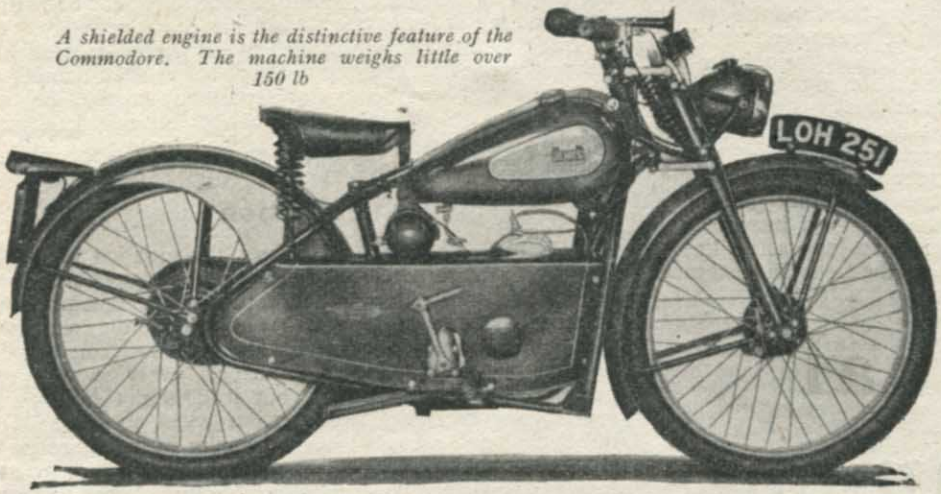
ROAD TESTS OF NEW MODELS

The 98 c.c. James

An Economical Villiers-engine Lightweight with

WHERE economy and cleanliness from the riding aspect are among the chief requirements, thoughts inevitably turn to the 98 c.c. James Commodore, which costs £60, plus Purchase Tax, is taxed at 17s 6d a year, will cover at a speed of 30 m.p.h. over 140 miles per gallon of petroil and which, with its shielded engine and large-area legshields, requires the use of no special motor cycle clothing. The 98 c.c. Villiers engine is inherently clean and, in the case of the Commodore, it is enclosed.

Throughout the test the tools were never required; and, because of the robust and simple character of the engine and cycle parts, there was every indication that trouble-free running over long periods could be confidently expected. All-round performance had not reached its peak at the end of the test and undoubtedly the fuel consumption and speed figures would have been improved had an additional 1,000 miles been possible. Starting from cold was at all times easily accomplished at the third or fourth kick-starter depression—with a warm engine starting was certain at the first kick.



A shielded engine is the distinctive feature of the Commodore. The machine weighs little over 150 lb

The cold-starting procedure was quite simple, involving merely flooding the carburettor, closing the strangler by lowering the lever on the side of the air filter and, with the throttle approximately one-half open, depressing the kick-starter. "Depressing" is the operative term, since starting proved so effortless that "spinning" the engine was quite unnecessary.

After a cold start the strangler required to be opened partially and left thus for roughly a quarter of a mile. Then it could be opened fully and forgotten about till the next cold start was required. As soon as it had reached its normal working temperature the engine would idle slowly and reliably with the twistgrip turned the merest fraction off its closed stop.

The two-speed gear is operated by means of a lever on the right handlebar connected to the gear box through a Bowden cable. Moving the lever forward to the limit of its travel engages bottom gear, and top gear is selected by drawing the lever backwards with a leisurely movement of the right forefinger.

