North Birmingham News

<u>NEWSLETTER</u> What is a Triumph Ricardo?

The machine has not been running since 1928 it now looks new again and ready for this year's Banbury Run and Stafford show.

The Model R gentleman's fast roadster catalogue was presented in 1921.

Triumph at that time had lost its Works Manager and Chief Design Engineer due to the sudden death of Charles Hatherway, and carried on with the old side valves throughout the First World War. Some say at the time Triumph lost ground to its competitors who were moving to twin and V style machines.

Frank Halford worked in the design team of Harry Ricardo, a young and up and coming consulting engineer with an interest in internal combustion engines and in particular the combustion chamber. Halford and Ricardo were friends; Halford was winning frequently in motorcycle races riding side valve Triumphs. Racing was Halfords hobby and passion. So when Indian motorcycle started racing V-engines and other twins, Halford asked Ricardo what could be done to develop the old Triumph single side valve to compete with the new Vs and twins.

Ricardo looked at Triumph engine bottom end and thought it was a very robust, all ball and roller bearing crankshaft in a sturdy casing, which would well stand further development. So he suggested they start from crankcase up. The overhead valve 4-valve layout was chosen with concave cast aluminium piston to produce a spherical combustion chamber in a bronze cylinder head. Revving up to 5000 rpm, this produced 20 bhp. A huge improvement on the old side valves, and Halford had the desired success winning races and speed records up to 87 mph.

With no team leader in the design team, Triumph who had heard of this private enterprise asked Ricardo to design the gentleman's fast roadster, hence the detuned all cast iron Model R. The cast alloy piston and spherical combustion chamber remained.



An attachment of Titch Allen's account of the 1930 when he road tested one of these for Motorcycling Magazine is included in the extended newsletter on the NBS website. This model sold well until 1927 when the recession of 1927 forced Triumph to more austere models and all in house designs.



Pioneer Run 2010

The 72nd Pioneer Run was held this year on Sunday 14th March. It was a great spectacle to see with approximately 360 machines, all manufactured before 31st December 1914 taking part.

The weather this year was perfect. The participants left the start at Tattenham Corner Epsom Down from 8.00am with 4 at a time at one minute intervals, with a coffee break at Leonardslee. The run finished at Madeira Drive in Brighton and the first finishers stated arriving at around 10.30 am, and most of them were checked in by 12.30 pm.

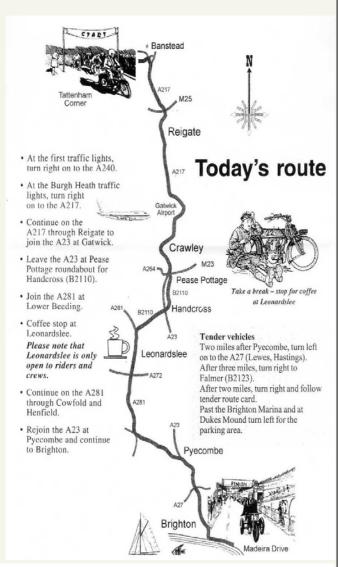
This run of some 40 miles is no mean fete for these machines and riders. It is amazing to see riders doing this with such ease; paddle, pedal or kick starting are the other methods which are common.

Madeira Drive is closed to normal traffic during the event and this gives spectators a good opportunity to see the machines travelling. There are of course other vantage points along the route.

All machines have the Pioneer Certificate. This is a requirement of entry. These certificates are issued by the Sunbeam Motor Cycle Club. The certificate remains the property of the SMCC and can be withdrawn by the dating committee if information comes to their attention which puts doubt over the date or authenticity of the machine. In the event of doubt, present owners can at best be allowed to keep the certificate, but if the machine is sold the certificate must not be passé don as it is

no longer authentic and the machine will not be allowed to enter the run again in new ownership.

All makes of machine are welcome and the Sunbeam Motor Cycle Club issue Pioneer certificates for all eligible machines.

