ROAD TESTS OF NEW MODELS

98 c.c. Two-spe

Economical Two-stroke Mount Which is E

CLEANLINESS, economy, silence, ease of handling and of control, and an excellent riding position; experience with the new 98 c.c. two-speed James proves that it has all of these qualities and more. The machine, in fact, may be said to fall into an exclusive class. It reaches a standard hitherto unattained by very small capacity British two-strokes.

If the performance of the James can be taken as a yardstick, the machine of a bare 100 c.c. can no longer be considered in the light that it is purely a runabout. In the course of the test, the James was used in connection with describing an important open trial. The following day it was ridden non-stop from Warwickshire to London, a distance of some 84 miles in a total time of two and a half hours. This means an average speed of no less than 33.6 m.p.h.

Economy is not sacrificed for the high engine performance. Never, no matter how near its limit the James was ridden, did the fuel consumption drop below 144 miles per gallon. At a steady 30 m.p.h., petroil consumption worked out at 168 m.p.g., and at 20 m.p.h. the figure was no less than 216 m.p.g.

Used as a ride-to-work machine, for shopping, or for short journeys of any kind, the James earns full marks. The engine starts easily cold or hot. In the morning, when the engine was cold, the engine would generally start at the second or third depression of the kick-starter. A kick, in the true sense of the term, of course, was never necessary. The control setting for making a cold start is quite straightforward.

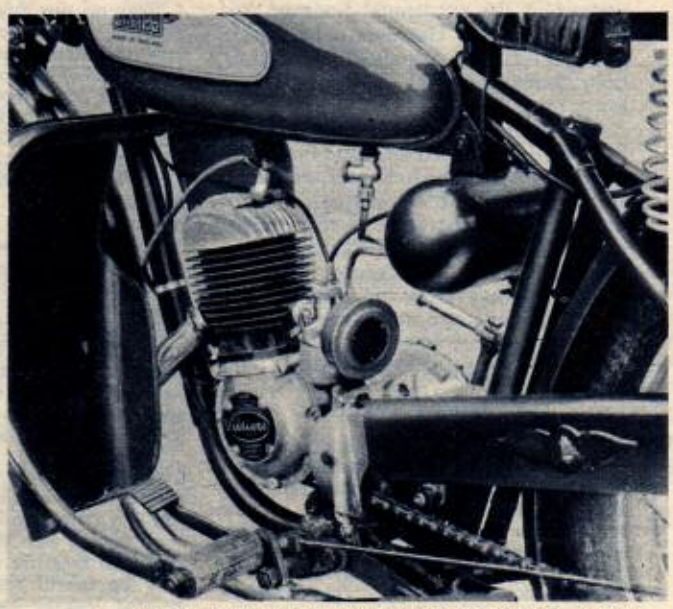
Engine Cleanliness

With the carburettor flooded, and the strangler closed (by depressing the small lever on the side of the air-cleaner) effortless starting was certain provided the throttle was approximately half open. Almost immediately after the engine fired, the strangler required to be opened fractionally and then, a few seconds later, opened fully. The strangler could be operated from the saddle, and warming up before starting off was not necessary. When warm, the engine would start at the first kick, irrespective of the throttle opening.

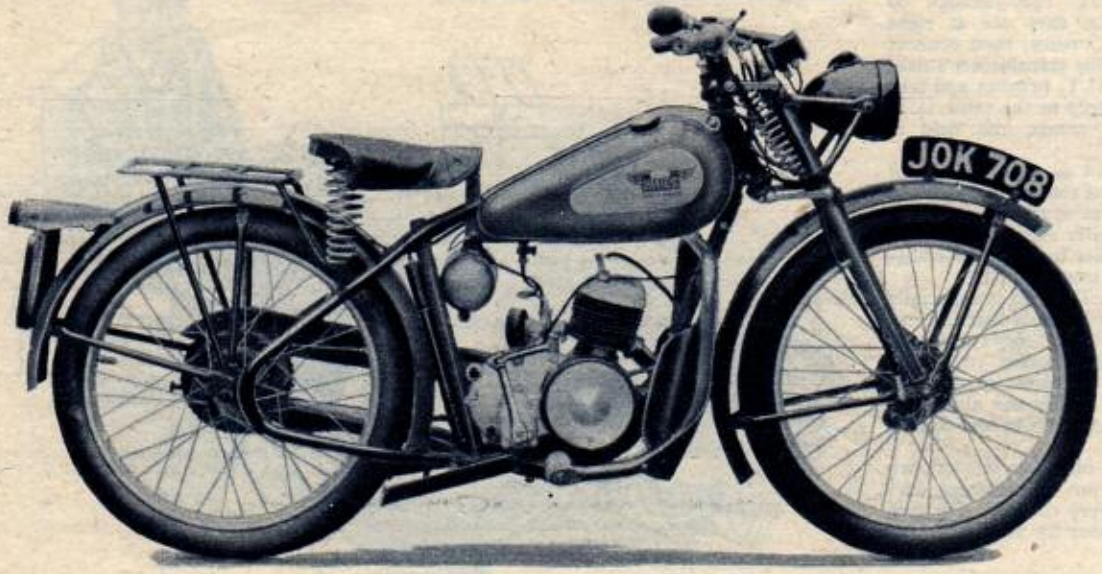
The model tested was fitted with the James legshields cum crash-bars which are available at extra charge. They were extremely useful. The legshields provided adequate protection for the rider. For the numerous short journeys made while the model was under test, no recognised motor cycle clothing of any description was worn. A slight draught was felt at the rider's knees, but the shields were sufficiently high to ensure that no water was directed on to the rider's legs. Another factor which made riding kit unnecessary was the entire lack of oily messiness on or around the engine. The air-cleaner proved a complete trap for oily blowback and because of the position of the carburettor, surplus petroil resulting from flooding fell directly on to the road. All joints on the engine were 100 per cent oil-tight. There was, however, a seep of petroil from the tank filler cap.

