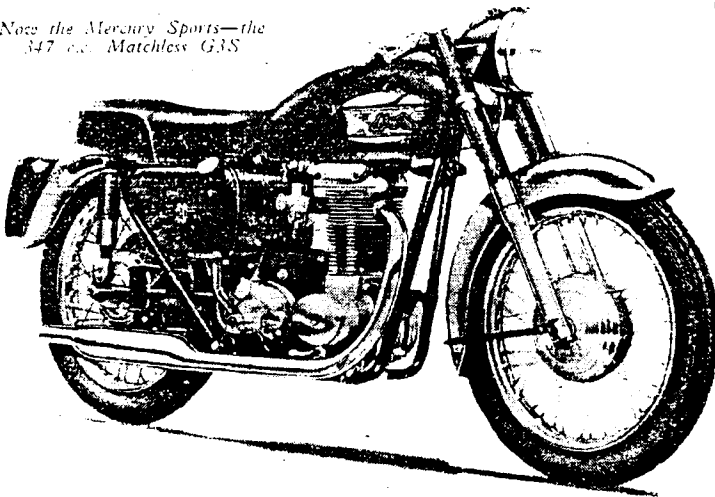
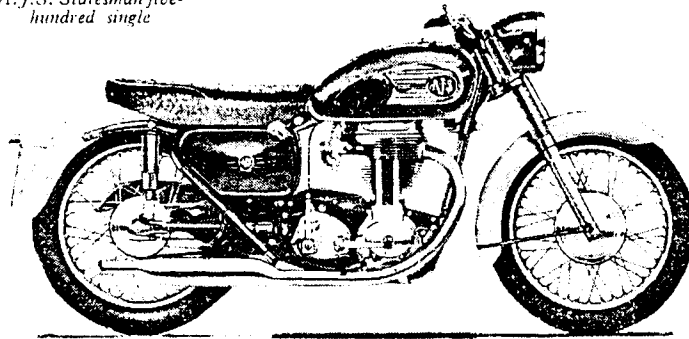


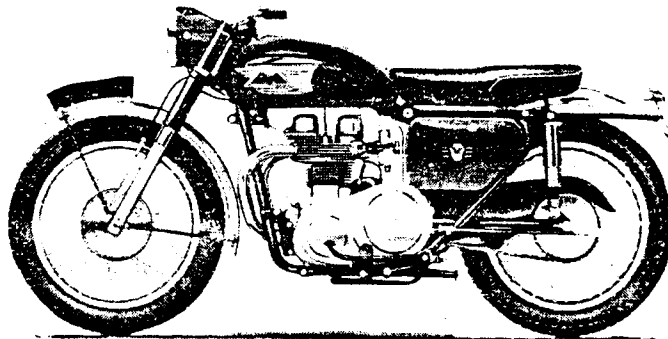
Note the Mercury Sports—the
347 c.c. Matchless G3S



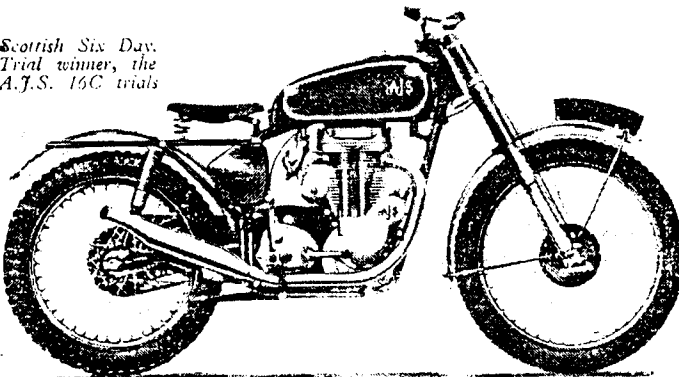
A.J.S. Statesman five-
hundred single



Twin sportster
from Matchless,
the six-fifty
Monarch



Scottish Six Day
Trial winner, the
A.J.S. 16C trials



REDESIGNED

Matchless and A.J.S. Short-stroke Engine Three-fifties From

YOU want a big, lively roadster with the relatively low insurance rates of a three-fifty? Then for you A.M.C. have extensively redesigned the single-cylinder engine of the Matchless G3 and A.J.S. 16. As a result maximum power is boosted from some 19 to 23 b.h.p. at 6,200 r.p.m. without sacrifice of tractability and the engine is said to give a pleasant top-gear surge when the twistgrip is tweaked at around 55 to 60 m.p.h. And since the engine is now a shade shorter, with the pushrod tunnels cast in the cylinder barrel and head, it has a cobby appearance, giving the models a more up-to-the-minute air.

