

# 348c.c. Matchless G5 Matador

**EXCELLENT 1962 LIGHTWEIGHT ROADSTER COMBINING ECONOMY WITH FIRST-CLASS HANDLING, POWERFUL BRAKES AND LUSTY PERFORMANCE**

**E**NDOWED with the new title of Matador for 1962, the G5 Matchless three-fifty offers a skilful blend of the most attractive qualities of both larger and smaller capacities. As against the larger it scores on lower initial cost, cheaper insurance and reduced fuel consumption. Compared with smaller models, it has the edge on performance—especially power in the medium-speed range—is not much heavier and is generally more suited to sustained hard work. It is a good example of a type of machine which shows signs of regaining its former popularity now that five-hundreds—although not the bigger twins—no longer attract so many enthusiasts.

obtained and in a long mileage required no adjustment.

During the test the Matador was ridden under a variety of weather conditions over many different sorts of surface. At all times the steering and general stability were well above average. At first there seemed a trace of heaviness in the steering at very low speeds but it went unnoticed as one became more familiar with the machine which could, in fact, be

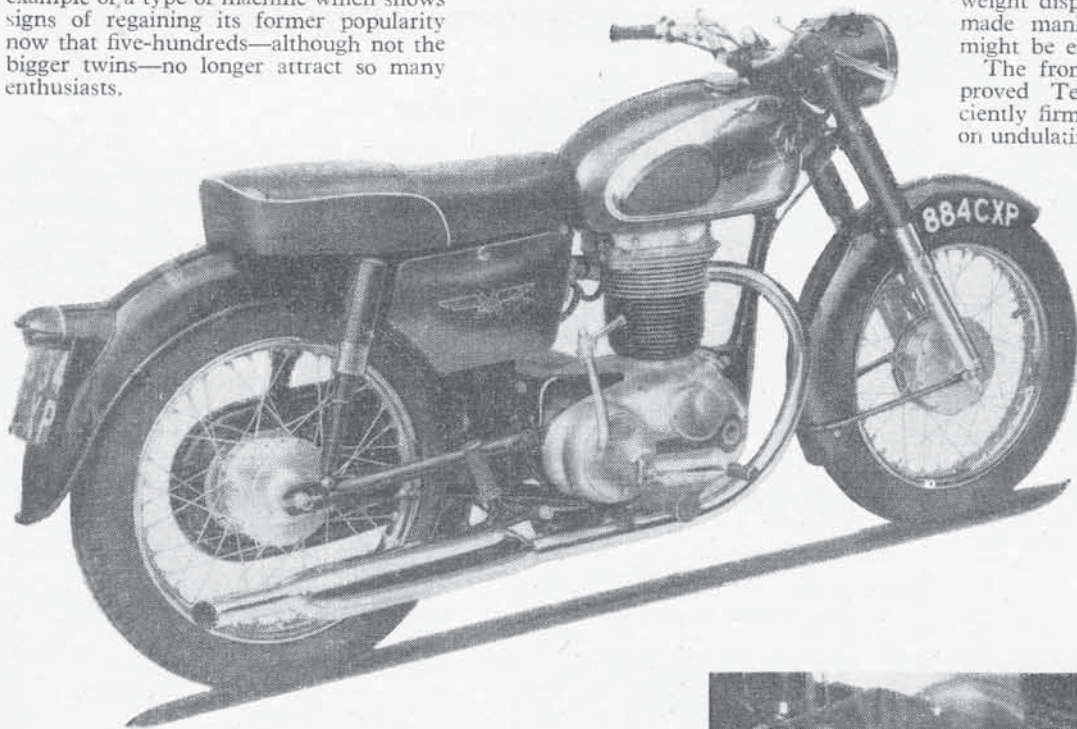
ridden feet-up without difficulty at a walking pace.

At the other end of the scale, the Matador could be laid into main-road curves and bends at really high speeds yet it would hold its line without waver. Swift changes of direction could be achieved effortlessly, thanks to the lightish weight and excellent all-round handling characteristics.

Of particular interest to those with limited garaging space is the fact that the weight disposition and wide steering lock made manhandling an easier task than might be expected.

The front fork, which is of the well-proved Teledraulic pattern, was sufficiently firm in action to prevent pitching on undulating surfaces but not so stiff as to give a harsh ride. Controlling the rear pivoted fork are Girling units with three-position adjustment. On the test machine they were set in the softest position for one-up use. The hydraulic dampers were thoroughly effective. No bottoming was experienced.