When straddling the James, one is immediately aware that the machine's dimensions are comparable with those of larger-capacity mounts. The saddle height is 28½ in, which is greater than that on some medium-capacity machines and as high as that on some 500 c.c. mounts. As a result, the rider's knee angle and leg position are extremely comfortable and allow him (or her) easily to brace the legs to counteract the effect of passing over bumpy or pot-holed road surfaces.

Throughout the test the engine never "tired" as small two-strokes are sometimes prone to do when driven hard for long



The air-cleaner was an effective trap for blowback. Surplus petroil from flooding dripped directly on to the road



The carrier, leg-shields, and speedo-meter on the test model proved well worth-while extras. Note the sensibly high saddle position

-speed JAMES

Which is Exceptionally Easy to Handle

periods. The engine remained remarkably cool. After six miles on full throttle, so cool was the engine that a hand could be placed on the cylinder and head.

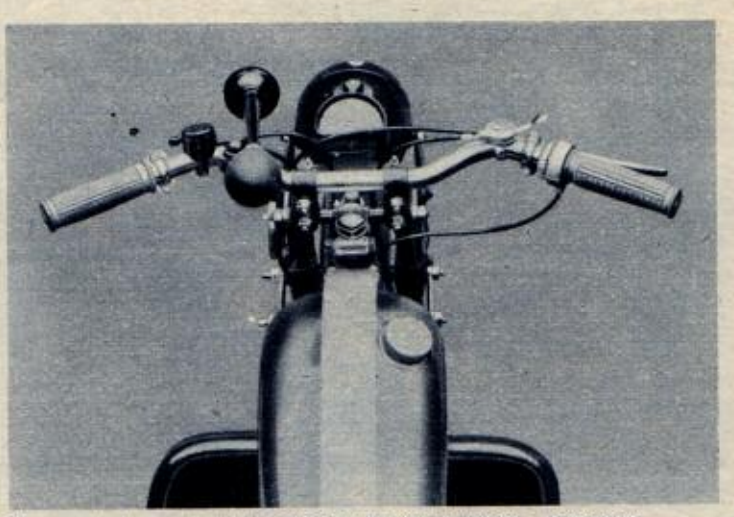
The clutch was smooth and light in operation and took up the drive smoothly and sweetly. It freed perfectly at all times, and bottom gear could be engaged noiselessly when the machine was stationary provided that the engine tickover was not unduly fast. The clutch required no adjustment during the 350-mile test.

Operated by a small lever on the right handlebar, the gear change is simplicity itself. Moving the lever forward to the limit of its travel engages bottom gear. Top gear is selected by drawing the lever backward with a leisurely, easy movement. The pressure required on the lever is light. The lever can be pushed forward by thumb pressure only and drawn to the rear with the forefinger. Hence it is unnecessary to take the right hand off the handlebar to change gear. Neutral is located between the gear positions, and, though there is no positive stop for the lever in neutral, no difficulty was experienced in finding the appropriate position.

Mechanical Silence

The standard of mechanical quietness is altogether exceptional. When the engine was started from cold there was a faint trace of piston slap, which almost disappeared when the engine's normal working temperature was reached. Apart from the piston noise, there was only the faint whirr of well-lubricated machinery. The exhaust, too, is very well subdued. At traffic speeds it is apparent only as a faint, pleasant-sounding purr. It becomes more pronounced at high revs, of course, but at no time can it be said to be objectionable. In fact, such is the standard of mechanical and exhaust silence that drumming from the legshields constituted the loudest noise.