Bore and stroke are now 74×81mm instead of the earlier 69×93mm, and advantage is taken of the bigger bore to increase the valve sizes. Choke diameter of the Amal Monobloc carburettor is also stepped up—from 1 $\frac{1}{8}$ in to 1 $\frac{1}{4}$ in—and the 1 $\frac{1}{2}$ in-diameter exhaust pipe is $\frac{1}{4}$ in bigger than before.

Fairly deeply finned, the cylinder head is a light-alloy die casting with the included angle of the valve stems slightly reduced. Compression ratio is increased from 7.5 to 8.5 to 1.

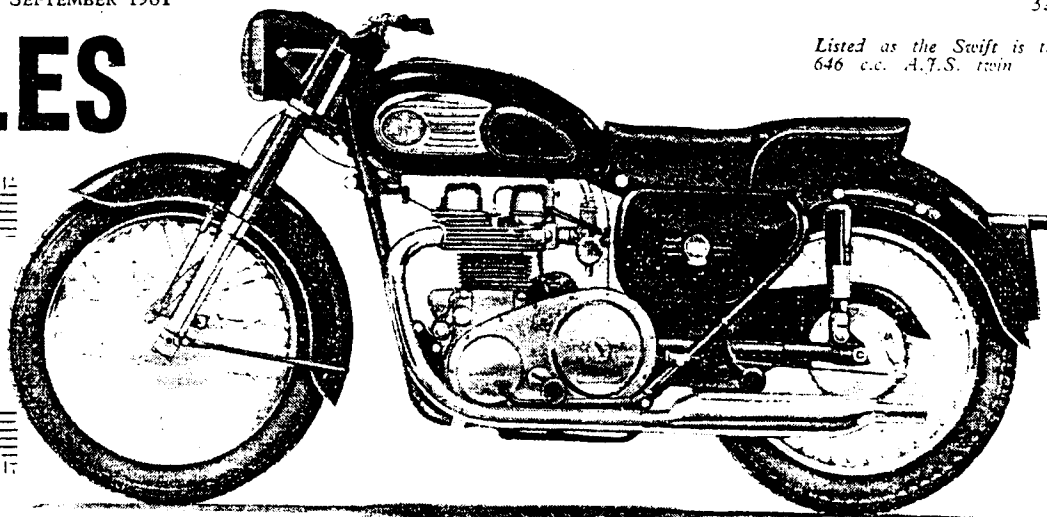
Except for a number of detail improvements common to all heavyweight models in both ranges, the Matchless G3 and A.J.S. 16 otherwise follow the earlier specification. That includes a duplex frame with telescopic front and pivoted rear forks, 3.25×19in tyres, 7in-diameter brakes, a 4 $\frac{1}{4}$ -gallon tank and Lucas electrical equipment with coil ignition, alternator and 7in-diameter headlamp.

From now on, however, with the exception of the road racers (349 c.c. A.J.S. 7R and 496 c.c. Matchless G50), every model in the two ranges has a name as well as a catalogue code. And the Matchless G3 and A.J.S. 16 are, respectively, the Mercury and Sceptre. Moreover, there is a variant on the theme, for the Mercury Sports (G3S) and Sceptre Sports (16S) have a downswept handlebar and a chromium finish on the mudguards and chain-guard.