Despite its strong family resemblance to the two-fifty, the G5 is not simply a larger-bore version of the smaller model. The bore is 2mm larger but the stroke is over 20mm longer. As might

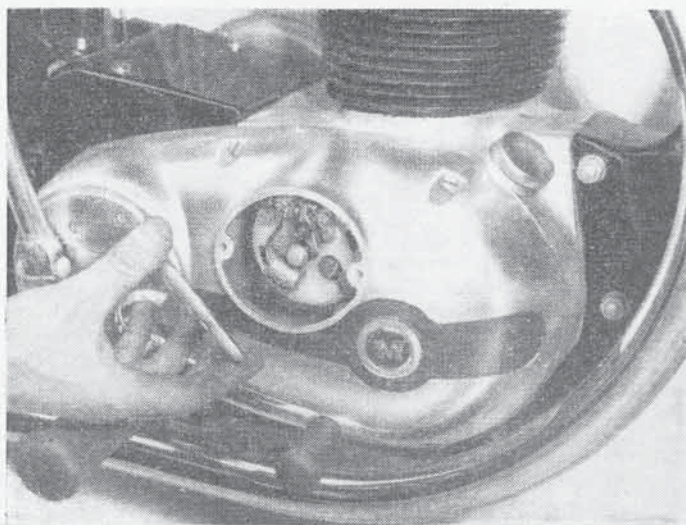


Although the Matador has an affinity with the G2 Monitor two-fifty and is, therefore, lighter than earlier Matchless three-fifties, it has a robust, comforting "big-bike" feel. The riding position is uncramped and allows a relaxed, easy posture.

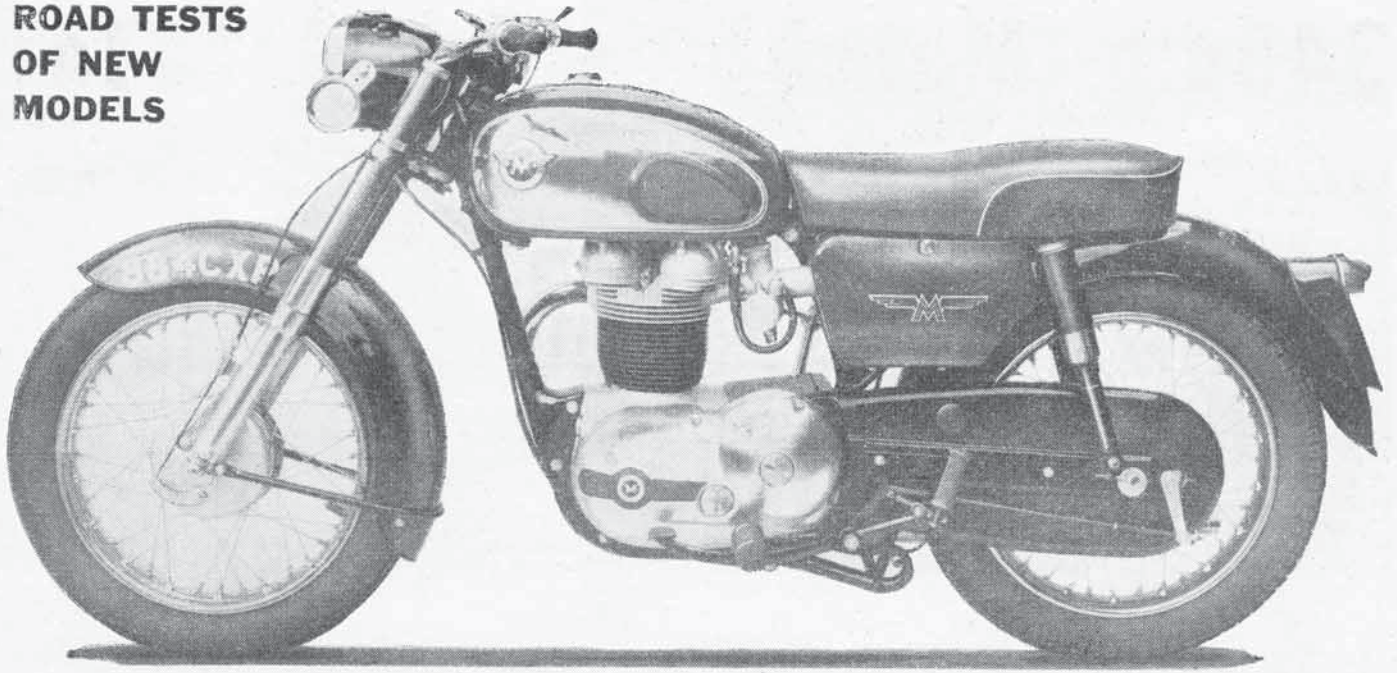
Clutch and front-brake levers and the handlebar are fully adjustable. The twist-grip was extremely light in operation—just as it should be for sensitive control of the throttle. Clutch operation was slightly—but only slightly—heavy, but the clutch took up the drive without a trace of judder or slip. It withstood without protest a series of standing-start getaways when the performance figures were being

