

IT is difficult to appreciate the true merit of a machine in wind and rain; particularly is this so after some 400 miles of really hard riding in an apparently perpetual April shower. But if, after putting the machine through its paces under such adverse conditions, it is possible to reflect that those 400 miles were thoroughly enjoyable and that the machine behaved perfectly throughout, then what would the rider have thought if the weather had been a little kinder?

These were the sentiments felt on returning the 1932 498 c.c. "Big-port" A.J.S. to its makers. The machine was one of the first to emanate from the new home of the A.J.S. at Plumstead, in south-east London.

Obviously, the comfort of the rider has been closely studied by the designer. When sitting astride, there is that intimate feeling of compactness to produce complete and instant confidence. All the controls are handy, and work freely. The "clean" handlebars, although mounted in front of the steering damper, are well suited to the position of the saddle and foot-rests. The latter, by the way, have a wide range of adjustment.

Steering

In motion it was possible to appreciate at once the rock-steady steering. This does not imply that it was heavy, for, on the contrary, it was exceptionally light. It had, however, a very strong self-centring action which made it possible to ride "hands-off" at speeds below 20 m.p.h.

Throughout the range of speed there was no sign of wobble, although the

steering damper was put into action merely as a precaution. Largely on the score of comfort and increased tyre-grip on the wet roads, the shock dampers on the front forks were slackened off. This brought about a curious "spring-frame" sensation, no doubt due to the large fork movement, which was in the neighbourhood of 4 to 5 in. Except for an expected tendency of the front wheel to leap into the air at speeds of over 65 m.p.h., this did not affect the steering, and certainly improved the general comfort of the machine at lower speeds.

The mudguarding afforded excellent protection, keeping the cylinder and the major portion of the crank case free from mud and grit, and depositing very little dirt on the rider, either from the front or rear.

The braking was in keeping with the steering. Both brakes were beautifully "spongy" in action and could be carelessly applied without locking the wheels. At the same time, they were extraordinarily powerful, for it was possible to make the front tyre scream by really heavy application. Even in the heaviest rain the brakes were consistently smooth and certain, requiring no adjustment.

The Gears

One of the pleasant features of this machine was the very easy gear change, which caused the rider unconsciously to use the gear box to its fullest extent. No doubt this was due to the choice of the ratios and the smooth and light action of the clutch.

At the start of the test the clutch was

SPECIFICATION.

ENGINE: 84 × 90 mm. (498 c.c.) o.h.v. single-port A.J.S.

IGNITION: Lucas Magdynamo.

CARBURETTER: Amal.

GEAR BOX: A.J.S. three-speed; ratios: 4.8, 7 and 12.8 to 1.

LUBRICATION: Dry sump, with adjustable control; tank capacity, 4½ pints.

TYRES: Firestone, 26 × 3.25 in.

TRANSMISSION: ½ × 0.305 in. chains (primary fully enclosed).

FUEL CAPACITY: 2½ gals.

WEIGHT (in touring trim, with speedometer and electric lighting): 371 lb.

PRICE: £47 (with Lucas Magdynamo lighting, £5 10s. extra).

MAKERS: A.J.S. Motor Cycles, Plumstead Road, London, S.E.18.

1932 Models on the Road—

inclined to slip if the engine was bounced over compression, but this tendency disappeared in the first fifty miles of use.

It was not possible to hear the gears when they were under load; but, on closing the throttle with second or bottom gear engaged, a pronounced whine came from the direction of the gear box.

The gears could be selected more or less regardless of the engine speed; for instance, when changing up, the throttle could be left open and slight pressure on the gear lever and clutch would suffice to engage the required gear.