SINGLES

Listed as the Swift is this
646 c.c. A.J.S. twin

in 1962
For New
Woolwich



For trials riders, the mountain-goat version of the three-fifty retains the earlier bore and stroke dimensions and is appropriately named the Matchless Maestro (G3C) or A.J.S. Experts (16C). The specification includes a low-compression piston, Lucas waterproof magneto, upswept exhaust system, wide gear ratios, lightweight welded frame giving 10in ground clearance, 2.75×21in front and 4.00×19in rear Dunlop Trials Universal tyres and a two-gallon light-alloy tank of the narrower pattern used by Gordon Jackson in winning this year's Scottish Six Days Trial.

The other heavyweights in the ranges are fewer in number than before because the five-hundred twins have been dropped and the de-luxe versions of the six-fifty twins are no longer listed separately, though they can be obtained by specifying magneto ignition and a quickly detachable rear wheel as extras on the standard models.

Individually, the models are the 498 c.c. Matchless Major (G80) and A.J.S. Statesman (18)—virtually 82.5×93mm versions of the Mercury and Sceptre—the 497 c.c. Scrambles variants known as the Matchless Marksman (G80CS) and A.J.S. Southerner (18CS), the Standard 646 c.c. twins—Matchless Majestic (G12) and A.J.S. Swift (31)—and their high-performance brothers, the Matchless Monarch (G12CSR) and A.J.S. Hurricane (31CSR), both hitherto known as Sports-twins.

Most noticeable of the modifications common to all these models are the new petrol-tank motifs. Much larger than the plastic badges they supersede, they are zinc-alloy pressure die-castings, chromium plated and fixed by two screws.

Less apparent but of more practical interest to the hard rider are new, soft-rubber tank mountings. At the rear the tank rests on a sponge rubber pad taped to the frame top tube and is held down by a rubber band passing under the tube and hooked over ears on the tank. At the front two tubes are let into the tank bottom: into these tubes fit long rubber sleeves expanded by self-locking nuts and bolts passing through lugs on the frame.

The oil tank has come in for attention, too. A breather tower is now formed at the top to prevent oil loss through the breather at sustained high speeds. (A tower is already standard practice on the Monarch and Hurricane.)

To prevent the kick-starter from flapping on severe bumps a stronger return spring is fitted. An extension on the centre stand gives it a roll-on action, considerably reducing the muscular effort required.

A number of electrical improvements have been carried out. First, battery size reverts to the larger dimensions of approximately 4½×6×3½in, with the enclosure box slightly enlarged to suit. Then there is the new-pattern Lucas horn, smaller, lighter and louder. Finally, ignition is controlled by a detachable key in the light switch instead of by a separate, non-detachable switch. Coil ignition is standard on all roadsters except the super-sports six-fifties; when a magneto is specified on the Matchless Majestic and A.J.S. Swift, the Lucas alternator is retained for battery charging.

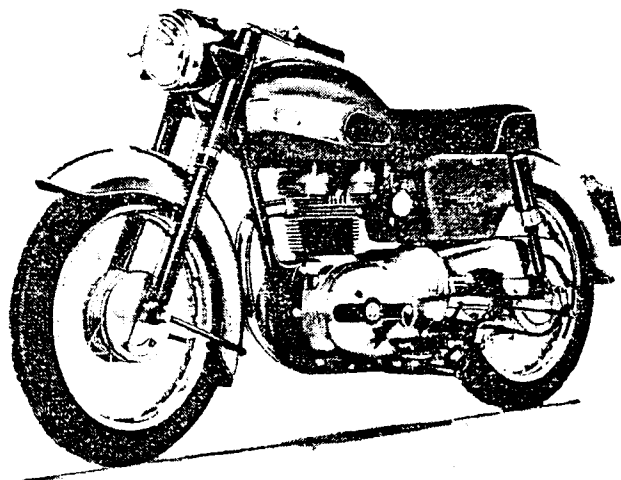
Poundage of the front-fork springs on the standard twins is increased to bring

it in line with that of the Matchless Monarch and A.J.S. Hurricane. And on the last two models the pillion footrests are now carried on brackets extending rearward from the sub-frame (as on the standard twins) instead of being brazed direct to the sub-frame. The mountings are thus stronger and better placed.