*Sleek, businesslike, light; the Matador is finished in tartan red and black*

*The contact-breaker assembly is located behind a plate on the right-hand engine casting. Remove two screws and the entire assembly is readily get-at-able*



## ROAD TESTS OF NEW MODELS



be expected the comparatively long stroke endows the engine with a wide spread of beefy power which would not disgrace a five-hundred. Its excellent pulling characteristics were noticeable as soon as the clutch was engaged at low r.p.m. Even when restarting on a 1-in-6 gradient with the engine running at only a fastish tick-over the clutch could be let home quickly and the Matador accelerated smartly at a tweak of the throttle.

Given average road conditions, the G5 would hustle along indefinitely at between 65 and 70 m.p.h. as its cruising speed without the engine showing signs of tiring. High-frequency vibration could be

felt through the handlebar and footrests at speeds above about 60 m.p.h. in top gear and at corresponding engine revolutions in the indirect gears. The effect on the hands would, it was thought, be reduced almost completely by handlebar grips of a more resilient type than the smooth plastic ones fitted as standard.

During normal open-road riding, there was no appreciable advantage in buzzing the engine in the lower gears. Changes from top to third were unnecessary until the speed fell below about 40 m.p.h., yet point-to-point averages of between 45 and 50 m.p.h. were commonplace without recourse to spirited riding. Easy gradients

and normal-strength headwinds had no marked effect on top-gear performance; a 1-in-12 main-road hill could be climbed at 60 m.p.h. in top.

Exhaust silencing was adequate if the G5 was ridden sensibly. Without fuss or noise the miles could be gobbled up most pleasantly. Only when unnecessarily wide throttle openings were used for hard and prolonged acceleration did the note become loud by current standards.

Throughout the test the Matchless could be started easily whether the engine was cold or hot. An exhaust-valve lifter enabled the piston to be eased past compression after which a single swinging

## Specification

**ENGINE:** A.M.C. 348 c.c. (72 x 85.5mm) overhead-valve single with light-alloy cylinder head and cast-iron barrel. Crankshaft supported in a ball and a roller bearing on the drive side and a plain bearing on the timing side; roller big-end bearing. Compression ratio 7.5 to 1. Oil reservoir bolted to the right side of the crankcase; capacity 2½ pints.

**CARBURETTOR:** Amal Monobloc; air slide operated by handlebar lever.

**IGNITION and LIGHTING:** Coil ignition. Wipac 54-watt alternating-current generator mounted on drive-side crankshaft charging Exide 12-amp-hour battery through rectifier. Wipac 6in-diameter headlamp with pre-focus light unit and 30/24-watt main bulb.

**TRANSMISSION:** A.M.C. four-speed gear box clamped to rear of engine. Gear ratios: bottom, 18.66 to 1; second, 11.82 to 1; third, 8.3 to 1; top, 6.39 to 1. Multi-plate clutch with bonded friction facings. Primary chain, ½in duplex in cast aluminium case. Rear chain, ½ x 0.305in in pressed-steel case. Engine r.p.m. at 30 m.p.h. in top gear, 2,600.

**FUEL CAPACITY:** 3½ gallons.

**TYRES:** Dunlop: both 3.25 x 18in; front ribbed tread, rear studded.

**BRAKES:** Both 6in-diameter x 1in wide.

**SUSPENSION:** A.M.C. telescopic front fork with hydraulic damping. Pivoted rear fork controlled by Girling spring-and-hydraulic units with three-position adjustment for load.

