

MATCHLESS for 1958

The standing of a motor cycle is judged by the satisfaction it provides to its owner, and the growth of the Matchless organisation from the founder and his two sons to a large modern factory employing well over one thousand highly skilled craftsmen indicates the current standing, popularity and efficiency of Matchless motor cycles.

The Golden Jubilee of Brooklands Track and the Isle of Man Tourist Trophy Races have provided a vivid reminder that the design and performance superiority which enabled Matchless motor cycles to win the first T.T. Race and establish so many early records is even more apparent in the latest models.



MATCHLESS MOTOR CYCLES

Proprietors: Associated Motor Cycles Ltd.

PLUMSTEAD ROAD : LONDON, S.E.18 : ENGLAND

Telephone: WOOLWICH 1223.

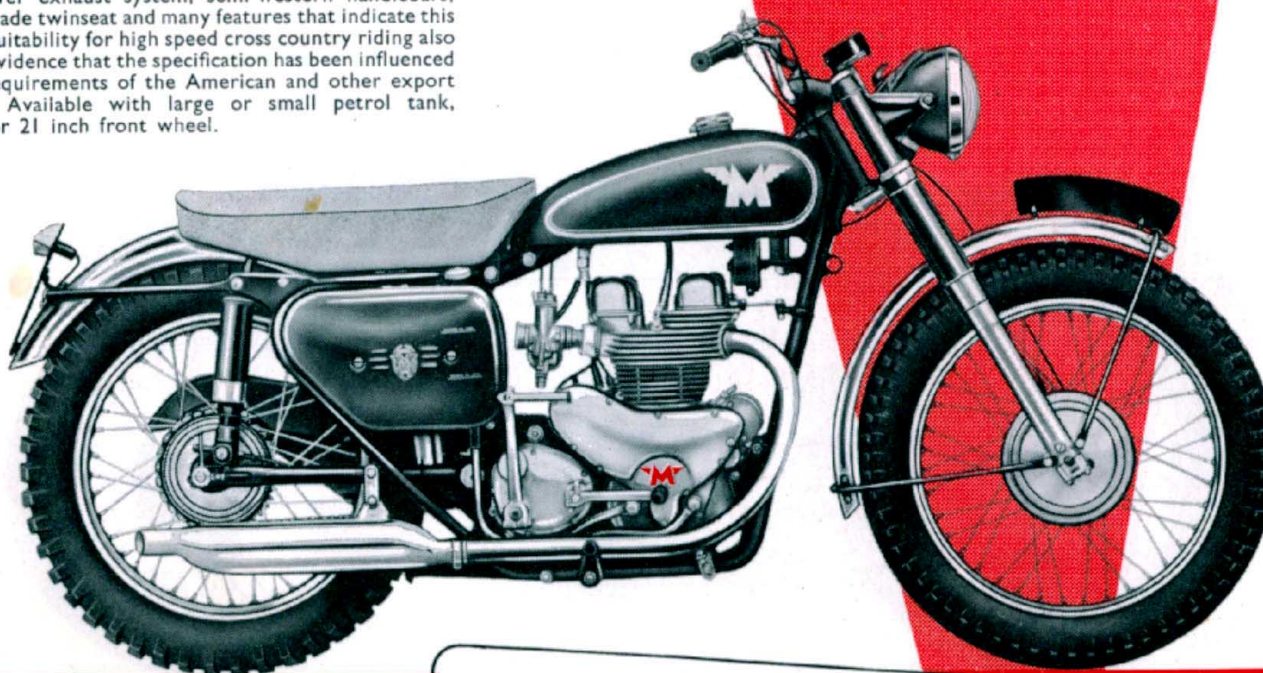
Telegrams: MATCHLESS, LONDON, TELEX

Telex: No. 22617

THE NEW 600 c.c. SPORTS TWIN

The specification of this exciting new model comprises the frame and cycle parts of the latest Scramble models fitted with a modified high output 600 c.c. twin cylinder engine. A crossover exhaust system, semi-western handlebars, pigskin shade twinseat and many features that indicate this model's suitability for high speed cross country riding also provide evidence that the specification has been influenced by the requirements of the American and other export markets. Available with large or small petrol tank, 19 inch or 21 inch front wheel.

Model **G II CS** 600 c.c. O.H.V.