Used by Dave Curtis for the last two seasons, a new front fork is standardized on the scrambles five-hundreds. The total stroke is longer than before with progressive damping in both directions; grit and water are excluded by orthodox-type rubber gaiters.

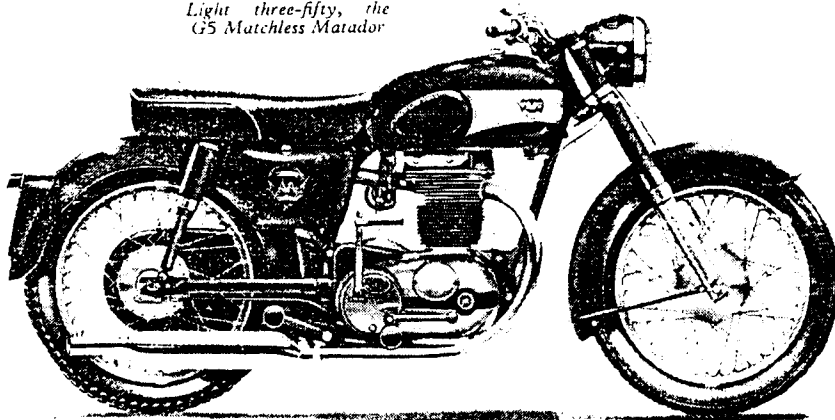
As before, the lightweight ranges comprise three two-fifties and a three-fifty apiece. The standard two-fifties (Matchless G2 and A.J.S. 14) are now called the Monitor and Sapphire respectively; then there are the G2S and 14S sports versions and the G2SC and 14SC scramblers known as Matchless Messenger and A.J.S. Scorpion. The light three-fifty names? Matchless Matador (G5) and A.J.S. Senator (8).

To prevent the rider's foot from fouling the footrest when starting, a longer kick-starter is used on all lightweights.



From A.J.S., the
racy looking Sapphire
Sports two-fifty

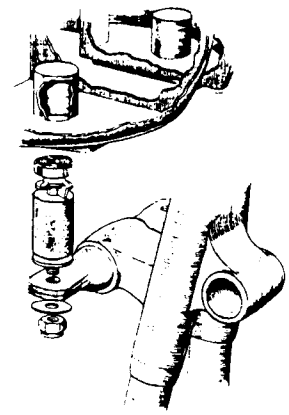
Light three-fifty, the G5 Matchless Matador



Tanks of the lightweights carry a white flash, framed in gold, and a plastic motif. Optional finishes for the lightweight roadsters are as described for the heavyweights (i.e., all tartan red or blue with white mudguards) and the same goes for the Monarch and Hurricane except that the guards are not enamelled. Odd man out in the Matchless range is the two-fifty scrambler which, for the home market, retains the earlier cardinal shade of red for the tank and the flashes on the engine covers.

Several improvements are scheduled for the road-racing machines, details of which will be announced later.

New tank front mounting for the larger A.M.C. models. An expanding rubber bush grips the tank sockets



On the three-fifties only there is an improved crankcase breather and a change from ball to roller type for the inner drive-side main bearing.

For the sports two-fifties the handlebar has been redesigned with tighter bends, thus combining a narrow overall width (24½in) with long-enough straight portions at the downswept ends for firm lever mounting. Full swivelling adjustment for the bar is now provided by split clamps. This bar is standard also on the sports versions of the Mercury and Sceptre and on the Monarch and Hurricane twins.

Features of the lightweights include hairpin valve springs and the casting of the push-rod tunnels in the cylinder barrel and head. The oil tank flanks the right-hand side of the crankcase while the engine cover on that side gives a semblance of unit construction. Wipac alter-

nators and coil ignition are standardized with 6-in diameter headlamps on the roadsters.

A black finish is used on the standard heavyweights (three-fifty, five-hundred and six-fifty) and on the trials models and scrambles five-hundreds. A tartan-red (Matchless) or blue (A.J.S.) tank may be specified on the competition models, while an optional finish for the roadsters is tartan red (or blue) for all enamelled parts except the mudguards, which are white.