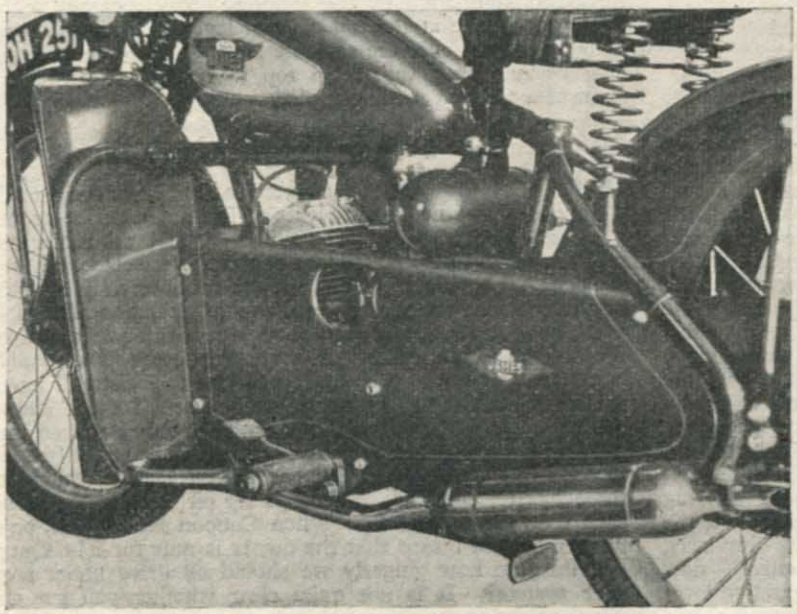
Only light pressure and no special skill was required to make clean, sweet, upward or downward gear changes. Because of slight clutch drag bottom gear generally engaged with an audible "clonk" when the machine was stationary with the engine idling.

Clutch drag, it was felt, was due to inadequate movement at the handlebar lever—movement which was such that the cable had to be adjusted without free play if excessive drag was to be avoided. No trouble from clutch slip was, however, experienced during the test. Light enough in operation to be easily disengaged by an eight-year-old boy, the clutch was silky-sweet in its take-up of the drive.

All controls were light and smooth and well placed for ease of employment. The clutch and front-brake levers required unusually little hand reach. In its position close to the twistgrip, the gear control could be operated by the forefinger and thumb of the right hand—there was no need to take a hand off the bar. Neutral, though not "positive," was easily selected from bottom or top gear. The brake pedal could be depressed by pivoting the left foot on the footrest—there was no need to lift the foot in order to apply it.

James machines are, of course, noted for their comfortable riding position. The Commodore is no exception, the test mount proving outstandingly comfortable for a machine in this particular capacity class. The saddle height is 28½in and the relationship between the saddle and footrests was such as to permit a satisfactory knee angle for riders of average stature. Footrests on the Commodore are non-adjustable. The handlebars are carried in split clamps which provide adjustment for height, fore and aft position (or "reach"), and angle of the grips.

Scaling little over 150lb, the Commodore is the type of machine which instils confidence in the veriest novice. All manner of vile road surfaces were encountered during the test. Stability on greasy surfaces was exceptionally good. Wood blocks and slippery tramlines



Protection from road dirt in wet weather proved to be entirely adequate

Commodore

First-class Weather Protection

could be traversed with complete confidence. Traffic threading on wet roads could be indulged in almost with impunity just as it could when it was dry. The Commodore is easily manœuvred in traffic and, with its low weight and excellent turning lock, it can be pushed in and out of awkward garages or passages with ease.

In the wet, the measure of protection from water and road dirt proved entirely adequate. Waders or any other form of waterproof leggings were never required. Goggles and gauntlet gloves were the only items of out-of-the-ordinary wear that were indulged in when the machine was used as a ride-to-work "hack."

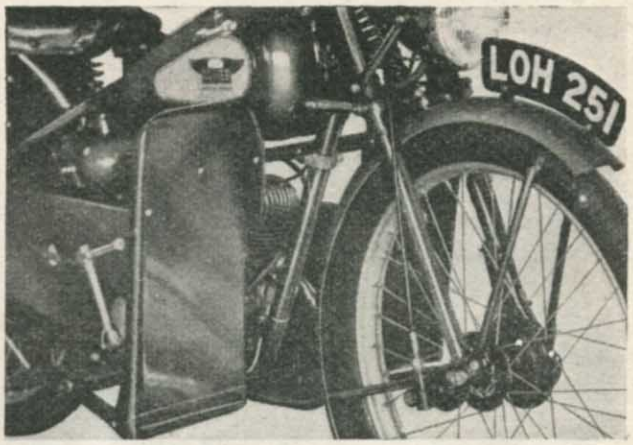
Front suspension is by means of a link-type fork with a single compression spring. The degree of comfort provided was adequate on roads of average poor surface; on very bad city cobbles, severe jolting was experienced unless the speed was kept down to, say, 15 m.p.h. At this speed in top gear, the engine is entirely happy, whether it is pulling hard or running under only light load.