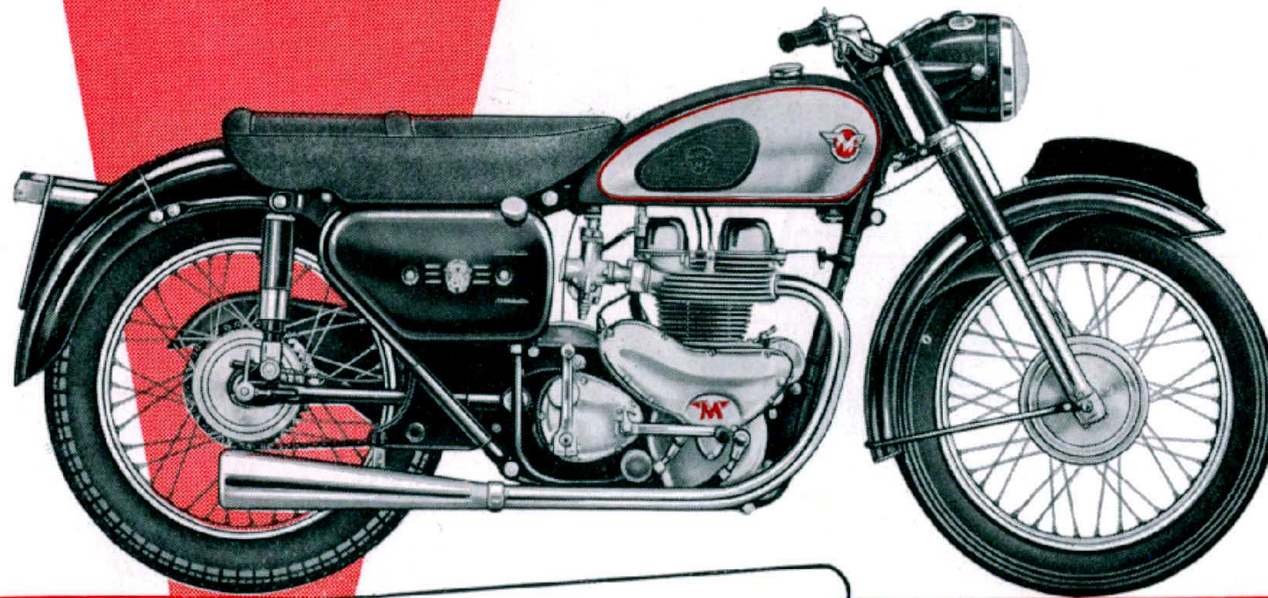


A functional model for the hard riding enthusiast who requires a zestful performance combined with low weight and perfect handling.

PAGE THREE

Model **G 9**

500 c.c. O.H.V.



Dashing and distinctive yet utterly dependable—
the undisputed leader of its class.

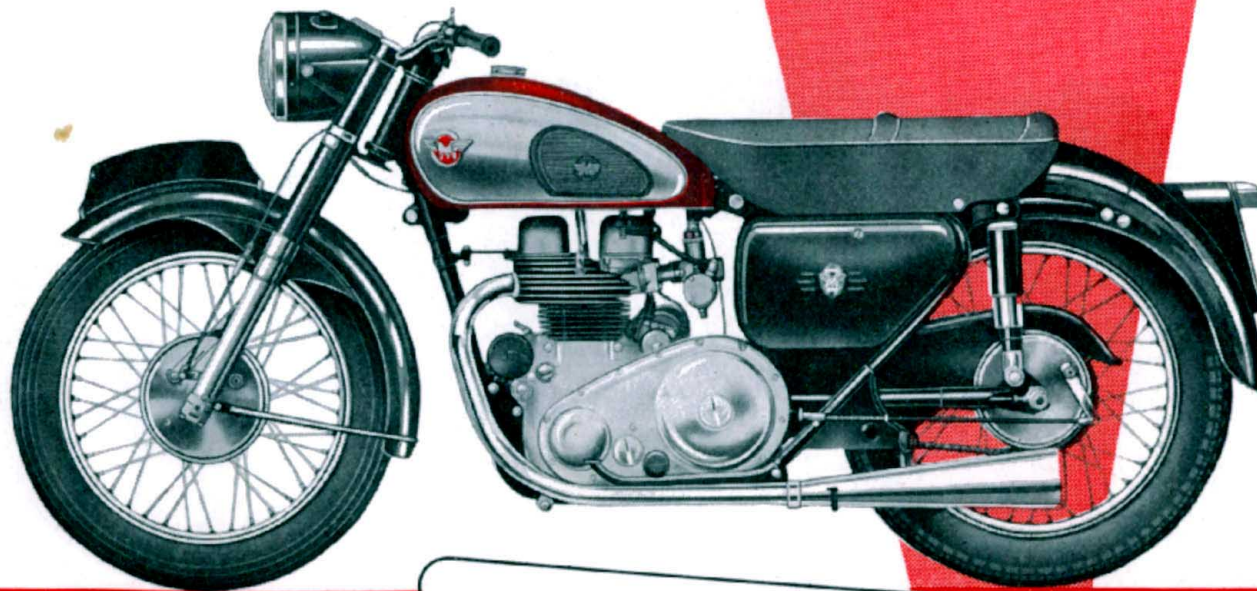


For full specification see pages 12 and 13

PAGE FOUR

Model **G II**

600 c.c. O.H.V.



For full specification see pages 12 and 13



Surging power, high maximum speed, hair-line steering—the choice of the knowledgeable enthusiast.

