot bushes, note should be made the need to ream out to 1/1.00025 i after fitting. Girling dampers are sealed the factory and thus no maintenance needed or possible.

Lubrication

Working under ideal conditions, • t rotary-plunger oil pump has a very long li Likely wearing points after many thousan of miles of service are the guide-pin a the cam-track in the body of the plung The pump housing is formed by a bor cavity in the timing-side crankcase and, wear occurs at this point, the only sat factory cure is a factory job involving t machining-out of the cavity oversize a sleeving. That is an expedient rarely nece sary and usually employed only after seizure or similar mishap due to shortage oil.

The FELLOW TRAVELLER

Story of a Lonely Road

by OLIVER COX

THE bike had only been mine for a week. "Goes like a bird," they told me. It did, too; quiet and smooth—more like gliding than riding—altogether a treat.

I'd come a long way since morning and was getting a bit tired of our "Great" North Road, so near Royston I was glad of the chance to turn off to a quiet bit I knew, which would see me through as far as Puckeridge. Quiet? About all the life you have for quite a stretch is an old windmill and a couple of haystacks. What road signs there are look positively surplus. You get so used to being on your own that you tend to drift to the crown of the road, and it's so soothing that if you don't look out you find your head near to nodding. But not this trip. I hadn't enjoyed more than half a mile of peace before I was aware that I had company. He must have pulled out from behind, and pretty close, too, although I'd never heard a sound. I swerved sharply to the nearside to let him overtake, but to my surprise, without a look or a gesture, he drew level, exactly suiting his pace to mine, and so we continued, neck and neck.

This was ridiculous! Someone had to act. I waved my arm at him, fatuously, a caricature of anything you'll ever find in the Highway Code. He, wisely perhaps, ignored it.

"All right," I thought, "If you won't break up the formation, I'll do it for you."

With a glance at him for effect, and to surprise him, I opened up. The result was absolutely nil. Effortlessly, without noise, without even a glance in my direction, he kept alongside.

It was uncanny. There was nothing else on the road, n likely to be. Just as well, as things were, me with my he screwed permanently sideways. I kept my eye on him, but made no sign. I called to him, feeling a bit of a fool, b got no answer; in fact, I never expected one. What was h little game, then, and how long was he going to play it? If increased speed, so did he; if I slowed down, he did the sam It was a lonely road; could it be that he just wanted to ke near me?

I was becoming intrigued. What else could I try, to te him? Well, if it was company he wanted, what about stoppi for a bit? See what he'd do then. I braked gently and dre in, carefully, to the hedge. I didn't want to cause any troub and just as I had thought, he stopped too, and, of all fun things, squatted down in the middle of the road.

Now his eye was definitely upon me—half timid, half curiou He said not a word, and I thought it best to keep silent, b tentatively, awkwardly, held out my hand. I was relieved see that it had the desired effect; my kindly gesture h succeeded. He attached himself gratefully, first to my bi and then to me, obviously glad to have made my acquaintan He seemed tired. Would he care for a lift, as he was goi my way, to give him a rest? He accepted with alacrity. was no weight, and the grip on my shoulder was very lig

I took him as far as the next cross-roads, where our wa parted—mine due south, his away up a narrow lane, acr the fields—I stood and watched him, regretfully, as he skimm fast along the track, and then higher, higher, up and over haystacks, over the tops of the elms and out of sight. Ne a goodbye. Never a word of thanks. Ah, well. . . . Just l a bird!

More Treasures from the Stevenage Works

Yet more from Franco

CONFIDENTIAL

The VINCENT H·R·D COMPANY Ltd.

STEVENAGE, HERTS, ENGLAND

31st October, 1947.

Service Letter No.: 1.

Model RAPIDE "B". Eng. Type No. F10AB/1/ Frame Type No.

Subject SPARKING PLUGS.

The Champion NA.8 plug normally fitted has been found to oil-up occasionally, usually in the front cylinder, and when the machine is new or being driven slowly. A cure can usually be effected by using a softer type, such as Champion N.8 or its equivalent in other makes; such as Lodge HLN or HL.14, and in future N.8 will be fitted as standard to new machines. Naturally, these plugs will not stand up to really hard work as well as the harder grades, and riders may find it necessary to revert to the grades quoted in the Riders Handbook, preliminary issue, if very hard riding is indulged in.

Over-oiling which is confined to the front cylinder may be due to excessive clearance between the inlet valve stem and the lower guide, and which should not exceed .002". The front inlet rocker box does not drain as efficiently as the rear, and drainage can be improved by fitting the grooved rocker bearing, Part No. ET26/1, or by filing two grooves, $\frac{1}{8}$" deep on the lower side of the existing bearing, just to each side of the slot through which the rocker passes. This modification will be incorporated in engines produced in the near future. (subsequently to F10AB/1/200 approx.)

