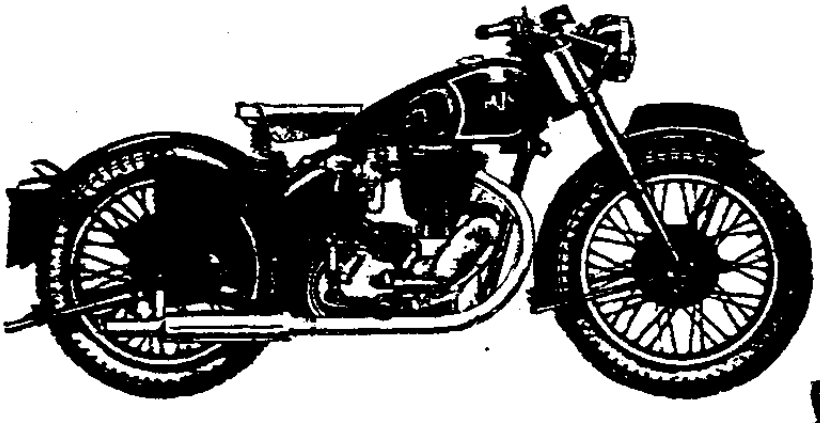
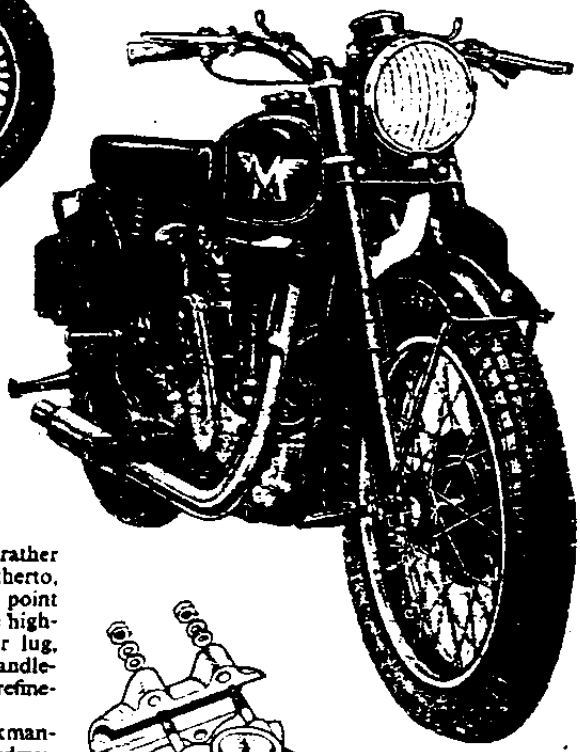
THE A.J.S. AND MATCHLESS

A.M.C., Ltd. Announce Particulars of their 1948 350 and 500 c.c. o.h.v. London-built Models with Detail Improvements



The popular 498 c.c. A.J.S., shown above and (right) the 347 c.c. Matchless, both retain most of their existing features, and have, in addition, improved forks, larger-diameter brakes and a number of minor refinements.



AT a period when austerity dominates most undertakings relying upon steel as an essential raw material, the motorcycle manufacturer already marketing a well-tried and intrinsically sound series of machines might, in all justification, call a halt, at least temporarily, to alteration in his designs.

Doubtless, for this reason, most 1948 models so far reviewed have not, as the pre-war cliché had it, bristled with novelty. Next year's A.J.S. and Matchless programme, just announced by Associated Motor Cycles, Ltd., is no exception to this trend. Yet in presenting a range limited, as in 1947, to 347 c.c. G3L Matchless, 16M A.J.S. and 498 c.c. G80 Matchless and Model 18 A.J.S. machines, plus competition models in each capacity, the Woolwich factory has largely overcome current difficulties and included some 17 commonsense improvements.

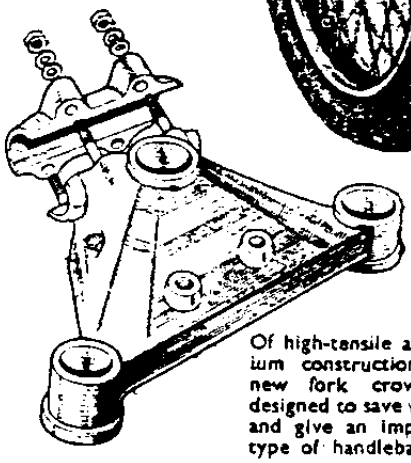
The Improved Brake

Outstanding and common to all models are the front-end modifications, embodying a 7-in.-diameter brake with greatly improved anchorage. KE.805 steel bolts secure the brake plate, which has a chromium finish, to a lug on the near-side fork slider, affording infinitely greater rigidity than heretofore and, correspondingly, giving more positive retardation. Situated on the same slider is a new type of mounting for the brake-cable adjuster, the cable itself now being fitted with a protective sleeve. The front stand fixing, too is altered, pivoting from the outer, rather than the inner, faces of lugs situated, as in previous years, at the lower end of each slider casting.