On all other models there is a two-colour finish, the frame and forks being black and the contrasting colour tartan red for Matchless and blue for A.J.S. As mentioned earlier, mudguards and chain-guard are chromium-plated on sports models; the hot-stuff six-fifties have polished light-alloy guards as used on the trials and scrambles models.

Model	Capacity, Bore, Stroke and Type of Engine	Comp Ratio	Ign	Gear Ratios				Capacity Fuel Oil	Susp F R	Size of Tyres Front Rear		Wt lb	Basic Price £ s d	Total Price £ s d
A.J.S.														
14 Sapphire	248 c.c. 70 x 65mm o.h.v.	7.8	C	6.89	8.95	12.75	20.12	3½g	2½pc	T PF	3.25 x 17 3.25 x 17	325	168 0 0	204 19 2
14S Sapphire Sports	248 c.c. 70 x 65mm o.h.v.	7.8	C	6.89	8.95	12.75	20.12	3½g	2½pc	T PF	3.25 x 17 3.25 x 17	325	174 0 0	212 5 7
14CS Scorpion	248 c.c. 70 x 65mm o.h.v.	10.0	C	8.95	11.63	16.55	21.62	2½g	2½pc	T PF	3.00 x 19 3.50 x 19	321	186 10 0	227 10 7
8 Senator	348 c.c. 72 x 85.5mm o.h.v.	7.5	C	6.39	8.3	11.82	18.66	3½g	2½pc	T PF	3.25 x 18 3.25 x 18	340	180 10 0	220 4 2
16 Sceptre	348 c.c. 74 x 81mm o.h.v.	8.5	C	5.8	7.08	9.85	14.85	4½g	4½pc	T PF	3.25 x 19 3.25 x 19	380	197 0 0	240 6 9
16S Sceptre Sports	348 c.c. 74 x 81mm o.h.v.	8.5	C	5.8	7.08	9.85	14.85	4½g	4½pc	T PF	3.25 x 19 3.25 x 19	380	203 0 0	247 13 2
14C Experts	347 c.c. 69 x 93mm o.h.v.	6.5	M	6.48	10.1	15.8	21.0	2g	2½pc	T PF	2.75 x 21 4.00 x 19	306	197 0 0	240 6 9
18 Statesman	498 c.c. 82.5 x 93mm o.h.v.	7.3	C	5.02	6.13	8.53	12.8	4½g	4½pc	T PF	3.25 x 19 3.50 x 19	394	208 10 0	254 7 5
18CS Southerner	497 c.c. 86 x 85.5mm o.h.v.	8.7	M	5.8	7.08	9.85	14.85	2g	4½pc	T PF	3.00 x 21 4.00 x 19	336	233 0 0	284 5 2
31 Swift	646 c.c. 72 x 79.3mm o.h.v. twin	7.5	C	4.78	5.83	8.13	12.23	4½g	4½pc	T PF	3.25 x 19 3.50 x 19	403	215 0 0	262 6 0
G1CSR Hurricane	646 c.c. 72 x 79.3mm o.h.v. twin	8.5	M	4.78	5.83	8.13	12.23	4½g	4½pc	T PF	3.25 x 19 3.50 x 19	388	237 10 0	289 15 0
7R	349 c.c. 75.5 x 78mm o.h.c.	11.6	M	4.87	5.36	6.48	8.68	5½g	7pc	T PF	2.75 x 19 3.25 x 19	285	420 0 0	512 8 0

MANUFACTURERS: A.J.S. Motor Cycles, Plumstead Road, London, S.E.18. EXTRAS: Lighting set, 14CS, £8 19s 4d; 16C, £13 8s 5d; 18CS, £15 17s 2d. Colour finish: Models 14 and 8, £3 13s 2d; other roadsters, £4 5s 5d. Magneto ignition, 646 c.c. twin, £9 15s 2d. Quickly detachable wheel (roadsters except Models 14 and 8), £2 11s 3d. Air filter, Models 14 and 8, £1 18s 5d; other roadsters, £2 4s 10d. Carrier, Model 14 and 8, £3 11s 8d; other roadsters, £3 14s 1d.