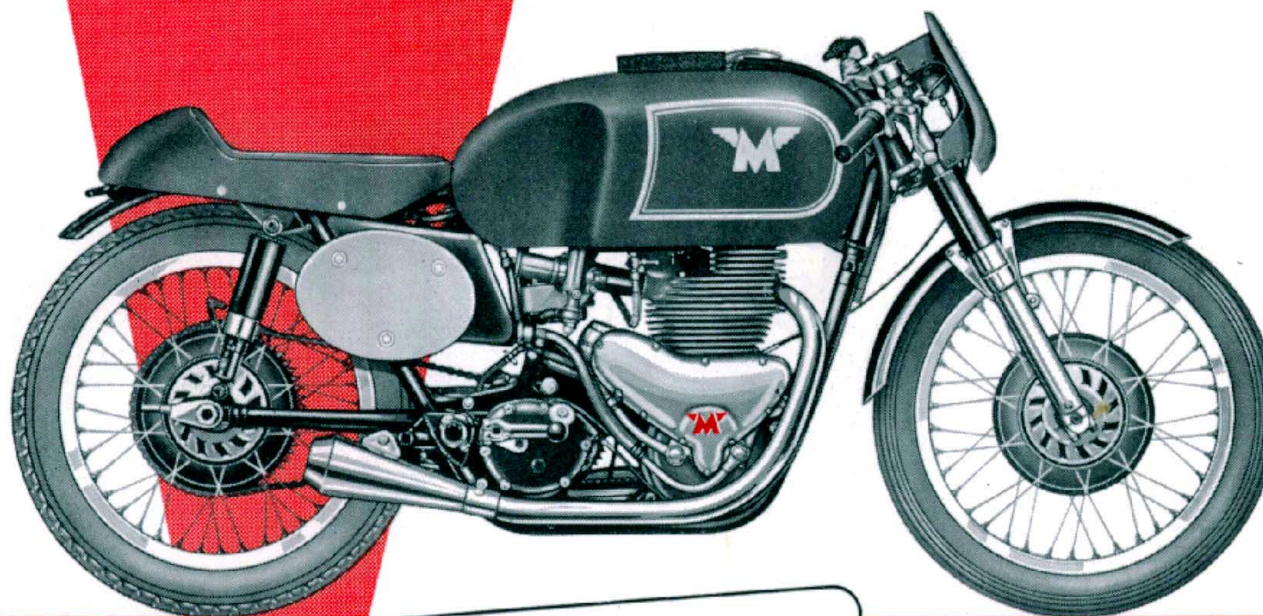
PAGE FIVE

Model **G 45**

500 c.c. O.H.V.

Racing Vertical Twin

498 c.c. 66 mm. bore x 72.8 mm. stroke. O.H.V. vertical twin cylinder engine, deeply finned light alloy cylinders and cylinder heads, forged steel three bearing crankshaft, twin camshafts, roller followers, duralumin pushrods, eccentric spindle valve adjustment. 2 G.P. Amal carburettors, Lucas racing magneto, twin gear oil pumps. 50 B.H.P. at 7,200/7,400 r.p.m. on 90 octane petrol. Welded duplex cradle frame, oil damped front and rear suspension, 4 speed racing gearbox, 8½ inch diameter brakes, magnesium alloy hubs, 6 gallon petrol and 1 gallon L.A. oil tanks. Light alloy wheel rims, straight spokes, 3.00 inch x 19 inch front, 3.50 inch x 19 inch rear racing tyres.



Individually produced to conform with F.I.M. regulations, the Model G45 is the fastest available 500 c.c. twin cylinder racing motor cycle in the world.



PAGE SIX

Special high ground clearance short wheelbase frame, swinging arm rear suspension, welded construction. 347 c.c. low compression O.H.V. engine, slow running cams, light alloy cylinder and cylinder head. 2 gallon light alloy petrol tank, mudguards, number plates, etc. Upswept exhaust system, heavy gauge straight spokes, crankcase-shield, waterproof saddle and magneto with handlebar control. Wide ratio gearbox. Trials universal tyres, 2.75 inch x 21 inch front, 4.00 inch x 19 inch rear. Both wheels fitted with security bolts.

OPTIONAL EQUIPMENT

Standard or high compression ratio, standard wheels and tyres, standard gear ratio.

OPTIONAL EXTRAS

Electric lighting with quickly detachable headlamp. Quickly detachable rear wheel.

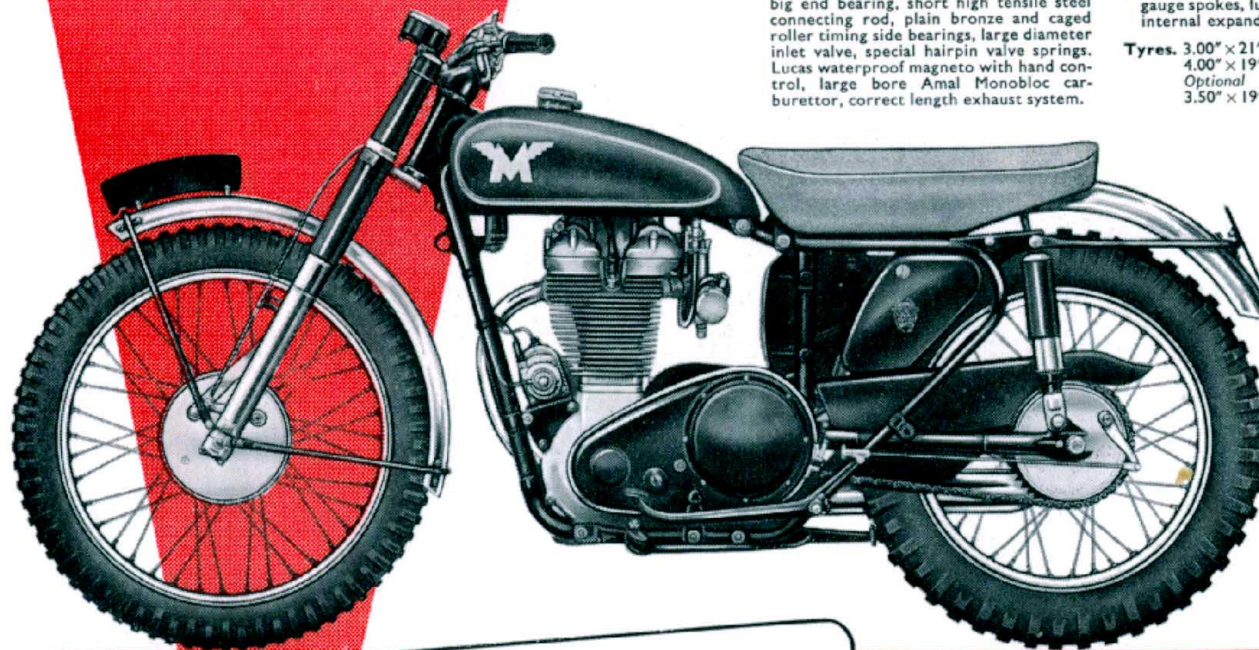
Model **G 3/LC** 350 c.c. O.H.V.