CONFIDENTIAL

The VINCENT H·R·D COMPANY Ltd.

STEVENAGE, HERTS, ENGLAND

Service Letter No.: 2 — 31st October, 1947.

Model RAPIDE "B". Eng. Type No. F10AB/1/3-195 Frame Type No.

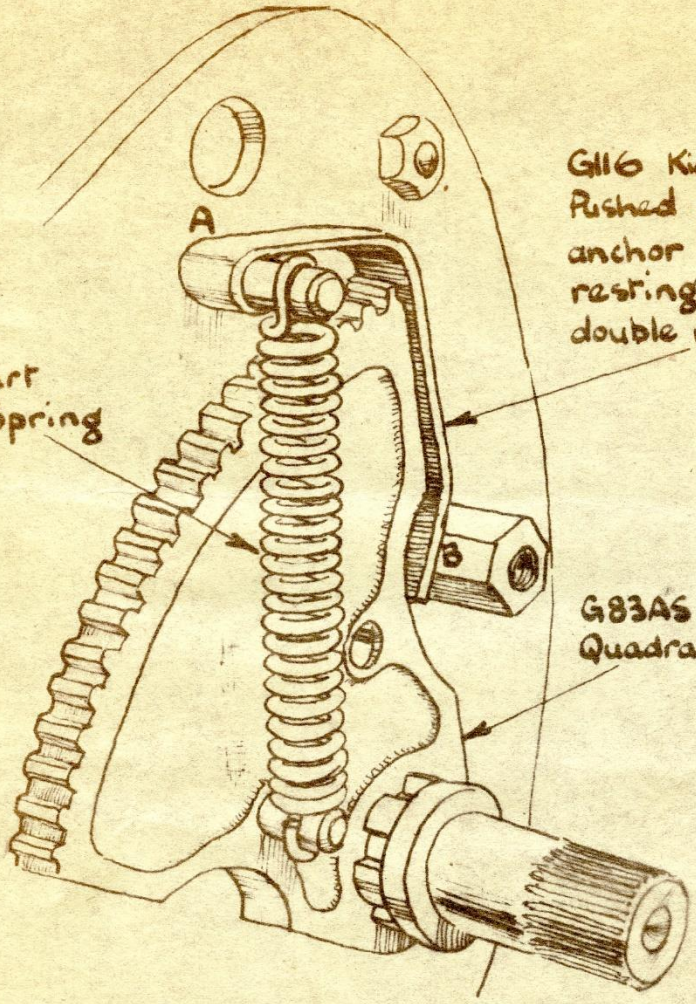
Subject KICK STARTER STOP AND SPRING.

Rattling of the K.S. quadrant against the K.S. cover when travelling can be obviated by fitting the Quadrant Stop, Part No. G116, and stronger Return Spring, G87/1, as depicted in Drawing No. M006. To fit, remove R.H. footrest, the gear-shift arm on gear box and the serrated washer behind it, the indicator lever and the K.S. crank. Detach clutch wire inner cable (See Riders Handbook, p.24). Remove the screws and nut which retain cover, and pull cover off, pushing the indicator-lever shaft and the squared actuating-arm boss inwards as the cover comes away to retain all the foot-change components in place. Detach the old spring, tap the Quadrant Stop into place on the upper spring peg, and fit the new spring.

Opportunity can now be taken to verify that the foot-change ratchet mechanism is correctly adjusted as per Drawing No. M008. If correct, verify that the Actuating Arm roller is correctly positioned in the slot of the Footchange Ratchet, then replace cover and other components. Finally, set the kick starter crank on its splined shaft so that it clears the footrest distance piece by 1", otherwise it may subsequently rattle against the distance piece.

THE VINCENT

H·R·D



G116 Kickstart Return Stop Pushed over top spring-anchor (as at A) and resting back against double nut (as at B).

G87/1 Kickstart Spring

G83AS Kickstart Quadrant and Shaft Assembly.

FITTING OF KICKSTART RETURN STOP AND SPRING.

M006

R.J. 4.6.47.

RAIN IN THE FACE RALLY

By: Phillip White, Australia

The 2021 Mid-July "Rain In the Face" Rally has come and gone and it went very well. It almost goes without saying that a rally held in the dead of winter is never going to draw a large number of attendees. Only a dozen club members participated but what we lacked in numbers we made up for in Quality. For the next three days we had perfect blue skies and, as little we knew then, this was to be the last week end where we would be allowed out to play. Carpe Diem!

We based out of a large red brick motel near the Main Street of Echuca. This is a port city on the Murray with a long history. Therefore, it is touristy and ergo it boasts a goodly number of pubs, bars and restaurants. The Motel was well located but looked a lot like that brick jail in metropolitan Melbourne they built a few years back. To reinforce that similarity, there were lots of Police staying there. They were there as part of the border protection against the Dreaded Covid Bug.