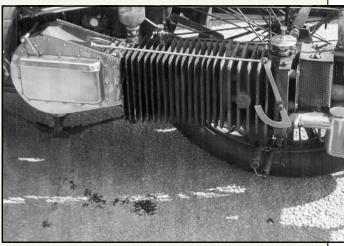


TERMS AND CONDITIONS FOR THE ISSUE OF A PIONEER CERTIFICATE

- Dating of Motor Cycles and Tricycles is a service for owners only to identify the date of a machine to establish its eligibility for entry in the annual Pioneer Run[®], for which a nominal fee is charged.
- The Pioneer Certificate issued for eligible machines remains the property of the Sunbeam MCC.
- The dating Committee amy at any time review a date should they consider that further information has come to light relevant to that relevant machine.
- 4. The Dating Committee has the right to withdraw or revoke a Pioneer Certificate should a review resulting from new information coming to light conclude that the machine in question is not eligible under the rules.
- Should a Pioneer Certificate be revoked for any reason the owner of the machine must return it to the Club.
- 6. The Dating Committee decisions are taken by the Committee as a whole in the best interests of the owners of Veteran Machines and to preserve the integrity of the Pioneer Register.

- The Dating Committee acts under the authority of the Club's Management Committee to whom they are responsible.
- 8. The Pioneer Certificate is issued free and in good faith to owners of eligible machines and is based on information available and presented to the Dating Committee at the time of issue. It is issued for the purpose of establishing eligibility for the Sunbeam MCC Pioneer Run® and maintaining historic accuracy in the classification of machines deemed eligible, and for no other purpose. Neither the Sunbeam MCC nor its officers can accept liability for loss occasioned by owners or any other person or persons or organisations should they elect to use the Certificate as a basis for any commercial decision or indeed for any other purpose whatever.
- 9. The decision of the Dating Committee is final.
- Upon acceptance of a Pioneer Certificate it is deemed that the owner of the machine concerned accepts these Terms and Conditions.

















PROVISIONAL FORTHCOMING ATTRACTIONS FOR 2010

	CLUB NIGHTS		
APRIL 28TH	Slide night		
MAY 26TH	Noggin and Natter		
JUNE 30TH	Ride A Bike Night		
JULY 28TH	Fish and Chip Supper		
AUGUST 25TH	Arrive on Your Bike Night		
SEPTEMBER 29TH	Noggin and Natter		
OCTOBER 27TH	Book Swap		
NOVEMBER 24TH	Noggin and Natter		
DECEMBER	No Meeting		

DATE	RUN	ORGANISER	Tel No
MAY 2ND	Relay Rally	Josie Stanley	01543-452695
MAY 23RD	Girder Fork Run	Martyn Round	0121-550-1547
JUNE 9TH	Mid Week Run	Bill Danks	01562-67103
JUNE 13TH	Josie's Jaunt	Josie Stanley	01543-452695
JUNE 27TH	Severn Valley Run	Bill Danks	01562-67103
JUNE 30TH	Ride A Bike Night	Paul Harris	01902-842732
JULY 4TH	Trent Valley Run	Brian Empsall	01543-264968
JULY 7TH	Mid Week Run	Roger Greening	01562-730464
JULY 25TH	Long Mynd Run	Colin Lloyd	01384-371835
AUGUST 1ST	Breakfast Run	Rob Pell	0121-624-7674
AUGUST 4TH	Mid Week Run	Ian Harris	01952-299118
AUGUST 15TH	Anniversary / Concours	Peter Ashen	01562-882854
SEPTEMBER 5TH	Flight of Fantasy Run	Trevor Bull	01905-778917
SEPTEMBER 19TH	Roger's Run	Roger Greening	01562-730464
OCTOBER 3RD	Levis Cup Road Trial	Paul Harris	01902-842732
OCTOBER 10TH	Autumn Run	Andy Briggs	0121-544-5938
NOVEMBER 7TH	Winter Wander	Paul Harris	01902-842732