Without doubt the finest and most successful spring frame Trials model produced to date.

PAGE SEVEN

Model G 3/LCS 350 c.c. O.H.V.



The essential deviations from the standard specification are detailed as follows:

Capacity	Bore	Stroke
348 c.c.	72 mm.	85.5 mm.
497 c.c.	86 mm.	85.5 mm.

Steel disc flywheels drilled for balance, large diameter crankpin and caged roller big end bearing, short high tensile steel connecting rod, plain bronze and caged roller timing side bearings, large diameter inlet valve, special hairpin valve springs. Lucas waterproof magneto with hand control, large bore Amal Monobloc carburettor, correct length exhaust system.

MOTO-CROSS

Frame. Redesigned to provide even better steering and fitted with long stroke rear suspension units.

Forks. Matchless Teledraulic, special springs and modified oil damping.

Wheels and Brakes. Wide rims, heavy gauge spokes, full width light alloy hubs, internal expanding brakes.

Tyres. 3.00" x 21" Front Dunlop Trials
4.00" x 19" Rear Dunlop Sports
Optional
3.50" x 19" Front Dunlop Trials

Equipment. Light steel crankcase sh high lift central su
Optional equipment.
large petrol tank, tyres.
Optional extras.
lighting equipment
detachable rear w

Not an adapted road model but specially designed for cross country speed events—a model that has proved outstandingly successful in its class.



SS MODELS

Gearbox. Heavyweight 4-speed with special steel pinions. Folding kick-starter.

Transmission. Primary chain runs in oil bath case with clutch inspection cover. Rear chain protected by deep steel guard. Vane type rubber shock absorber incorporated in clutch.

Mudguards. Polished aluminium front and rear. The rear guard is longer and of new deep section.

alloy number plates, shield, security bolts, stand, side prop stand. Standard gear ratios, standard wheels and

Quickly detachable front air cleaner, quickly wheel.

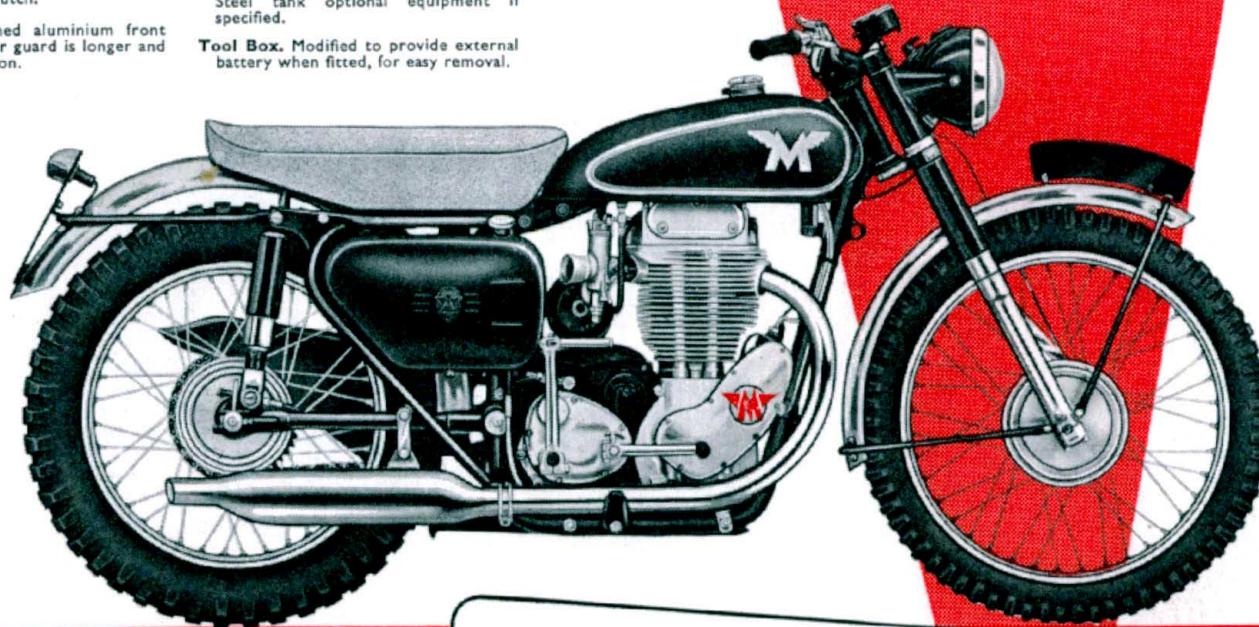
Seat. Deep section foam rubber, pigskin type Vynide covering and upswept rear.

Footrests. Immensely strong steel forgings.

Tanks. 2-gallon light alloy petrol tank. Half-gallon steel oil tank with improved mounting and repositioned filler cap. Steel tank optional equipment if specified.

Tool Box. Modified to provide external battery when fitted, for easy removal.

Model **G 80 CS** 500 c.c. O.H.V.