Most of the attendees drove up on the Wednesday and a noticeable number of them brought more than one bike. To arrive early is becoming a fairly common practise, most attendees have control of their time and departing on the Sunday leaves time for family.

On the Thursday it was the coldest day of the Rally with temps down around 2 degrees C. A few of us had the rather excellent heated jackets and gloves from "Venture". All I wore on my torso was a t-shirt, the Venture jacket and a light leather jacket and it was fine. Such a step up from the layers of stuff we all had to wear in times past. We were on the road at the crack of ten thirty and headed for Bridgewater and its famous Bakery. In 2020 the general public voted this establishment as having the best pies and vanilla slices in all of Victoria. We then meandered up the street to a shop that specialises in Classic Nortons - but they were shut. Back on the bikes we went a couple of km's up the road to a winery where most folk bought a bottle or three of rather good value wine. The return ride was pleasant and apparently uneventful..... wrong, wrong, wrong.

To comprehend what follows it is helpful to understand the layout of the motel. As mentioned, it is a large two-story complex built in the form of a hollow rectangle. Access is via a fairly long entrance passage way that opens on to the central courtyard. On the right is a concrete apron that would hold around twenty or more cars. After that there is sheltered parking under the building which is bounded by a brick wall at the side boundary, stairs to the right and on the left a 6-metre glass partition with sliders that forms part of the fencing for the swimming pool. I arrived slightly ahead of the main group so I had a grandstand view of what transpired next.

There was a milling mass of bikes either on the concrete apron or trying to get up the narrow driveway. Noel was bringing up the rear on his trusty 47 and tried to avoid the miniature traffic jam by jumping the gutter. Now the foot clutch on a Chief is a sturdy and trouble-free piece of equipment but.... they can bite you. When the bike hit the gutter, Noel put a foot out for balance whereupon the clutch smartly dropped in to full engagement. The resultant lurch and further loss of control caused him to wind open the left-hand throttle. Indians are torquey old brutes and the bike took off like a scalded cat. All Noel could do was hang on and try and avoid the milling mass of bikes, riders, parked cars and brick columns and he did a great job. He had the horn blaring and in flat track style, managed to wrench the bike to the left - away from a nasty head on into the looming brick wall. This put him on course towards the glass fence. Ever seen "Stargate" where there is a flash of silver as people go through the portal?

I got a rear view of an Indian and rider momentarily silhouetted by 6 metres of spectacularly exploding glass. The front wheel wedged into a buttress with enough force to snap the bottom fork link spindle like a crisp carrot, the front end collapsed and the bike finally stalled. That's What I Call An Entrance! Noel was a little shaken and bruised but otherwise O.K. Definitely Beer O'clock after that! Dinner that evening was at the Star Hotel and perfectly adequate for a pub.

The first stop on Friday's run was the town of Colbinabbin. There is not much there but like many towns in this region the city fathers have opted to paint large murals on a group of silos. I suppose that if people have a reason to stop in the town, then they have a reason to spend money in the town. The arvo run took us to Kyabram where we had a brief stop and regroup. Club Member Garry was mounted on his very clean 1976 Triumph Trident. Gary has owned this bike for many trouble-free years but in the recent past the bike has been plagued with engine and electrical problems. This time the bike was quietly parked when suddenly vast quantities of thick blue smoke erupted from the headlight. Much frantic fuse pulling saved the day. The culprit turned out to be a shorted-out blinker wire so the machine was still rideable. On to Rushworth for our lunch stop and more Silo Art.

After return to base camp, we dined that night at a hotel that shall remain nameless - appalling would be too kind an epithet to describe the food. I had a rack of lamb with ribs so huge that they looked like a prop from "Jurassic Park"! I am sure this particular lamb died of old age. Other folk reported inedible curries and such like. [I have been advised that the steak was acceptable] Later in the evening a number of us felt the need to party on to recover our equilibrium.

Saturday's run was supposed to start early for an extended run to Kerang where a pub had been booked for lunch. I was not planning to join this particular run as my Vincent was out of action with ignition problems and my Enfield had nipped up briefly the day before. So I thought I would just nurse the bike to Kerang and back with John F riding shot gun in case the bike crapped out and needed recovery. John and I set out for a leisurely breakfast at the rather excellent café right next to the motel. I kept expecting to hear departing bikes but no. When we meandered back to the hotel the group was still 'faffing' about! Here are just a few of the reasons for this tardy departure:

1. Garry had left his choke on the day before and a plug change was necessary.
2. John's bike suffered a sunken float.
3. Phil Pilgrim could not find the keys to his Vindian. [after a lot of frantic searching of the premises by the group, they were found in the pocket of his previous days riding jacket!]