**WHEELBASE:** 54in unladen. Ground clearance, 6in unladen.

**SEAT:** A.M.C. dual-seat; unladen height, 30½in.

**WEIGHT:** 352 lb fully equipped, with full oil tank and approximately one gallon of petrol.

**PRICE:** £180 10s; with purchase tax (in Great Britain only), £220 4s 2d.

**ROAD TAX:** £4 10s a year; £1 13s for four months.

**MAKERS:** Matchless Motor Cycles, Plumstead Road, London, S.E.18.

**DESCRIPTION:** *The Motor Cycle*, 14 September 1961.

## PERFORMANCE DATA

**MEAN MAXIMUM SPEED:** Bottom: \*29 m.p.h.

Second: \*47 m.p.h.

Third: \*66 m.p.h.

Top: 75 m.p.h.

\*Valve float occurring.

**HIGHEST ONE-WAY SPEED:** 76 m.p.h. (conditions; light three-quarter wind; rider wearing two-piece suit and overboots).

**MEAN ACCELERATION:** 10-30 m.p.h. 20-40 m.p.h. 30-50 m.p.h.

Second ... .. 4.2 sec 5.0 sec —

Third ... .. — 6.2 sec 7.2 sec

Top ... .. — 7.4 sec 8.8 sec

Mean speed at end of quarter-mile from rest: 67 m.p.h.

Mean time to cover standing quarter-mile: 19.6 sec.

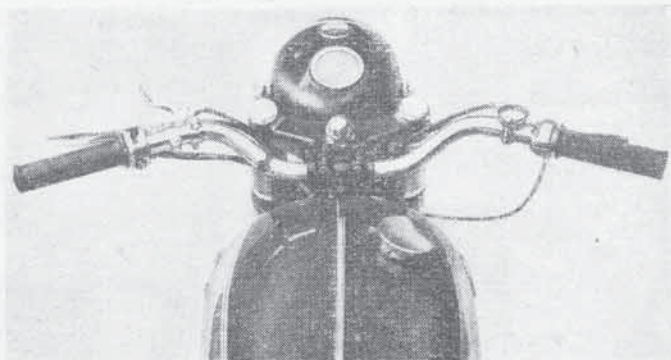
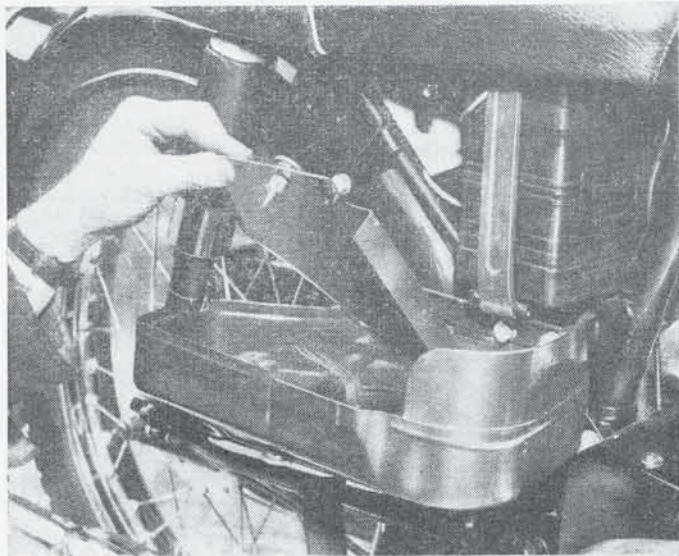
**PETROL CONSUMPTION:** At 30 m.p.h., 104 m.p.g.; at 40 m.p.h., 80 m.p.g.; at 50 m.p.h., 72 m.p.g.; at 60 m.p.h., 64 m.p.g.

**BRAKING:** From 30 m.p.h. to rest 30ft (surface, dry tarmac).

**TURNING CIRCLE:** 13ft 9in.

**MINIMUM NON-SNATCH SPEED:** 18 m.p.h. in top gear.

**WEIGHT PER C.C.:** 1.0 lb.



Left: Tools are carried in a waterproof compartment incorporated in the battery cover. The battery is thus readily accessible for topping up

Above: The Matador is fitted with an exhaust-valve lifter, the trigger for which is mounted on the left of the handlebar. Controls are adjustable

kick sufficed on every occasion. The engine started equally well whether the ignition switch was in the normal or emergency position. Idling was slow and reliable once the engine was warm. Mechanical quietness was markedly above average; even when the engine was cold there was no piston slap.

