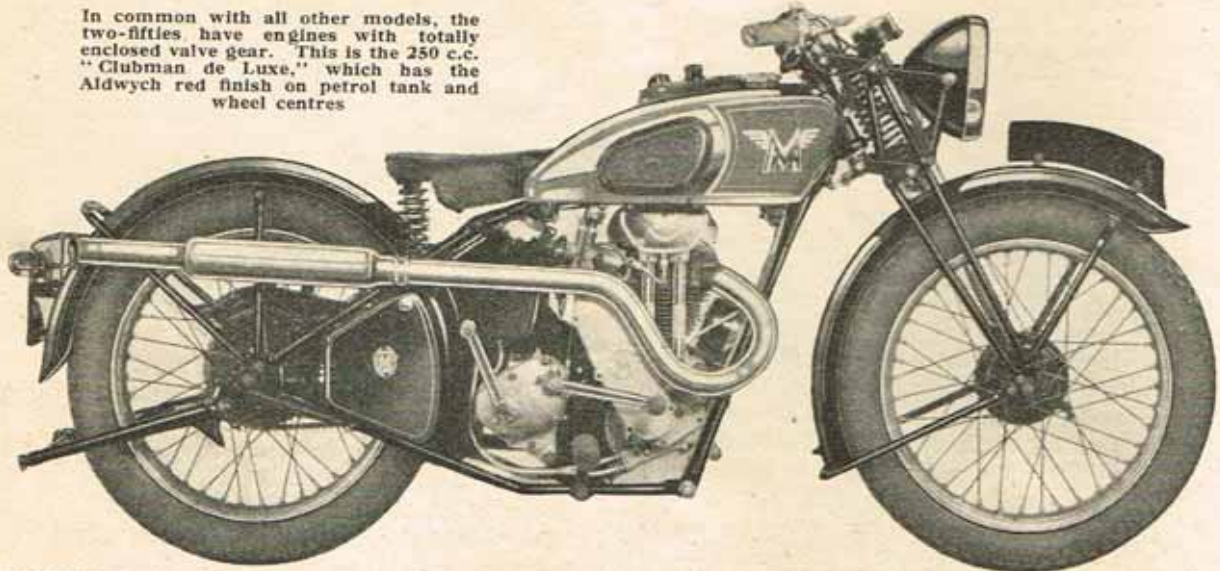


SPORTS AND TOURING

Attractive Range of Overhead- and Side-valve Models from 250 c.c. to 990 c.c. with Practical Improvements

In common with all other models, the two-fifties have engines with totally enclosed valve gear. This is the 250 c.c. "Clubman de Luxe," which has the Aldwych red finish on petrol tank and wheel centres



CONTINUING their policy of producing reliable, high-class machines which are notable for their mechanical silence, the makers of Matchless motor cycles have adopted total enclosure of the valve gear throughout their range for 1939. Many other improvements have also been incorporated in the machines, and as before there are three separate series, the "Clubman," the "Clubman Special" and the "Tourist."

It will be recalled that last year a new engine was introduced for the two "Super Clubman" models in which the whole of the valve gear was enclosed in the cylinder-head casting. This system has been found so satisfactory that although the cylinder head is costly it has been adopted on all the new 350 c.c. and 500 c.c. overhead-valve models.

The cylinder head of this engine is of massive construction and the head, rocker-box and valve-spring chambers are all formed in one casting. Hairpin valve springs are used, and by an unusual method of securing the springs to the valve collar space has been saved and the cylinder head is neat and compact. The whole of the valve-gear is lubricated from a by-pass feed from the main oil pump.

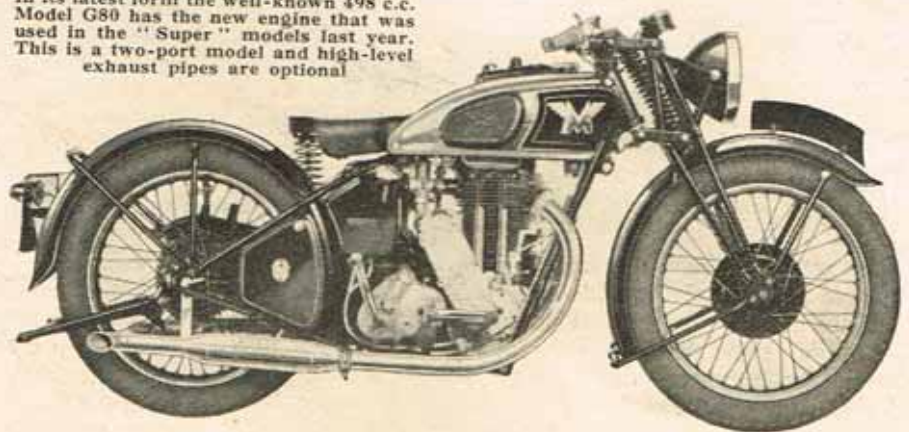
This engine in two-port form is used in the 500 c.c. "Clubman" model, but in the 347 c.c. "Clubman" and the two "Super Clubman" machines the head is of the single-port type. The "Super Clubman" engines are, of course, specially polished internally and tuned.