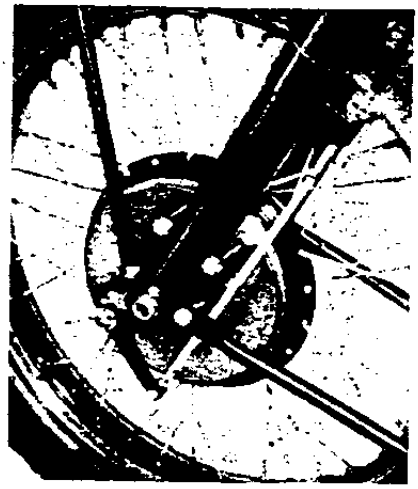
Improved fork performance and increased comfort, due to the introduction last year of a three-rate compression spring, has been furthered by subsequent experiments leading to the adoption of a shorter recoil spring. A damper shuttle—actually a steel sealing ring permitting freedom of upward slider movement following road impacts, but impeding the oil-flow during downward movement—now contributes to more efficient damping of the well-known A.M.C. Teledraulics.

Clamping the fork tubes in the fork crown with ⅜-in. studs and nuts, rather than by the pinch bolts used hitherto, lessens the chance of wear at this point and makes for greater safety. The high-tensile aluminium alloy handlebar lug, with a four- instead of two-stud handlebar fixing is an additional fork refinement.

Apart from suggesting a workmanlike, clean appearance, 1948 Teledraulics, in conjunction with a slightly different head angle—developed in the light of road, trials and racing experience—promise positive steering with no trace of wavering either at the top or bottom of the speed range. For this reason a steering damper is not fitted as standard, although it can be supplied separately where machines are intended for sidecar use.



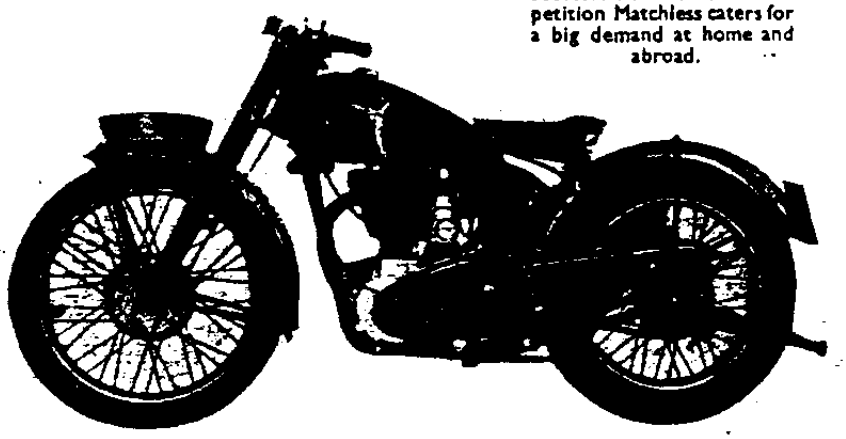
Of high-tensile aluminium construction, the new fork crown is designed to save weight and give an improved type of handlebar lug.



Secured to the redesigned fork slider by KE.805 steel bolts, the front brake-plate now has more rigidity. Chromium finish enhances its appearance, whilst the altered front-stand fixing makes for accessibility.

The well-tried Matchless and A.J.S. engines in both capacities have individually balanced flywheels, two-piece crankpins, triple-row duralumin-caged big-end bearings, "Lo-ex" pistons, heavily finned single-port cylinder heads, chromium-plated valve stems, with all moving parts totally enclosed and positively lubricated. Modifications to the scroll and engaging pin responsible for operating the duplex reciprocating plunger pump have been made with a view to prolonging the life of this important component.

RANGES FOR NEXT YEAR



Combining the best features of the road models and the result of post-war sporting successes, the 498 c.c. Competition Matchless caters for a big demand at home and abroad.

The "Lo-ex" piston specified on all 1948 Matchless and A.J.S. machines is of the split-skirt variety fitted to A.M.C., Ltd., products from time to time during the past few years and standardized during 1947.