Although the Enfield had zero compression on one cylinder, I thought I would chance it. The bike started and ran ok but very smokey. We made it to Kerang by the direct route and found the lads and laddette in the pub. I didn't eat there but reports were good. The proprietors were very solicitous. I guess things are just so tough on the tourist scene that they wanted to be sure we were happy. Apparently, the main group basically crisscrossed the Gun Barrel Highway back to town. My bike was over heating so I set off on my own but my 200-year-old GPS steered me wrong. I ended up doing many extra km. I got within 9 km of town when the bike expired. A call to John saw him drive out in my Ute for a rescue. That night we hit the Royal Hotel. This is also a Gin Distillery with yummy finger food. A welcome break from pub grub.

There was mooted to be a Sunday morning run but it did not transpire. No matter, a very good time was had by all.

This entire event was planned and organised by Iron Indian Rider's President Piercy and Wonder Woman A.K.A. Sandy so a very special thanks to them for their efforts. If you missed this Rally, try hard to make the next one. It is said you only regret the things you do not do.

Attendees:
Alistair 2015 Chief; Sandy 47 Chief; Phillip 47 Vincent and 37 Royal Enfield; Dave 2015 Chief; John F 54 BSA Gold Star; Noel "Cannonball" 47 Chief and 57 BSA B33; Gary "FireBall" 76 Triumph Trident; George F 44 Chief; John M 47 Chief; Phil Pilgrim 47 Vindian Replica; Heath Pilgrim 68 Trumph Bonneville; and John S 47 Chief

Footnote: The USA Distributor for the Vincent HRD company was the Indian Motorcycle Company. Phil Irving freely admitted that he was inspired by many of the design innovations pioneered by the Indian Company.

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.

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 Takeing 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 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

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

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

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

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 use these. Contact Paul Holdsworth of the VOC Chicago section c/o pl_holdsworth@yahoo.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

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 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

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 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

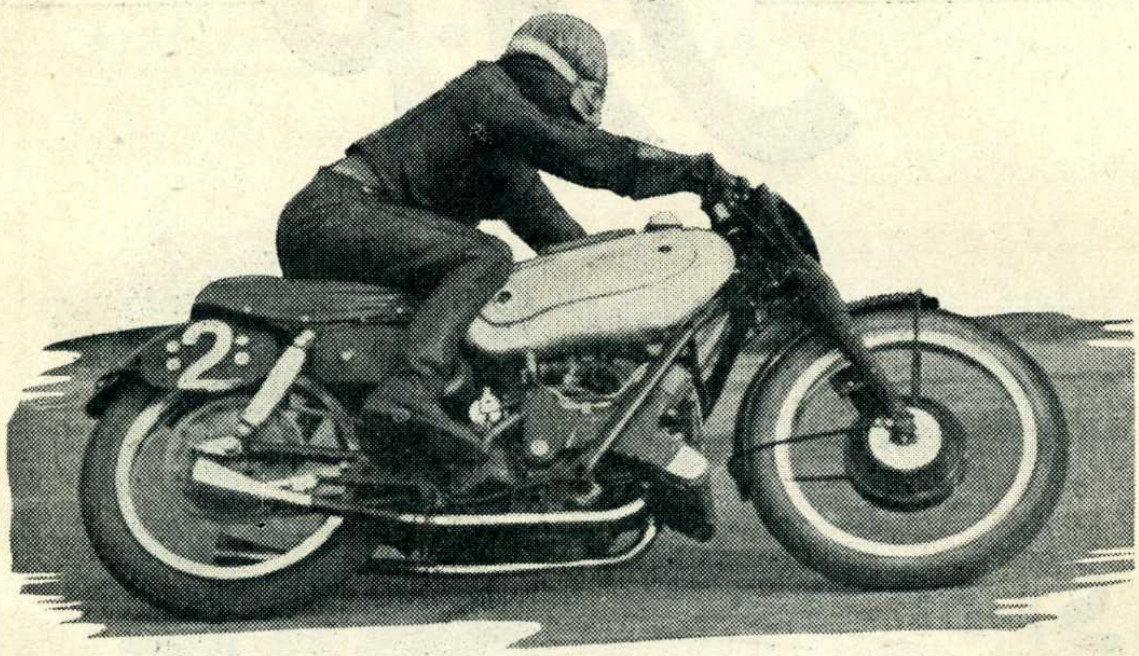
LUCAS STUFF – The man who bought Kevin Baker's Lucas Parts business is Danny Lee in Melbourne. Email: dannyleepersonal@gmail.com His phone number is 0412 327 197 Apparently Kevin has moved to Melbourne and works with Danny one day a week.

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

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

Tyreman M/C, Australia: Highly professional and reasonably priced motorcycle (and car) tyres, 102 Chifley Drv., Preston, VIC. Ph 03 9480 0911 ask for Ari (*disclosure – OVR gets its motorcycle tyres here*). www.tyremanmc.com.au



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