

DIY delight. Accessibility is the strong point. Owner Ivan Rhodes whips the kickstart mechanism off in seconds

*The
1927
349cc
A.J.S.
H6 Big
Port*

CCHEEKY sums up in a word the 350 O.H.V. A.J.S. of the mid-Twenties. Its forebears, the 1921 T.T. models, had the gall to win the Senior T.T. and the Junior, the only machine to get away with such effrontery. Subsequent roadster models in clubman hands went on as cheekily for a decade, taking on heavyweights and licking the pants off them. They still cock a cheeky snoot at more toffee-nose bikes in vintage races today...

Because the Big Port legend began in the 1921 T.T. we should go back there and introduce a hero who oftimes had the nerve to attempt the near-impossible, the irreplaceable Howard R. Davies. Cheek got him a works ride with Sunbeams in 1914 when he as a lad of 18. He tied for second place. Not off put by reading his premature obituary after being shot down and captured in World War I, he got the job of competitions manager at A.J.S. in time to enter himself for both the Junior and Senior T.T.s of 1921.

Ajays did not make a 500, would not let him ride another make, and were dead against the idea. They did not think either Howard or the bike could stand the strain of two races. He had no doubts and the bike problem was solved by his agreeing to use the same engine but new cycle parts for the Senior.

He would have cake-walked the Junior by the best part of ten minutes if he had not punctured and had to change a tube on the second lap. As it was he ran second to team-mate Eric Williams but set the record lap at 55.15 mph.

In the Senior, his engine nicely run in, the late Howard Davies went even faster, upping his race average to close on his Junior record ... he had to for Fred Dixon and Bert le Vack were after him on 500 Indians.

Birth of the Big Port

The fact that the cheeky A.J.S. had a big-bore exhaust had not past unnoticed though and when it grew even bigger in 1922 — to a full 2 3/8-inches — it seemed that Ajays had another one-two Junior result. The words Big Port began to be bandied about and naturally latched on to the production 350 cc ohv sports model which appeared in 1923. The modest A.J.S. firm did not cash in on this gratuitous gimmick, chastely referring to their big-ported model as T.T. B3 O.H.V.

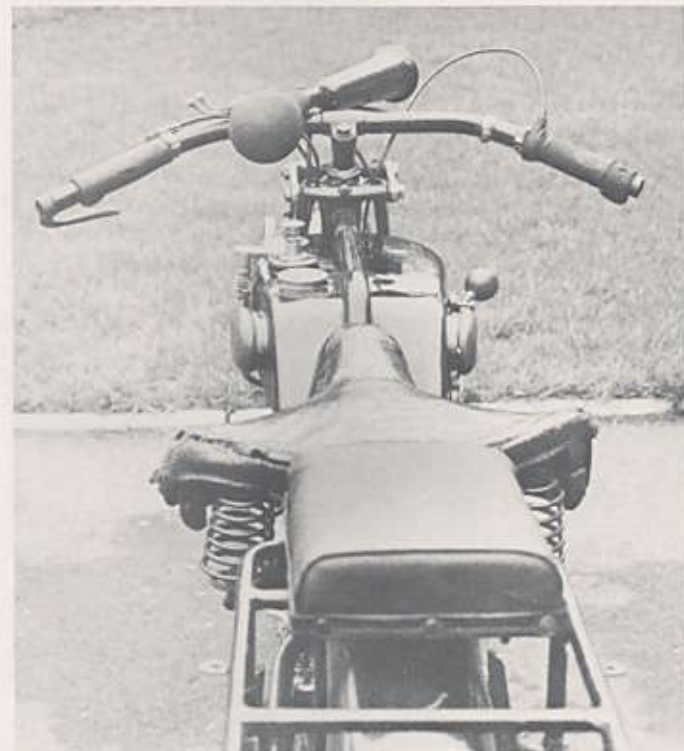
The appellation T.T. was continued with yearly coded symbols until 1926 when after a disastrous race week they dropped the T.T. bit. The 1925 and 26 production models were not really big ports anyway though a generation of

enthusiasts has loosely referred to all the flat-tanked ohv models as such.

Let's get it straight. True Big Ports — the real bore jobs (don't worry about small changes in the pipe due to different port fittings) — only came in 1923, 1924, 1927 and 1928. The 1928 job was a redesigned engine so may not strictly count.