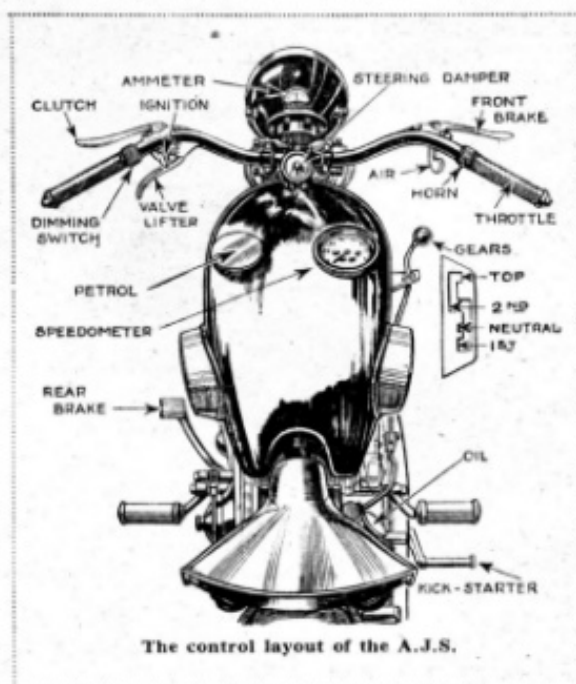
Naturally the most interesting aspect of the A.J.S. lay in the performance of the single-port engine. In spite of having light flywheels it was extremely flexible. Starting, however, was rather a gamble. Partly, no doubt, due to the flywheels and partly to the insufficient leverage exerted by the kick-starter, the engine was prone to back-firing when starting from cold, regardless of the ignition setting.

By judicious setting of the ignition and air controls (the air lever was no ornament) the engine could be made to tick-over like a side-valve. It could be ridden, with a top gear ratio of 4.8 to 1, at as low a speed as 12 m.p.h. without snatch.

Maximum Speed

Down a very gradual slope, but with a strong head wind as a counterbalancing factor, a speed of 75 m.p.h. was attained with the dynamo charging. The rider was not crouching, and was wearing full wet-weather kit. The engine could be "felt" at over 70 m.p.h., but it would hold 60 to 65 m.p.h. all day without any fuss. The actual speeds reached in the various gears (38 m.p.h. in first, 63 m.p.h. in second, and 75 m.p.h. in top) were surprisingly high under the adverse conditions which prevailed. The acceleration figures from 20 m.p.h. to 45 m.p.h. were $10\frac{2}{5}$ s. in top and $7\frac{1}{5}$ s. in second gear, taken on a level road.

These figures are particularly good for a machine costing under £50, but even more astonishing was the petrol consumption of this 75 m.p.h. mount. At a maintained speed of 30 m.p.h. it worked out at 116.8 m.p.g.! Although the mixture was obviously set on the weak rather



The control layout of the A.J.S.

than the rich side, the engine never once showed signs of overheating, as the condition of the sparking plug and the colour of the exhaust pipe clearly testified. The plug at the conclusion of the test was in excellent condition and faithfully performed its duties.

It would hardly be fair to take into consideration the oil consumption, as the setting was adjusted to give a very liberal supply. However, the machine averaged over 1,600 m.p.g. during the test. The crank case and timing chest were free from oil leakages, except for a faint smear on the rear side.

Largely owing to the efficient exhaust silencing system, the valve gear at first appeared to be noisy, but it could not have been termed excessively so. The valve clearances were

adjusted once, and the operation was simple, for the adjustment is on the end of the rocker arms, over the valve springs.

The A.J.S. is equipped with a front stand and a central one of the spring-up type, which is easy to operate and enables the machine, which weighs 371 lb., to be pulled up with one hand. The stand, however, is mounted rather low, giving the frame at that point a ground clearance of $3\frac{1}{2}$ in.

In the Rough

In the rough, the A.J.S. handled like a two-fifty, and, in spite of tyre treads that were unsuitable for freak work, it could hold a straight course with the minimum amount of balancing. Thanks to the slogging ability of the engine at low speeds, steep and tricky hills could be taken without rushing or serious wheelspin.

The primary chain is fully enclosed in a built-up case, which holds a sufficient quantity of oil to keep the chain constantly lubricated. No chain adjustments were necessary during the test.

There is one remaining feature, and that is the detachable rear wheel; this, coupled with a hinged rear mudguard, made a test removal of the rear wheel a clean and easy job.

After 400 miles of complete neglect, as far as the outward appearance was concerned, there was absolutely no sign of rust, which speaks highly for the all-black finish of this well-behaved and up-to-date machine.

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