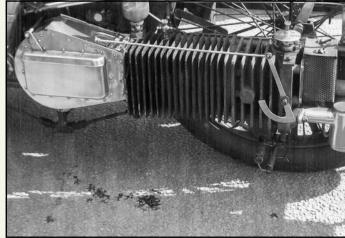






























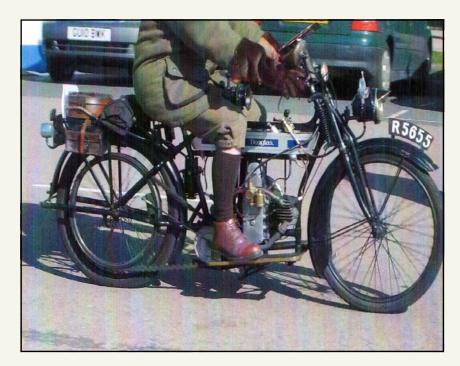
















The 1923 499cc Single-cylinder Ricardo Triumph

IN 1911, after showing the world how to make a good sidevalve single, Triumphs rather rested on their laurels until 1921. Then, as if wakened from slumber by the furious activity of their rivals, they suddenly announced a machine with not two but four overhead valves.

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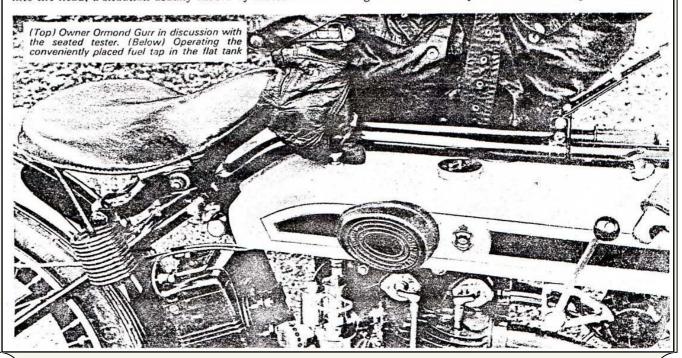
It was not their own work for they had commissioned the leading expert on internal combustion engines, H.R. Ricardo — later Sir Harry Ricardo — to design this longstroke 500. I am told by Ormond Gurr, the owner of the test machine, that Sir Harry submitted a number of designs to Triumphs (he has blueprints to prove it). What finally emerged as the Model R, or "Riccy" as it came to be known, was little more than a Ricardo head and barrel on a typically Triumph bottom-end, the rest of the machine being the same as the Coventry firm's sidevalve.

It looks as if fuel economy figured largely in Sir Harry's brief for no serious attempt was made to realise the power potential of the four-valve design. Inlet ports were small. A novel feature, though not one to improve gas flow, was that the inlet valves were masked; the seats were sunk by 30 thou into the head, a situation usually caused by excessive wear



and disastrous to efficiency. Ricardo's timing of course made allowance for the fact that valve opening would not be effective until the valve was clear of the pocket. It is difficult to see why he went to the trouble...

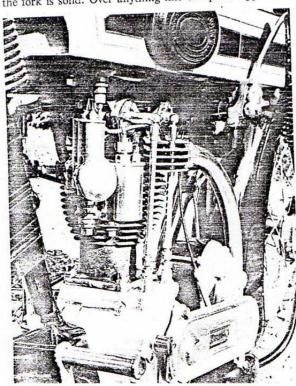
One would imagine that works racing Ricardos (which were modified as to bore and stroke and had splayed exhaust ports) did not have masked inlets when one finished second in the 1922 Senior T.T. and among other successes took the Mile World Record at over 80 mph. Though the engine could obviously be tweaked nothing much could be





done about the rather primitive cycle parts which were a legacy of wartime sidevalves. The notorious pivot front fork had gone but the girder fork which replaced it was a most unfortunate design. The first Riccys actually had Druid forks which were not too bad but this was a stopgap while Triumph got in production with their own design.

The inadequacy of the fork is soon apparent when one rides a late Ricardo. On dead smooth surfaces all is fine for the fork is solid. Over anything like bumps or ripples the



suspension becomes confused, getting out of phase with the bumps. In the end it is going down on rebound when it should be coming up on bump. That, plus steering rather too light for a feeling of security, and an early veteran rather than a late vintage riding position, does not form a vote of confidence. I can understand why Triumph riders nearly mutinied over the poor steering in the mid-Twenty T.T.,

But there again I am looking at the Riccy as a sports machine which it isn't at all. It's clearly intended as a refined gentleman's machine with exceptional economy but restricted performance.

Economy-plus is the keynote. Ormond confirms that 100 to 120 mpg is quite within its capabilities at its modest cruising speed of 40'ish. And, looking on it in the light of it being an improvement on its sidevalve ancestors, it is a pleasant machine.