Crankcases of larger diameter and bigger flywheels are used on all the 500 c.c. overhead-valve machines—a change that has been made to improve the slow running and increase the smoothness of these engines.

The two 250 c.c. overhead-valve "Clubman" models have valve enclosure of a different type, for on these engines coil springs are used. As before, the rocker gear is totally enclosed in an aluminium casting and is flood lubricated. Extensions of this rocker-box casting enclose the valves and valve springs. The extensions are divided in the middle and two set-screws hold the detachable portions to the main casting.

The bottom ends of the valve springs are enclosed in cups which register with the extensions of the rocker box and form complete enclosure. To insulate the valve springs from the heat of the cylinder head the cups in which the springs rest are mounted on collars. Tappet adjustment is provided at the top ends of the push-rods as before, and a rubber oil seal is used on the detachable cover-plate to ensure an oil-tight joint.

In its latest form the well-known 498 c.c. Model G80 has the new engine that was used in the "Super" models last year. This is a two-port model and high-level exhaust pipes are optional

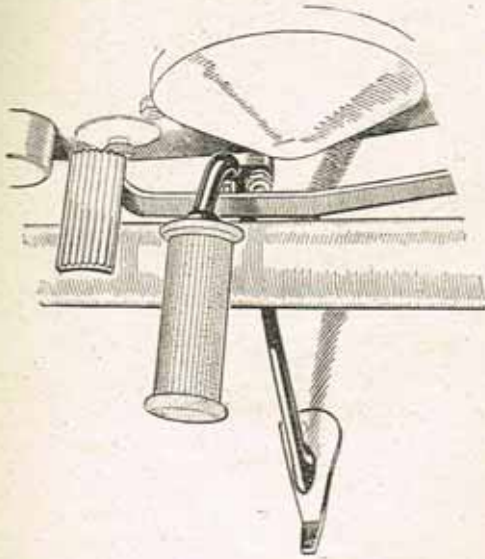


A single-port cylinder head is fitted to the coil-ignition model, while the magneto model has a two-port head. Both machines now have vertical Amal carburettors in common with the other models of the Matchless range. These engines have a redesigned cylinder head with a modified inlet port, which, it is claimed, improves slow running and acceleration.

Apart from engine alterations a number of modifications have been made to many of the new models. All the new machines have welded exhaust system fittings instead of clips, resulting in a neater appearance and greater strength. High- or low-level exhaust systems are optional on all the o.h.v. models. The rear fork-ends have been modified so that pillion footrests can be fitted, and footrests of the folding type with standard Matchless rubbers can be supplied as an extra. The last alteration does not apply to the side-

MATCHLESSES

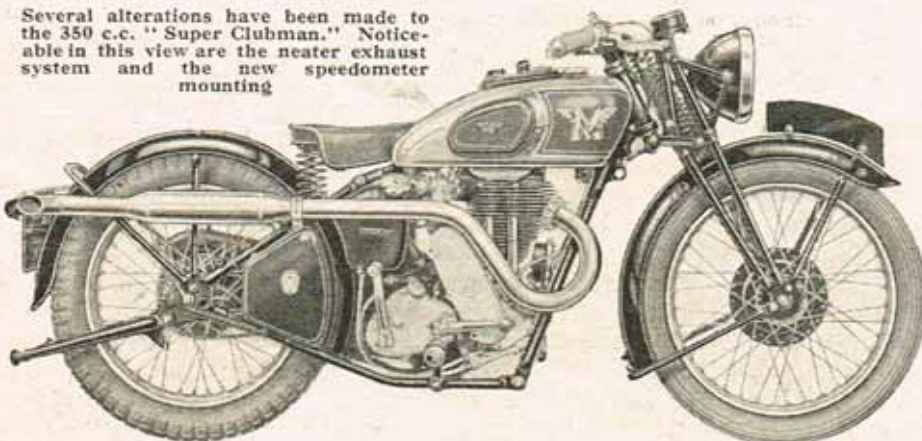
valve 250 c.c. model or to the coil-ignition two-fifty; and a further improvement which is available on all except these two models is a rigid speedometer mounting, which is actually part of the top front fork bridge. The speedometer is carried on a platform which is at such an angle on the forks that it can be easily read by the rider. In view of the slight extra weight of this mounting it is not fitted as standard on the competition models.