What happened in 1925 and 1926? Well Ajays seemed to have had a change of heart. They reduced the exhaust ports to 1 7/16-inches but upped the inlet from the niggardly 1 inch to a rousing 1 1/4-inches. It did not make them go any better.

Most of the private-owner successes of Big Port (and small port) mid-twenty Ajays have faded beyond recall for it was soon outpaced in all-out speed but the example I chose for test without any hesitation is one that is still



The rear view is all that many challengers see of this punch-packed 74 x 81 three-fifty. Note the enormous squawk horn



maintaining the reputation of cheekiness. It is the hard-used 1927 model owned by Ivan Rhodes (better known as a vintage Velo man). He has a soft spot for the Wolverhampton breed ... he has even named his home Graiseley House after the old A.J.S. works and enthusiasm can go no further than this.

It's a maid-of-all-work, vintage standard class racer, vintage trials bike, loan-to-friends bike, daily hack. I would say that the Big Port A.J.S. was the first really good clubman D.I.Y. all rounder and this one carried on the tradition.

A first-time winner

Consider this. Rebuilt in 1954, it won a vintage hill climb first time out. An elderly racer borrowed it for the Dragon Rally and blew off no end of moderns on the twisty bits of the A5 in Wales. Rhodes has won quite a few standard class vintage races from potent 500's and it's just as happy in a road trial in the Derbyshire hills. It's bog standard inside apart from a bit shaved off the cylinder barrel to raise the compression from the original 6:1 to about 7:1 for modern fuel. Oh, and a bit of polishing in the inlet port.

It will top 80 mph, as many rivals with 500's will be pleased to confirm, does 65-70 in middle and 40-45 mph in bottom. Petrol consumption on the road can be as good as 80 mpg. Being a '27 model it enjoys the final refinements of the model such as roller bearing mains in place of p.b. bushes, Dural push rods, rockers and valve collars — and the big exhaust port.

I was most interested to ride it, having owned Big Ports myself in the past though I fancy mine would have gone even better if they had been as standard as this one!

Valve float aids bhp

I confess to having been surprised at the maximum speed of this particular "Big Port" ... much faster than any I recall. Just as you think it has reached maximum revs, it starts to buzz as if the valves are floating and then it finds some more horses. I think the valves do float and automatically extend the timing to a more optimum figure for maximum revs. Perhaps if in older times we had not fitted extra strong valve springs to prevent valve float we would have gone faster!

The moment you walk it along you realise one of the secrets of its performance. It's unbelievably light (210-lbs)

and free running, as free as a push bike. It's small and slim, your knees noticeably close together and the riding position and steering somehow reminiscent of a racing pedal cycle, not much metal between you and the ground.

It takes some adjusting to the idea of tramping in the 80 region on such a frail projectile.

Frail it may look but fragile it is not. That is where the genius of the A.J.S. design lies. No part looks heavy or is heavy, but everything is strong enough for the job, stressed not by complicated test and calculation but by instinct. What looks right is right. Not a superfluous ounce so every possible scrap of horse power goes into acceleration.

Leap-forward acceleration

Acceleration, that's the outstanding feature. It doesn't wind itself up a scale of building revs. It leaps forward at a touch of throttle, every firing stroke thrusting forward.

I've followed it through country lanes on a quite potent 500 twin. It's a demoralising experience. You follow it into a tight bend, it skips round with no effort, lets out a few sharp cracks, and is gone. You have to work like crazy on the gear box and use all your revs to catch it and by that time another bend has loomed and it's the whole performance again.

On the other hand this 350 is docile enough to plonk along with the ignition retarded though when I rode it a flat spot had got into the tickover. Not surprising as it's seven years since it had more than lick and promise check over. Which brings me to another almost unbelievable feature.

Accessibility. No machine of its period or later can touch it. In Big Port fashion the cylinder head and barrel is retained by two drawbolts and a loose bridge piece which puts pressure on the top of the head. "How long do you reckon it takes to lift the head off" I asked.