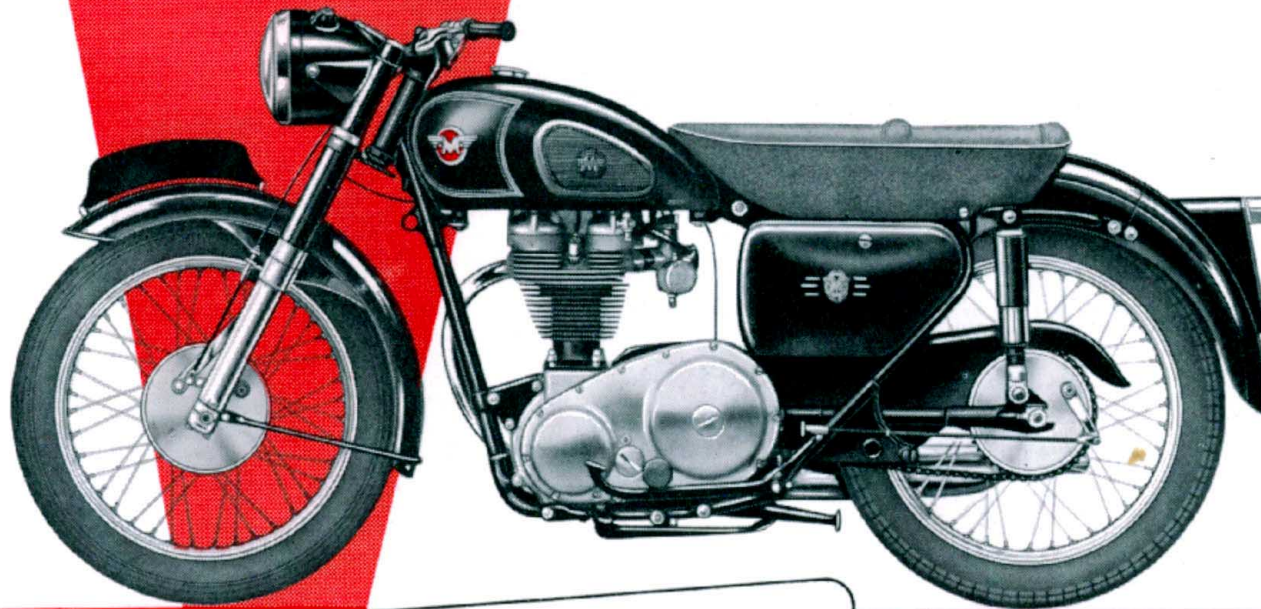
With its oversquare racing type engine, this model has achieved an unprecedented number of successes in National and International competitions.

(Lighting extra)

PAGE NINE

Model **G 3/LS**

350 c.c. O.H.V.



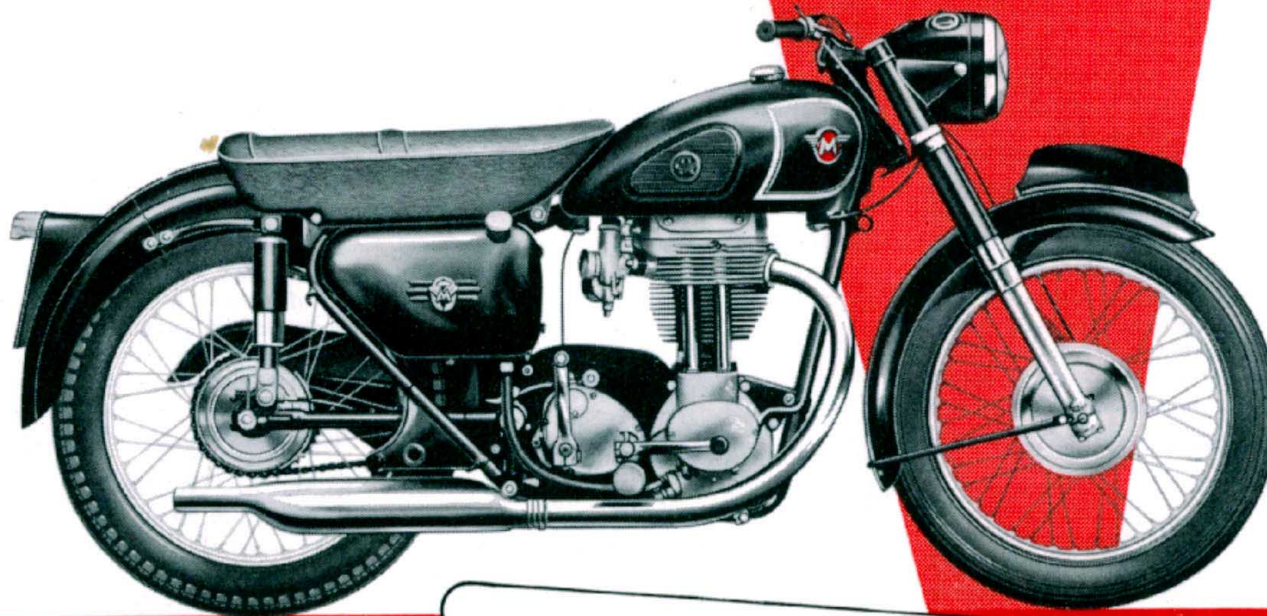
Clean and mechanically silent yet lively and very economical—the ideal all purpose solo mount.



For full specification see pages 12 and 13

PAGE TEN

Model **G 80 S** 500 c.c. O.H.V.



For full specification see pages 12 and 13



Tractable and unobtrusive yet capable of a surprising maximum—a superbly finished model that can hold its own in any company.

PAGE ELEVEN

SPECIFICATION

ENGINES—TWIN CYLINDER

Capacity	Bore	Stroke
498 c.c.	66 mm.	72.8 mm.
592 c.c.	72 mm.	72.8 mm.

From the foregoing details it will be seen that the 500 c.c. and 600 c.c. twin-cylinder engines differ only in connection with the cylinder bore dimensions.