The new prop stand, which is available as an extra on all the 1939 models and can also be fitted to 1937 and 1938 machines

The three 250 c.c. machines—side-valve, o.h.v. coil and o.h.v. magneto—all have a heavier front fork spring designed to eliminate "clashing" on bad roads and to reduce vibration of the spring itself as far as possible. On the magneto model a steering damper is fitted, and all three machines have an adjustable fork damper. The magneto model also has a new finish. The tank is finished in chromium with Aldwych red panels, and the wheels have red centres. This finish also

Several alterations have been made to the 350 c.c. "Super Clubman." Noticeable in this view are the neater exhaust system and the new speedometer mounting

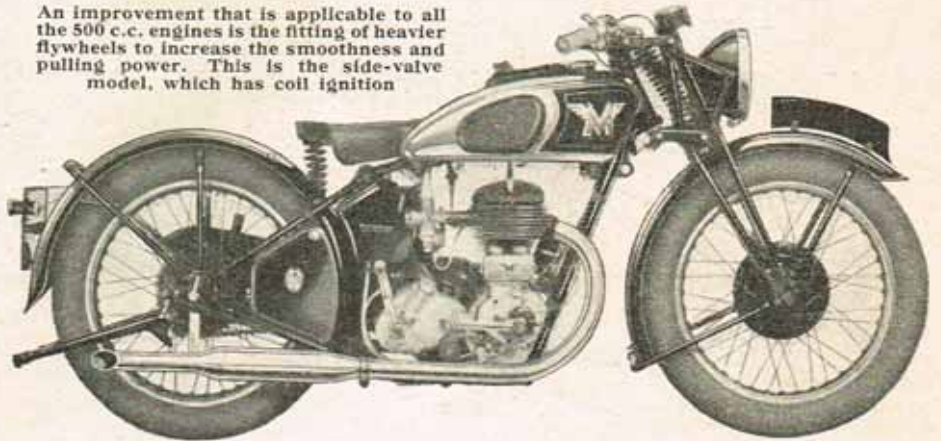


applies to the 350 c.c. and 500 c.c. "Super Clubman" models.

Alterations have been made to the brakes of all models over 250 c.c. Special steel pads are fitted to the brake shoes on the cam-operating faces, so that the expander cam bears on these plates instead of directly on to the aluminium shoe. It is claimed that this alteration will mean less frequent brake adjustment and will ensure more even wear of the brake linings.

A new prop stand of the spring-up type has been designed. It has a single arm and is mounted on the near-side foot-rest hanger. It is available on all the

An improvement that is applicable to all the 500 c.c. engines is the fitting of heavier flywheels to increase the smoothness and pulling power. This is the side-valve model, which has coil ignition



1939 models as an extra for 12s. 6d., and an interesting point is that sets of parts can be supplied which will enable the stand to be fitted to 1937 and 1938 Matchless machines.

These, then, are the alterations that have been made to the Matchless range for the coming year.

The "Clubman" range consists of six models. All have overhead-valve engines with enclosed valve gear as described. The least expensive is the 250 c.c. Model 39/G2, which has coil ignition. Model 39/G2M is a de luxe edition with magneto and "Super Clubman" finish.

Of the other four models, two are three-fifties and the other two five-hundreds. All have the new engine, but the "Super" models have tuned engines and red petrol tank panels and wheel centres. The "Super" models also have rebound springs on the front forks and are fitted with 3.00—19 ribbed front tyres and 3.50—19 studded rear tyres.

The "Clubman Special" range consists of three competition editions of the 250 c.c., 350 c.c. and 500 c.c. "Clubman" models. They are specially equipped for all types of competition work and have tuned engines, special gear ratios, shallow-section chromium mudguards, and competition or standard tyres as required, with the rear tyre of 4in. section. A feature that will appeal to the man who wants to do occasional competition work is a plug in the head lamp leads which allows the lamp to be removed without disturbing the wiring.

Finally, there are the three side-valve machines, 250, 500 and 990 c.c., of the "Tourist" range. All have engines with fully enclosed valve gear and tappet chests specially designed to insulate the valve springs from the direct heat of the engine. Four-speed gear boxes with foot-change are fitted, and the 246 c.c. and 498 c.c. models have coil ignition. The 990 c.c. big-twin Model X, which was almost completely redesigned only two years ago, is retained in its present successful form with the addition of the refinements mentioned earlier. One further modification is the provision of dampers on both sides of the forks, each one with its own hand adjustment.

PRICES.

Clubman Models.

		£	s.	d.
39/G2	246 c.c. o.h.v. single-port, coil ...	45	10	0
39/G2M	246 c.c. o.h.v. two-port, magneto ...	50	0	0
39/G3	347 c.c. o.h.v. single-port ...	56	10	0
39/G4	347 c.c. o.h.v. single-port, "Super Clubman" ...	61	10	0
39/G8	498 c.c. o.h.v. two-port ...	61	10	0
39/G90	498 c.c. o.h.v. single-port, "Super Clubman" ...	65	10	0

Clubman Special Models.

39/G2MC	246 c.c. o.h.v. single-port, Competition ...	55	0	0
39/G3C	347 c.c. o.h.v. single-port, Competition ...	61	10	0
39/G90C	498 c.c. o.h.v. single-port, Competition ...	66	10	0

Tourist Models.

39/G7	246 c.c. side-valve coil ...	43	15	0
39/G5	498 c.c. side-valve coil ...	55	10	0
39/X	990 c.c. side-valve twin ...	77	10	0

Smith's non-trip speedometer £2 5s. extra; trip model, £2 10s. extra.