Hill-climbing Capabilities

The engine's flexibility, indeed, was such that bottom gear was seldom required except for starting away from rest or when the speed had to be dropped very low (because of traffic conditions) on severe gradients. All main-road hills encountered during the test, irrespective of head winds, were surmounted (given a no-baulk run) on top gear. The average up-grade would be topped at 28-30 m.p.h., and the more severe gradients at seldom below 20-25 m.p.h. Restarts were made on an estimated 1 in 10 gradient without difficulty.

Throughout the test circumstances generally demanded that the model had to be driven flat-out or all but flat-out. It gave no indication of being unduly stressed even with this treatment and, indeed, the engine never became really hot. Maximum comfortable cruising speed was in the region of 35 m.p.h., at which gait the engine was buzzing quickly, but not to an extent which suggested unduly high revs or fuss. Minimum practicable cruising speed in top gear was about 14-15 m.p.h.

At the beginning of the test both brakes proved to be spongy in operation and lacking in real power. They improved steadily with use, however, and at the conclusion of the test they were satisfactorily in keeping with the machine's performance.



An appreciated rider's feature of the James—the wide legshields

A particularly pleasing feature of the James is the fact that the exhaust is subdued to a degree in excess of average standards. At speed on the open road it was no more than a pleasant purr. Even when the machine was running downhill on a small throttle opening (and there was firing in the silencer), the exhaust noise was not at all objectionable.

For parking purposes—or for use when removing either wheel—a centre stand is provided. It was extremely easy to operate, but unless the joint at the detachable part of the silencer was kept clean, a spot of oil was liable to find its way on to one's shoe each time the stand was used. The petroil filler cap was liquid-tight even when the tank was filled almost brimful, which is, of course, as it should be on a machine of this type. So that the oily exhaust gases are not ejected on to the rear tyre and rim, the silencer outlet is turned outward; a measure which proved most effective.

Tools are carried in a neat, easily-accessible, cylindrical container under the rear of the tank, and the pump is carried on clips on the top of the safety bars. The finish is in James maroon and chromium (though the wheel rims are argenized silver), and the tank panel is blue with gold lining.

Information Panel

SPECIFICATION

ENGINE : Villiers 98 c.c. (47 x 57 mm) single-cylinder two-stroke, with two-speed gear in unit. Roller-bearing big-end ; ball-bearings supporting mainshafts. Flat-crown die-cast, aluminium-alloy piston. Detachable light-alloy cylinder head. Petroil lubrication.

CARBURETTOR : Villiers "Junior" single-lever type with air-filter and strangler. Twistgrip throttle control.

TRANSMISSION : Villiers two-speed gear in unit with the engine ; gear change operated by handlebar lever through Bowden control cable. Top, 8.47 to 1 ; bottom, 13.04 to 1. Cork-insert clutch running in oil. Primary chain, ⅜ x 0.225in ; oil-bath chain case. Secondary, ½ x 0.305in, with guard over top run.

IGNITION : Villiers flywheel-magneto.

LIGHTING : Villiers direct. Twin-filament 18w main bulb. Dry battery in headlamp for parking.

PETROIL CAPACITY : 1¾ gallons.

TYRES : Dunlop studded, 19 x 2.50in front and rear.

BRAKES : 4in internal expanding front and rear.

SUSPENSION : James link-type fork with single compression spring.

WHEELBASE : 46½in. Ground clearance, 5in.