CYLINDER HEADS—single port light alloy die castings with valve seat inserts, integral rocker posts, eccentric spindle valve adjustment and separate detachable cast aluminium valve covers. **CYLINDERS**—separate deeply finned seasoned iron castings with through retaining bolts. **VALVE GEAR**—twin gear-driven camshafts operating inclined overhead valves through duralumin pushrods and forged steel rockers. Fully enclosed and pressure lubricated. **CRANKSHAFT**—robust statically and dynamically balanced three-bearing alloy iron casting running in twin caged roller bearing and plain centre bearing. **CONNECTING RODS**—light alloy forgings of efficient and interesting design. Three layer Vandervell big end bearings. Bearing caps retained by studs in trunnion nuts and locknuts. **CRANKCASE**—spherical light alloy casting with sandwiched centre bearing support. **LUBRICATION**—dry sump system with

separate oil tank, pressure feed to all moving parts via centre main bearing, two large capacity gear pumps driven direct by the camshafts. Magnetic and fabric filters. **PISTONS**—low clearance and wire wound for controlled expansion. **IGNITION**—gear driven flange mounted magneto. **DYNAMO**—60 watt, mounted in machined crankcase recess and gear driven.

SINGLE CYLINDER

Capacity	Bore	Stroke
347 c.c.	69 mm.	93 mm.
498 c.c.	82.5 mm.	93 mm.

As in the case of the twin-cylinder engines the singles differ only in the cylinder bore dimensions.

CYLINDER HEAD—deeply finned light alloy die casting of high efficiency single port type. Cast in valve seat inserts. Rockers mounted in detachable cast aluminium valve enclosure. **CYLINDER**—cast in close grain seasoned iron. Heavily finned for efficient cooling. **VALVE GEAR**—twin camwheels, mushroom tappets, duralumin pushrods incorporating valve adjustment, steel rockers, duplex hairpin valve springs, chrome plated valve stems. Totally enclosed and positively lubricated. **FLYWHEEL ASSEMBLY**—large diameter

individually balanced flywheels, two-piece crankpin, triple row roller big end bearing with duralumin cage, forged steel connecting rod, pressed in hardened and ground liner, two large diameter drive side caged ball bearings, flanged bronze oil distributor timing side bearing. **CRANKCASE**—die cast in light alloy. Main bearing housings fine bored for absolute accuracy. Duplex rotary reciprocating oil pump plunger housed in pressed in bearing and driven direct by timing side mainshaft. **LUBRICATION**—full dry sump with separate oil tank and positive feed to all moving parts. Gauze and magnetic filters. **PISTON**—wire wound for controlled expansion. Two compression and one scraper ring. Top ring chromium plated for long life.

ELECTRIC GENERATOR AND IGNITION UNIT

High output A.C. generator directly driven by drive side mainshaft and mounted in cast aluminium primary chain-case, spigot attached to crankcase. Emergency switch to eliminate battery for direct starting. Contact breaker and automatic ignition control driven by inlet camwheel and enclosed by polished aluminium cover.

SPECIFICATION

GEARBOX AND CLUTCH

Heavyweight 4-speed of Matchless design and manufacture. Enclosed foot-operated positive stop gear change and kick-starter. Handlebar operated dry multi-plate clutch incorporating highly efficient rubber shock absorber.

TRANSMISSION

Primary chain enclosed in polished aluminium oil bath casting with clutch and chain inspection caps. Rear chain protected by deep section steel guard.

CARBURETTOR

Amal Monobloc. Twist grip throttle control, separate air lever, adjustable pilot jet. See Data on p. 15 for dimensional details.

FRAME

Duplex cradle of brazed construction with sidecar and pillion footrest lugs. Swinging arm rear frame pivots in large diameter self-lubricating bronze bearing. Spring-up centre and prop stands are fitted.

SUSPENSION

Matchless Teledraulic front forks, oil damped, self lubricating, 3-rate springs. Adjustable oil damped rear suspension units mounted on rubber bushes.

WHEELS AND BRAKES

Large diameter internal expanding brakes

in full width light alloy finned hubs with iron liners. Quickly detachable rear wheel, rubber sleeved driving pins, straight spokes, adjustable taper-roller bearings, 19 inch chromium plated rims.

MUDGUARDS

Steel and of deep efficient section with centre rib. Detachable tail piece to valanced rear guard for wheel accessibility.

TYRES

Front 3.25" x 19" ribbed Dunlop
Rear 3.25" x 19" studded Dunlop 350 c.c. Models
3.50" x 19" studded Dunlop 500 c.c. and Twin Models.

TANKS

3 $\frac{3}{4}$ gallons Petrol. 4 pints Oil. Quick action filler cap, twin petrol taps—one reserve.

TWINSEAT

Foam rubber on metal base with Vynide cover.

HANDLEBARS

Fully adjustable $\frac{7}{8}$ inch diameter chromium plated steel tube.

FOOTRESTS

Forged steel, rubber covered, fully adjustable.

STANDS

Spring-up central and prop.

ELECTRICAL EQUIPMENT

7 inch diameter headlamp, internal pilot light. Moulded plastic rear light with integral reflector. Electric horn, enclosed 6 volt 12 amp. hour battery, ammeter, handlebar headlamp dipper switch.

FINISH

Three thicknesses best quality stoved enamel on Bonderized base. Exhaust system, wheel rims, handlebars, controls, etc., heavily chromium plated. Gearbox cover, timing cover, fork sliders, etc., highly polished. The Model G9 and G11 petrol tanks are fitted with detachable chromium plated panels.

OPTIONAL EQUIPMENT

Low compression ratio pistons, sidecar gears and suspension.