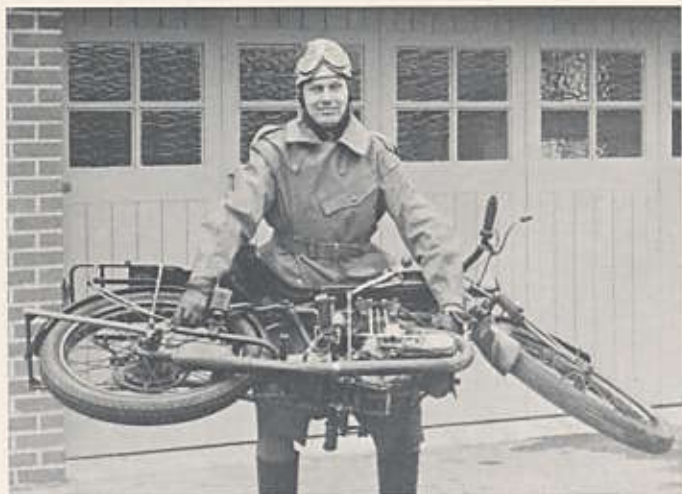
"Not long, I'll do it now, it's about time I looked inside," said Rhodes. I timed the operation. Two minutes and the exhaust pipe nut, the petrol pipe and the carb slides were off, one minute and the rockers were depressed with a special tool and the pushrods out (unnecessary this as the head was being lifted). Three minutes more and the double threaded nuts on the holding down bolts were unscrewed and the head was off. With everything free and easy, not stiff with seven years goo, it could be done in five minutes flat.

Seven years hard labour and all it needed was a new top piston ring for the old one was broken. The valves were reseated. The head showed signs of heat, likewise the distinctive tulip-shaped valves. But what can you expect? Other chores would be a sheer delight. One nut releases the single-spring clutch. The kickstart mechanism is all visible; knock out one cotter pin and it's all yours.

Even the special Binks carburettor has a quick action release for the slides and is screwed direct into the cylinder

The single-spring single-friction-plate clutch takes up smoothly and frees cleanly. But the spring cap fouls the rider's heel





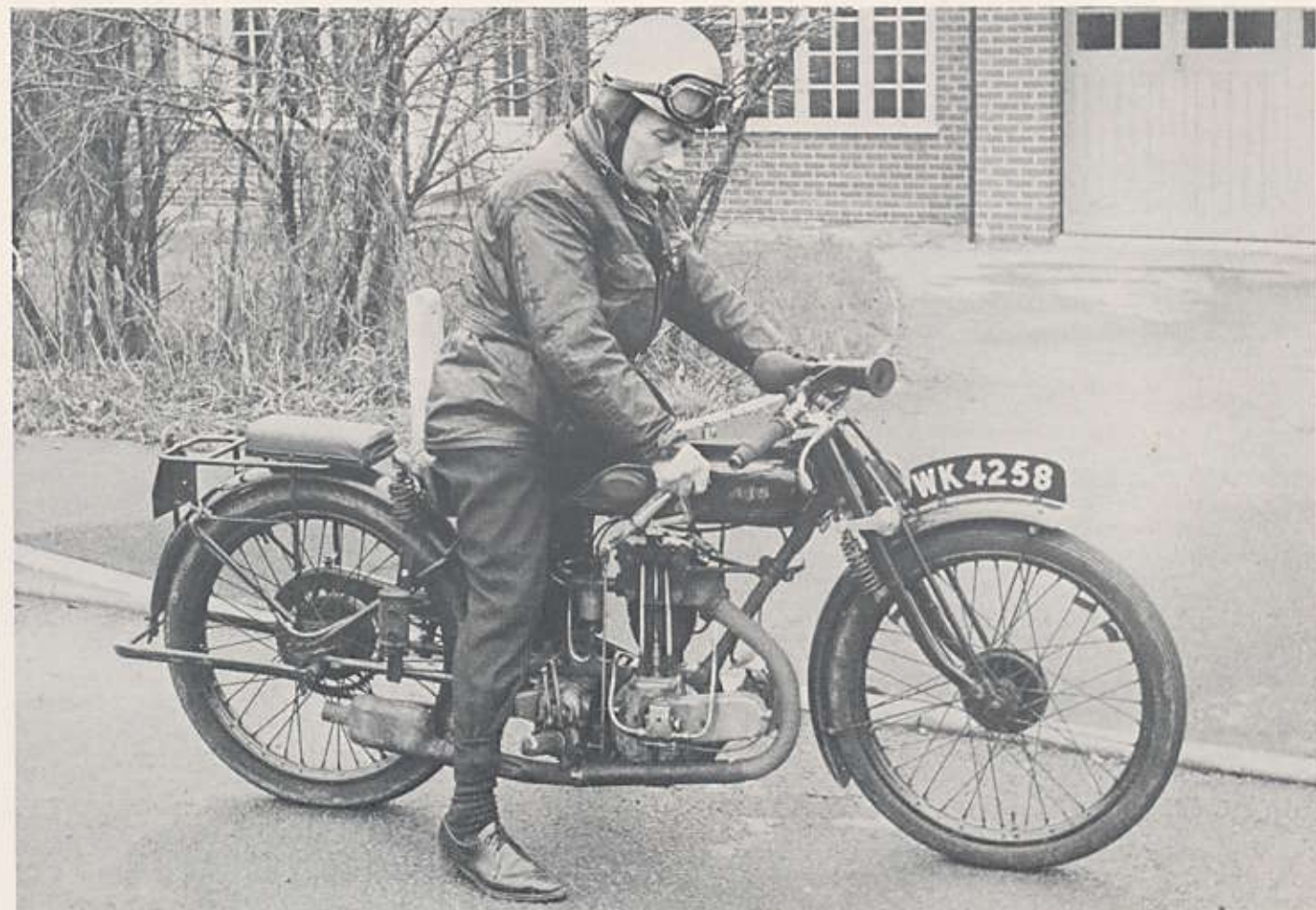
No manhandling problems with this 80 mph lightweight. Ivan Rhodes can pick the A.J.S. up bodily. The exhaust pipe is revealed as being larger than the silencer!