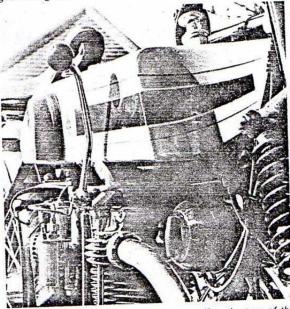
Big talking point about the Riccy is the distinctive exhaust note. The gases are led by two softly curved pipes into a cast-alloy expansion chamber in front of the engine. From this a single tail-pipe leads to level with the rear spindle. Whether by design or accident the acoustics of this system produce a most mellifluent sound, one free from metallic discord, a nicely rounded musical note which is so pleasant to the ear that one is persauded to plonk along at a

gentle speed the better to enjoy it...

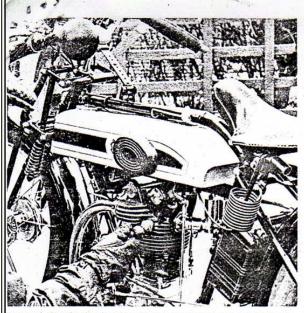
There are other pleasant features. The clutch is light and smooth and the gear change easy. There is no positive gate for the tank-side lever, merely depressions for the lever to fall into for each gear position. But somehow this works fine. There are one of two traditionally Triumph features. fine. There are one or two traditionally Triumph features like the screw-down needle valve in place of a petrol tap and the double-barrel Triumph carburettor which in this case had an irritating flat spot low down. Of course there is the superb Triumph finish (faithfully reproduced by the owner's restoration) with domed and capped nuts everywhere.

The test machine rejoiced in the optional extra of Lucas magdyno electric lighting equipment. Looking at the massive generator unit I feel sure it must have knocked quite 5 mph off the maximum speed!

Though well remembered by an older generation the Riccy Triumph was short lived. It lingered on in the catalogues until 1927 when sales for this rather outdated venerable gentleman of a machine fell right off. Then it was igned by a more sport, two valver called rather imagine. joined by a more sporty two-valver called, rather imaginatively, the T.T. Model. By 1928 the Ricardo Triumph had gone for good.



Hitching his feet up (top) C.E.Allen moves off to the tune of the Hitching his feet up (top) C.E.Allen moves on to the tall of the distinctive Ricardo exhaust note. (Left) Using separate barrels for distinctive Ricardo exhaust note. (Left) Using separate barrels for distinctive and air slides, the carburetter is of Triumph's own make.



(Above) The 4-valve head features a side-mounted sparking plug. (Below) Tyre inflator is sited alongside the uppermost tank rail. Squawk horn is Lucas. (Bottom left) Rear brake works on a dummy belt rim with the chain final drive on the opposite side. (Below right) Fretwork brake pedal has dimpling and corrugations to prevent foot slip, all too easy in the days of yore when road filth was truly filthy. Note very wide flanges in the Ricardo barrel uniting it to Triumph's stock bottomhalf

DATA

Engine: 499 cc Triumph aircooled single-cylinder fourstroke. 80.94 x 97 mm bore and stroke. Four overhead valves cperated by pushrods.

Lubrication: Constant-loss fed by hand pump on tank.

Ignition: Magneto or magdyno located in front of engine and driven by chain.

Triumph instrument with seperate barrels for Carburation: throttle and air slides.

Transmission: Triumph 3-speed gearbox. Chain primary and secondary drives. Primary chain and clutch in cast-alloy oilbath.

Frame: Diamond type. Triumph girder forks with twin side springs.

Wheels: Beaded-edge rims for 3.00-inch x 26-inch tyres. Internal expanding front brake. Shoe-type rear brake working on dummy belt rim.

Tank: Flat tank between frame tubes. Petrol capacity approximately two Imperial gallons, oil two pints.

Dimensions: Saddle height 31 inches. Handlebar width 33

inches. Weight approximately 250 pounds.

Original Finish: Black frame and mudguards. Tank light rey with green panels. Wheel rims, handlebars and small fittings nickel plated.



Performance: On top gear about 60 mph. On middle about 30 to 35 mph. On bottom about 10 to 15 mph. Petrol consumption 100 to 120 miles per Imperial gallon.