OPTIONAL EXTRAS

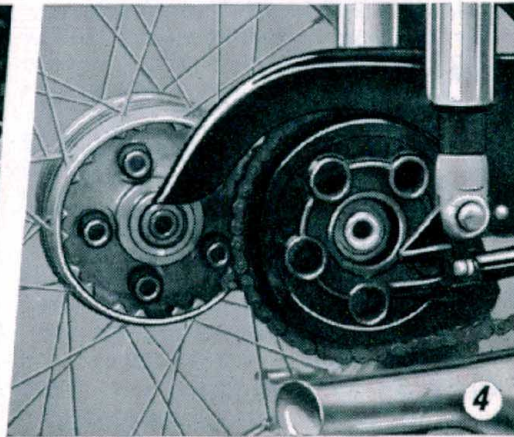
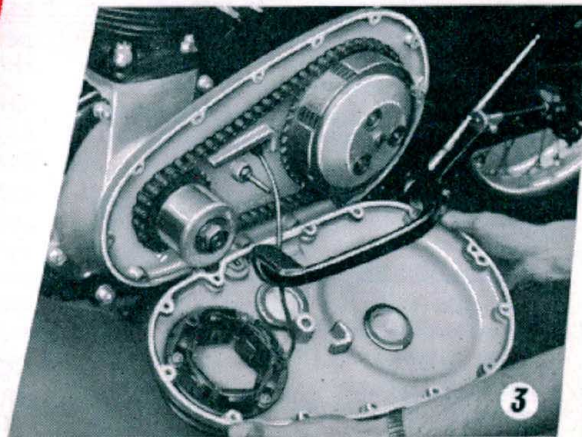
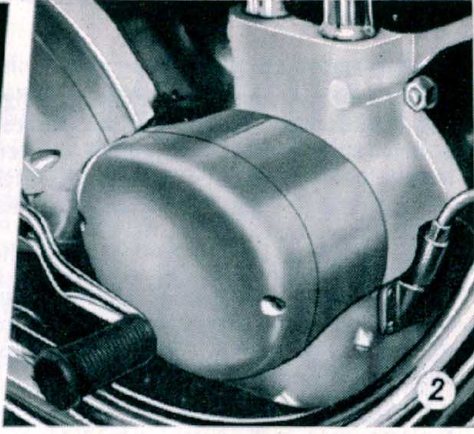
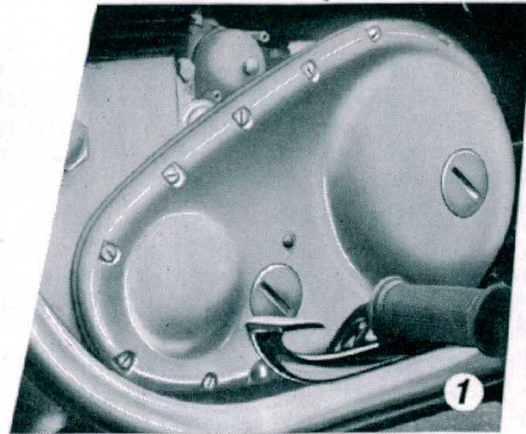
Stop light, folding pillion footrests, air cleaner, luggage carrier, pannier equipment, sidecar steering damper, safety bars, detachable chromium plated tank panels, steering lock.

COMPETITION MODELS

For deviations from the standard specification see pages 8-9.

NEW FEATURES

1. All twin cylinder and single cylinder road machines are fitted with an attractive polished aluminium primary chaincase.
2. The contact breaker and automatic ignition control are shrouded by a detachable polished aluminium casting of integral appearance.
3. The new 50 watt A.C. generator. The stator is accurately and rigidly mounted in a new polished cast aluminium primary chaincase.
4. Quickly detachable rear wheel with swinging arm rear suspension readily adjustable for varying loads.



TECHNICAL INFORMATION

MODEL	G9	G11	GIICS	G3LS	G3LC	G3LCS	G80CS	G80S
Capacity c.c.	498	592			347	348	497	498
Engine: type	O.H.V.	O.H.V.			O.H.V.	O.H.V.	O.H.V.	O.H.V.
Bore/Stroke mm.	66×72.8	72×72.8			69×93	72×85.5	86×85.5	82.5×93
Compression ratio	8.0 or 7.0	7.4 or 6.75	8.5	7.5 or 6.5	6.5	9.9	8.7	7.3 or 6.3
No. of cylinders	2	2	2	1	1	1	1	1
Gear ratio: Top	5.25	5.0	5.0	5.8	6.5	6.5	5.8	5.0
Third	7.1	6.8	6.8	7.8	9.6	8.8	7.8	6.8
Second	9.3	8.9	8.9	10.3	15.5	11.5	10.3	8.9
First	14.0	13.4	13.4	15.5	21.3	17.4	15.5	13.4
Rear chain	$\frac{5}{8}$ "×0.360"	$\frac{5}{8}$ "×0.380"	$\frac{5}{8}$ "×0.380"	$\frac{5}{8}$ "×0.380"	$\frac{5}{8}$ "×0.380"	$\frac{5}{8}$ "×0.380"	$\frac{5}{8}$ "×0.380"	$\frac{5}{8}$ "×0.380"
Front chain	$\frac{1}{2}$ "×0.305"	$\frac{1}{2}$ "×0.305"	$\frac{1}{2}$ "×0.305"	$\frac{1}{2}$ "×0.305"	$\frac{1}{2}$ "×0.305"	$\frac{1}{2}$ "×0.305"	$\frac{1}{2}$ "×0.305"	$\frac{1}{2}$ "×0.305"
Tyres: Front	3.25"×19"	3.25"×19"	3.50"×19" or 3.00"×21"	3.25"×19"	2.75"×21"	3.00"×21"		3.25"×19"
Rear	3.50"×19"	3.50"×19"	4.00"×19"	3.25"×19"	4.00"×19"	4.00"×19"		3.50"×19"
Carburettor: Amal	Monobloc 376/6	Monobloc 376/78	Monobloc 376/78	Monobloc 376/5	Monobloc 376/59T	Monobloc 389/18	Monobloc 389/12	Monobloc 389/1
Choke size	1"	$1\frac{1}{16}$ "	$1\frac{1}{16}$ "	$1\frac{1}{16}$ "	$1\frac{1}{16}$ "	$1\frac{1}{8}$ "	$1\frac{3}{16}$ "	$1\frac{3}{16}$ "
Main Jet No.	220	280	280	210	210	270	440	260
Throttle slide No.	4	3½	4	3½	3	3	3	3½
Brakes: Front and rear		7"× $\frac{7}{8}$ "		7"× $\frac{7}{8}$ "		7"× $\frac{7}{8}$ "		7"× $\frac{7}{8}$ "
Petrol tank capacity (galls.)	3½	3½	2	3½	2	2	2	3½
Oil tank capacity (pints)	4	4	4	4	4	4	4	4
Weight (lbs.)	394	396	380	375	320	326	329	387
Length	86½"	86½"	85½"	86½"	83"		85½"	86½"
Width	28"	28"	28"	28"	28"	28"	28"	28"
Height	41½"	41½"	43"	41½"	43"	43"	43"	41½"
Clearance	5½"	5½"	6½"	5½"	10"	6½"	6½"	5½"
Wheelbase	55½"	55½"	55½"	55½"	54"	55½"	55½"	55½"
Seat height	31½"	31½"	32½"	31½"	32½"	32½"	32½"	31½"