Gear pedal movement was light and gear engagement positive. Nothing unorthodox in the way of control manipulation was required to ensure fast, clean upward and downward changes. The clutch freed perfectly; hence when the machine was stationary with the engine idling bottom gear could be engaged noiselessly and there was never any difficulty in selecting neutral. At 18.66 to 1 bottom gear is rather low but has its compensations for traffic threading without clutch slipping.

Both of 6in-diameter, the brakes were

well up to the task of matching the performance. Light and positive in action and convenient to use, they provided first-class braking in every way and, as the performance data show, were capable of giving a stopping distance of 30ft from 30 m.p.h.

An excellent main beam and a satisfactory dipped beam from the Wipac headlamp made 60-plus m.p.h. after-dark cruising possible in safety. Mounted in a single drum on the left side of the handlebar the dip-switch and horn button are conveniently placed for thumbing.

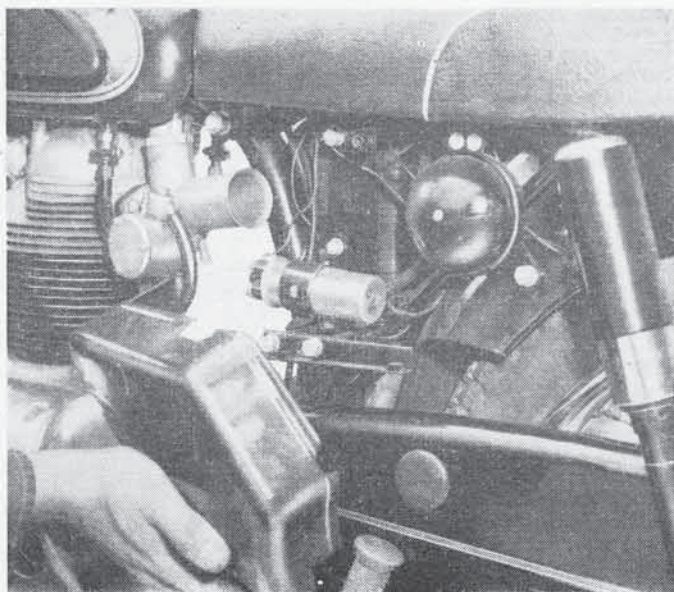
A more elaborate speedometer would be justified. That fitted is of the non-trip type and the total-mileage recorder reads only to the nearest mile. Speed readings were approximately 5 per cent fast almost throughout the range.

Neither the primary nor the rear chain required adjustment during 1,000 miles

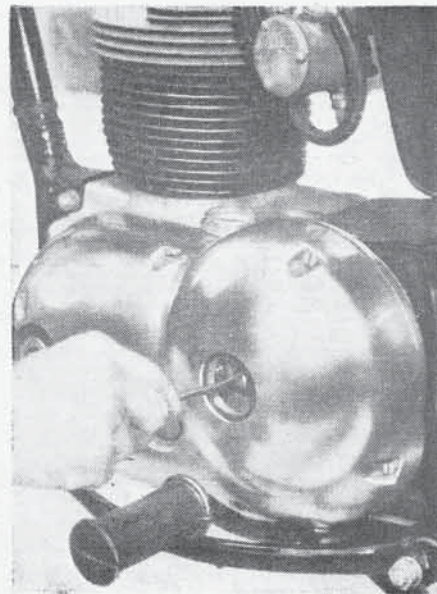
covered on test. The rear chain has full enclosure as standard and is lubricated by oil mist from the crankcase breather. Tappet adjustment can be carried out after removing a plate on the right side of the rocker box. Also readily accessible is the contact-breaker assembly which is located behind a detachable plate on the right side of the engine.

Undoing a hinged cover on the right beneath the dual-seat gives access to the battery which can then be removed for topping-up. The tools are housed in a compartment on the inner face of this cover.

Finished in tartan red and black, and with its smooth, cranny-free engine-unit castings, the Matador is of attractive appearance. It offers lively, lusty performance, excellent brakes, steering and road holding. It is an excellent all-round proposition.



Left: The opposite side of the battery to that shown above is enclosed by a matching cover concealing the horn and ignition coil



Right: Clutch adjustment could hardly be more simple; the adjuster screw is reached after undoing a plug in the primary chaincase