SADDLE : James. Height, 28½in.

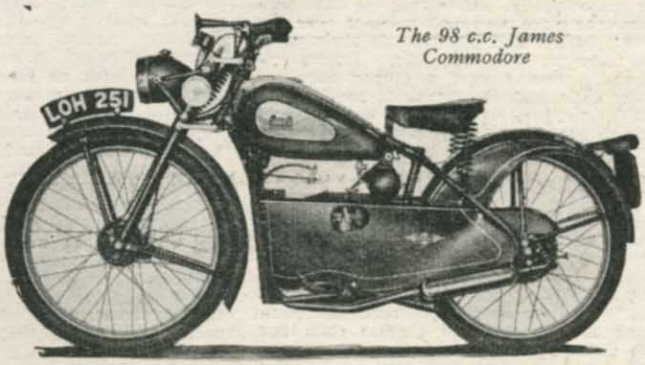
WEIGHT : 161lb, with full tank and fully equipped.

PRICE : £60, plus Purchase Tax (in Britain only), £16 4s.

ROAD TAX : 17s 6d a year, 4s 10d a quarter.

MAKERS : The James Cycle Co., Ltd., Greet, Birmingham.

DESCRIPTION : *The Motor Cycle*, 16 November, 1950.



The 98 c.c. James Commodore

PERFORMANCE DATA

MAXIMUM SPEED : Bottom : 30 m.p.h.
Top : 39 m.p.h.

ACCELERATION :

	10–20 m.p.h.	15–25 m.p.h.	20–30 m.p.h.
Bottom	4 secs	5.6 secs	9.6 secs
Top	4.6 secs	4.4 secs	6.2 secs

Speed at end of quarter-mile from rest : 37 m.p.h.
Time taken from rest to 30 m.p.h. : 11.6 secs.

PETROIL CONSUMPTION : At 20 m.p.h., 172 m.p.g. At 30 m.p.h., 144 m.p.g. At 35 m.p.h. (full throttle running), 104 m.p.g.

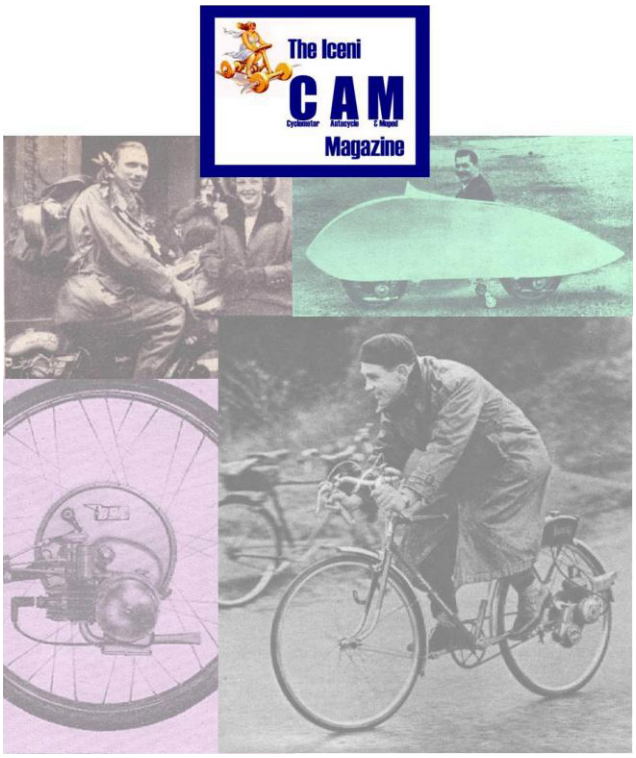
BRAKING : From 30 m.p.h. to rest, 35 feet.

TURNING CIRCLE : 11ft 6in.

MINIMUM NON-SNATCH SPEED : 12 m.p.h.

WEIGHT PER C.C. : 1.6lb.

IceniCAM
On-Line Library



www.icenicam.org.uk