GUARANTEE

NOTICE. We do not appoint agents for the sale on our behalf of our motorcycles or other goods, but we assign to Motorcycle Dealers areas in which we supply to such Dealers exclusively for re-sale in such areas. No such Dealer is authorised to transact any business, give any warranty, make any representation, or incur any liability on our behalf.

GUARANTEE. We give the following guarantee with our motorcycles, motorcycle combinations and sidecars, which is given in place of any implied conditions, warranties and liabilities whatsoever, statutory or otherwise, all such implied conditions, warranties and liabilities being in all cases excluded. Any statement, description, conditions or representation contained in any catalogue, advertisement, leaflet or other publication shall not be construed as enlarging, varying or overriding this guarantee. In the case of machines (a) which have been used for 'hiring-out' purposes or (b) any motorcycle and/or sidecar used for any dirt track, cinder track or grass track racing or competitions (or any competition of any kind within an enclosure for which a charge is made for admission to take part in or view the competition), or (c) machines from which the trade mark, name or manufacturing number has been removed, no guarantee, condition or warranty of any kind is given or is to be implied. We guarantee, subject to the conditions mentioned below, that all precautions which are usual and reasonable have been taken by us to secure excellence of materials and workmanship, but this guarantee is to extend and be in force for six months only from date of purchase, and damages for which we make ourselves responsible under this guarantee are limited to the free supply of a new part in exchange for the part of the motor-

cycle combination or sidecar which may have proved defective. We do not undertake to replace or refix, or bear the cost of replacing or refixing such new parts in the motorcycle, motorcycle combination or sidecar. We undertake, subject to the conditions mentioned below, to make good at any time within six months any defects in these respects. As motorcycles, motorcycle combinations and sidecars are easily liable to derangement by neglect or misuse, this guarantee does not apply to defects caused by wear and tear, misuse or neglect. The term 'misuse' shall include amongst others the following acts:—

1. The attaching of a sidecar to a motorcycle in such a manner as to cause damage or calculated to render the latter unsafe when ridden.
2. The use of a motorcycle or of a motorcycle and sidecar combined, when carrying more persons or a greater weight than that for which the machine was designed by the manufacturers.
3. The attaching of a sidecar to a motorcycle by any form of attachment not provided, supplied or approved by us, or to a motorcycle which is not designed for such use.

Any motorcycle, motorcycle combination or sidecar sent to us to be plated, enamelled or repaired will be repaired upon the following conditions, i.e., we guarantee that all precautions which are usual and reasonable have been taken by us to secure excellence of materials and workmanship, such guarantee to extend and be in force for three months only from the time such work shall have been executed or until the expiration of the six months above referred to, and this guarantee is in lieu and in exclusion of any common law or statute, warranty or condition, and the damages recoverable are limited to the cost of any further work which may

be necessary to amend and make good the work found to be defective.

CONDITIONS OF GUARANTEE. If a defective part should be found in our motorcycles, motorcycle combinations or sidecars, or in any part supplied by way of exchange before referred to, it must be sent to us CARRIAGE PAID, and accompanied by an intimation from the owner that he desires to have it repaired or exchanged free of charge under our guarantee, and he must also furnish us at the same time with the number of the machine, the date of the purchase, or the date when the alleged defective part was exchanged as the case may be.

Failing compliance with the above, such articles will lie here AT THE RISK OF THE OWNER, and this guarantee and any implied guarantee, warranty or condition shall not be enforceable.

We do not guarantee specialities such as tyres, saddles, chains, electrical equipment, lamps, etc., or any component parts supplied to the order of the Purchaser differing from standard specifications, supplied with our motorcycles, motorcycle combinations, sidecars, or otherwise.

THE MATCHLESS FREE SERVICE SCHEME. It is strongly recommended that owners of new Matchless Motorcycles should avail themselves of the free Service Scheme operated by all home Dealers, full details of which are given on the Card supplied with each machine.

NOTICE

All prices and specifications are subject to alteration without notice and all motorcycles and equipment are sold subject to the limited guarantee printed herein.