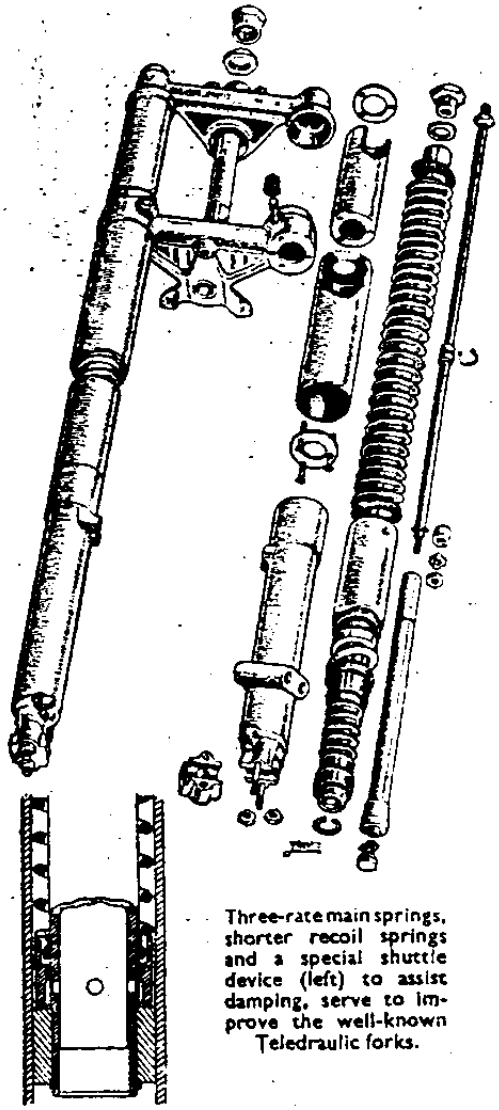
Features still identical with those of current models include the heavy-weight Burman four-speed gearbox, giving ratios for the "350s" of 5.8, 7.5, 10.2 and 15.5 to 1, and for the "500s" of 5, 6.4, 8.8 and 13.4 to 1. The 19-tooth engine sprocket fitted for sidecar use alters the latter figures to 5.5, 7, 9.6 and 14.6. Primary transmission on both makes is by ½-in. pitch by .305-in. chain, with cam-type engine shock absorber incorporating a special lubricating channel.

For the final drive a ½-in. pitch by .380 chain is used on all models. 1947 tank sizes also are unchanged, having capacity for three gallons of fuel and three pints of oil, irrespective of machine or model. Similarly, the present down-draught Amal carburetters, varying slightly in types and settings, according to the models will be standard for 1948.

General layout of both motorcycles remains virtually as last year, exception being found in the front down tube, which on "500s" now has a sidecar lug, and the petrol feed, so fitted as to give better accessibility to the carburetter.

Working towards the back of the machines, further modifications are noted, the most sensible of which is probably the adjustability of saddle height—by no means a new idea, but one of those small points by which good design is judged. Peculiar to the A.J.S. is a rear-frame lug for the horn, whilst on both machines tool-box mountings have been cleaned up and a chromium-plated and more practical type of battery strap fitted. A special lip-ended chain guard is calculated to deflect dirt or water flung from the rear tyre.

In keeping with front-end improvements, the rear wheel now accommodates a larger diameter brake than of yore, and, on the 498 c.c. job, carries a 3.50-in. by 19-in. tyre this being increased to 4.00 in. on competition models.



Three-rate main springs, shorter recoil springs and a special shuttle device (left) to assist damping, serve to improve the well-known Teledraulic forks.

Competition Models

Based upon a long run of success in post-war sporting events culminating in the 1947 Scottish Six Days' Trial, where A.M.C., Ltd., products were ridden by individual and team winners, the 1948 Competition jobs catalogued include 347 c.c. and 498 c.c. machines of both Matchless and A.J.S. manufacture.

In both cases these models are slightly shorter in wheelbase than are the standard road machines; they are lighter, apart from the fact that they are not marketed with "electrics," and are equipped with polished aluminium mudguards giving reasonabe protection to the rider and, at the same time, ample clearance between mudguard and tyre.

Gear ratios of the 498 c.c. Competition models are 5.49, 7.1, 11.55, and 17.52 to 1, whilst for the 347 c.c. machines 6.13, 7.93, 12.91 and 19.58 to 1 ratios are listed.

Lighting

Lucas lighting, unaltered from the present design, will be standard next year, except where trials machines are concerned, when it will be optional and chargeable as an extra if fitted. A small but welcome departure from current practice is the domed lamp-glass, which, apart from more effectively distributing the light, gives a pleasing finish.

Wheel rims, handlebars, head-lamp rims, saddle springs, battery straps filler caps, exhaust systems, and other parts are chromium-plated, whilst cylinder heads and cylinders are stove-enamelled. Polishing of the gearbox and magneto chaincase cover—one of the seemingly minor points of finish but one which is costly in these days of austerity—also will be a 1948 feature.

Equipment includes a full and compact set of tools, adequate, incidentally, for decarbonization and similar jobs likely to be carried out on the machine by the owner, together with tyre pump and a 90-page instruction manual, containing detailed technical data, well illustrated and excellently written.

The impression of good finish is aided also by thoroughness both in Bonderizing and enamelling, the 1947 colour scheme of black, relieved by gold in the case of the A.J.S. and silver for the Matchless "M" motif, being retained. The result is a range of unostentatious but essentially practical models, the quality and durability of which would appear to bear out the makers' claim of being second to none.

A.J.S. AND MATCHLESS 1948 MODELS

Model	Price £ s. d.	Purchase Tax £ s. d.	Total £ s. d.
G.3L (Matchless) and 16M (A.J.S.) 347 c.c.	112 0 9	30 4 10	142 4 10
G.80 (Matchless) and Model 18 (A.J.S.) 498 c.c.	122 0 0	32 18 10	154 18 10
347 c.c. Competition	117 0 0	31 11 10	148 11 10
498 c.c. Competition	127 0 0	34 5 10	161 5 10
Extra			
Speedometer (all models)	6 0 0	1 1 8	5 1 8
Lighting (Competition models)	7 10 0	2 0 6	9 10 6