head with no separate stub.

Fork action is rather short and sharp, no matter on good surfaces but limiting in the rough. It matters little if the wheels leave the ground. There is no wobble, no waver. The brakes look puny but like everything else on the machine they are correctly scaled for the weight they have to stop. The rear one would be a lot better if it had a longer pedal for the action is awkward.

Fashion finally killed what was perhaps the most functional sports machine of all time. The top-heavy saddle-tank-look came in and slim, flat-tank-look was out. A.J.s stuck to it as long as they could, until 1929 when they redesigned. The result was a conventional and quite unexceptional machine. It weighed 50 lbs more and

Tester Titch Allen gets the feel of the sliding gears in the Stevens' 3-speed box. Brakes are small but adequate though the rear one's pedal is too short for easy operation. The twin side-spring front forks are pretty unyielding over bumps but give precision steering on good surfaces. On this 1927 model the exhaust port is big, the inlet small



DATA

Engine: 349 cc A.J.S. aircooled single-cylinder fourstroke. 74 x 81 mm bore and stroke. Light-alloy pushrods, rockers and valve-spring caps. Tulip-shaped overhead valves. Roller-bearing mains and big-end.

Lubrication: Constant-loss from Pilgrim pump on magneto chaincase. Supplementary feed by semi-automatic hand pump on tank top.

Ignition: Chain-driven magneto in front of crankcase.

Carburation: Special A.J.S. two-jet Binks.

Transmission: A.J.S. sliding-gear 3-speed gearbox with tank-side hand change. Optional close or wide ratios. Single-plate cork clutch with single spring.

Frame: Diamond type with upper and lower top tube. A.J.S. Druid-type girder forks with side springs and built-in shockabsorbers.

Wheels: Wired rims for 2.75-inch x 21-inch tyres. Rear wheel Q.D.

Tanks: Flat tank between top tubes. Fuel capacity approximately 1½ Imperial gallons, oil two pints.

Original Finish: All black enamel including wheel rims and handlebars. Tank lined and transferred in gold. Fittings nickel-plated. Engine nuts, bolts and so forth in special matt-black finish.



Performance: With modern 7:1 compression ratio and the optional close-ratio gears: On top about 80 mph. On middle 65 to 70 mph. On bottom about 40 to 45 mph. Fuel consumption about 80 miles per Imperial gallon.

produced no extra power. The magic was gone.

Though their fortunes faded and they were finally brought to their knees financially by a bad batch of big ends, the A.J.Stevens' firm never stooped to the artifice of using the Big Port nickname.

Matchless Motor Cycles, who took over A.J.S. in 1931, had no such reservations. By 1932 they had a cost-cutting under-224-lbs tax-dodger advertised as the Big Port Model. It had a typically A.J.S. big-port exhaust but was otherwise undistinguished and soon forgotten

The real Big Ports however live on yet — and perhaps always will.