What of the machine's hill-climbing abilities? The answer is that the machine will go almost anywhere. At no time on a main-road run was the 13.04 to 1 bottom gear required except, of course, when restarting after a stop. In top gear (8.47 to 1) and with an eleven-stone rider aboard, the James would surmount normal main-road gradients with ease, the speedometer needle rarely dropping below 26-27 m.p.h. The steepest hill encountered during the test was half a mile long, with an average gradient of 1 in 8 and rising to 1 in 5 at the steepest part. The engine never faltered and the summit was breasted at a speed of about 10 m.p.h. in bottom gear. The maximum gradient on which restarts were possible was 1 in 9¼.



The two-speed gear control is carried on the right handlebar. Mounted in split clamps, the handlebars are widely adjustable for "reach" and for the angle of the grips

Mounted in split clamps, the handlebars are widely adjustable for height and for the angle of the grips. With the clamps in a near-vertical position, the grips were comfortably placed in relation to the saddle and footrests, and, in a fore-and-aft direction, approximately in line with the top of the steering head. The controls, including, of course, the gear change mentioned earlier, were extremely light in operation.

Steering is satisfyingly positive at all speeds within the scope of the machine, and the road-holding unusually good. On corners and bends the machine gives complete confidence. On really bad surfaces some form of damping of the link-action fork would, however, be valuable.

Stability on greasy surfaces was very good—so good, in fact, that one was almost tempted to take liberties. The model is very easily manœuvred in traffic and, with its low weight, can be pushed or ridden out of awkward, hole-in-the-wall types of garage with the utmost ease.

In brief, the James is an outstanding machine in its class; one which is exceptionally clean to ride, very easy to manhandle, and which combines economy with high engine-power output to an exceptional degree.

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.

GEAR BOX: Villiers two-speed in unit with the engine; gear change operated by handlebar lever through control cable. Top, 8.47 to 1; bottom, 13.04 to 1. Cork-insert clutch running in oil.

TRANSMISSION: Chain, Primary ½ 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 24w main bulb. Dry battery in headlamp for parking.

PETROIL CAPACITY: 1¼ gallons.

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

BRAKES: 4in internal expanding front and rear.

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

WHEELBASE: 46½in.

SADDLE: James. Height, 28½in.

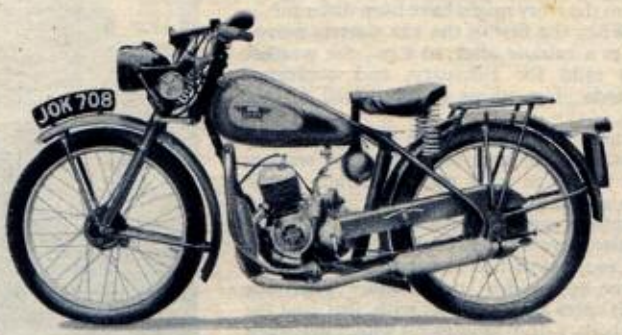
WEIGHT: 156lb (with approx. ¼-gallon petroil and equipped with legshields and carrier).

PRICE: £55, plus Purchase Tax (in Britain)—£69 17s. Extras: Speedometer, £3 3s 6d (P.T., 17s 2d); combined legshields and crash-bars, £1 16s (P.T., 8s 5d); carrier, 15s (P.T., 3s 6d).

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

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

DESCRIPTION: *The Motor Cycle*, October 21st, 1948.



PERFORMANCE DATA

MAXIMUM SPEED: Bottom: 30 m.p.h.
Top: 42 m.p.h.

ACCELERATION:

	10-20 m.p.h.	15-25 m.p.h.	20-30 m.p.h.
Bottom	3.2 secs	4.4 secs	7.4 secs
Top	3.8 secs	4.6 secs	5 secs

Speed at end of quarter-mile from rest: 42 m.p.h.
Time taken from rest to 30 m.p.h.: 11 secs.

PETROIL CONSUMPTION: At 20 m.p.h., 216 m.p.g. At 30 m.p.h., 168 m.p.g. At 35 m.p.h., 144 m.p.g.

BRAKING: From 30 m.p.h. to rest, 32ft 6in (surface, dry tarmacadam).

TURNING CIRCLE: 12 feet.

MINIMUM NON-SNATCH SPEED: 11 m.p.h. in top gear.

WEIGHT PER C.C.: 1.61b.