Model	Capacity, Bore, Stroke and Type of Engine	Comp Ratio	Ign	Gear Ratios				Capacity Fuel Oil	Susp F R	Size of Tyres Front Rear		Wt lb	Basic Price £ s d	Total Price £ s d
MATCHLESS														
G2 Monitor	248 c.c. 70 x 65mm o.h.v.	7.8	C	6.89	8.95	12.75	20.12	3½g	2½pc	T PF	3.25 x 17 3.25 x 17	325	168 0 0	204 19 2
G2S Monitor Sports	248 c.c. 70 x 65mm o.h.v.	7.8	C	6.89	8.95	12.75	20.12	3½g	2½pc	T PF	3.25 x 17 3.25 x 17	325	174 0 0	212 5 7
G2CS Messenger	248 c.c. 70 x 65mm o.h.v.	10.0	C	8.95	11.63	16.55	21.62	2½g	2½pc	T PF	3.00 x 19 3.50 x 19	321	186 10 0	227 10 7
G5 Matador	348 c.c. 72 x 85.5mm o.h.v.	7.5	C	6.39	8.3	11.82	18.66	3½g	2½pc	T PF	3.25 x 18 3.25 x 18	340	180 10 0	220 4 2
G3 Mercury	348 c.c. 74 x 81mm o.h.v.	8.5	C	5.8	7.08	9.85	14.85	4½g	4½pc	T PF	3.25 x 19 3.25 x 19	380	197 0 0	240 6 9
G3S Mercury Sports	348 c.c. 74 x 81mm o.h.v.	8.5	C	5.8	7.08	9.85	14.85	4½g	4½pc	T PF	3.25 x 19 3.25 x 19	380	203 0 0	247 13 2
G3C Maestro	347 c.c. 69 x 93mm o.h.v.	6.5	M	6.48	10.1	15.8	21.0	2g	2½pc	T PF	2.75 x 21 4.00 x 19	306	197 0 0	240 6 9
G80 Major	498 c.c. 82.5 x 93mm o.h.v.	7.3	C	5.02	6.13	8.53	12.8	4½g	4½pc	T PF	3.25 x 19 3.50 x 19	394	208 10 0	254 7 5
G80CS Marksman	497 c.c. 86 x 85.5mm o.h.v.	8.7	M	5.8	7.08	9.85	14.85	2g	4½pc	T PF	3.00 x 21 4.00 x 19	336	233 0 0	284 5 2
G12 Majestic	646 c.c. 72 x 79.3mm o.h.v. twin	7.5	C	4.78	5.83	8.13	12.23	4½g	4½pc	T PF	3.25 x 19 3.50 x 19	403	215 0 0	262 6 0
G12CSR Monarch	646 c.c. 72 x 79.3mm o.h.v. twin	8.5	M	4.78	5.83	8.13	12.23	4½g	4½pc	T PF	3.25 x 19 3.50 x 19	388	237 10 0	289 15 0
G50	496 c.c. 90 x 78mm o.h.c.	10.6	M	4.02	4.42	5.34	7.16	5½g	7pc	T PF	3.00 x 19 3.50 x 19	290	432 0 0	527 0 9

MANUFACTURERS: Matchless Motor Cycles, Plumstead Road, London, S.E.18. EXTRAS: Lighting set, G2CS, £8 19s 4d; G3C, £13 8s 5d; G18CS, £15 17s 2d. Colour finish: Models G2 and G5, £3 13s 2d; other roadsters, £4 5s 5d. Magneto ignition, 646 c.c. twin, £9 15s 2d. Quickly detachable wheel (roadsters except Models G2 and G5), £2 11s 3d. Air filter, G2 and G5, £1 18s 5d; other roadsters, £2 4s 10d. Carrier, G2 and G5, £3 11s 8d; other roadsters, £3 14s 1d.

ABBREVIATIONS: C, coil ignition; M, magneto; T, telescopic fork; PF, pivoted fork. Total price includes British purchase tax.