Matchless

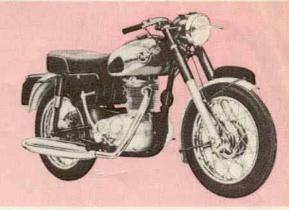
One of the most powerful machines in its class, this sleek 250cc is renowned for toughness and sterling performance ... ideal for both the beginner and established enthusiast.

250cc

ENGINE 248cc o.h.v. single (70mm bore x 65mm stroke). Alloy cylinder head: stellite tipped valves: coil valve springs: built-up rockers: hiduminium push-rods: lever type cam followers: both cams on single shaft: steel connecting rod: caged roller big-end bearings: built-up crankshaft supported by roller, ball and plain bearings: rotary reciprocating plunger oil pump: ignition by battery and coil with independent emergency start circuit.

GEARBOX. Separate from engine, but polished side covers give appearance of unit construction with engine. 4 speeds: multi-plate clutch: duplex primary chain adjusted by rotation

of gearbox shell.
FRAME. Of brazed and bolted construction: pressed steel engine under-channel: short triangulated rear sub-frame: pivoted fork rear suspension controlled by Girling adjustable units. COLOUR FINISH. Cherry red and chrome and black accessory covers: usual parts are chrome plated . . . and most of the light alloy components are highly polished.





Based upon A.M.C.'s many years' design and manufacturing experience, the G3 combines ease of handling with

most remarkable economy.

ENGINE. 348cc o.h.v. single (72mm bore x 85.5mm stroke). Alloy cylinder head: stellite tipped valves: hairpin valve springs: built-up rockers: hiduminium pushrods mushroom type cam followers: separate cam wheels: built-up crankshaft, with individually balanced steel fly wheel and two-piece crankpin, supported by two ball, one roller main bearings: duralumin caged roller big-end bearing: steel connecting rod: alloy piston: cast iron cylinder barrel with integral pushrod tunnels: gear type oil pump: ignition by battery and coil with independent emergency start circuit.
GEARBOX. Separate four speed box: wide tooth heavy duty pinions: multi-

plate clutch with integral rubber vane shock absorber: primary drive housed

in cast alloy oil bath.

350cc

COLOUR FINISH. All black and chrome.



500cc

Apart from a few components, which would otherwise make it unsuitable for roadwork, the G80 engine is identical to those used by A.M.C. works riders in tele-

scrambles series.

ENGINE, 497cc o.h.v. single (86mm bore x 85.5mm stroke). Alloy cyilnder head: stellite tipped valves: hairpin valve springs: built-up rockers: hiduminium pushrods: mushroom type cam followers: separate cam wheels: built-up crankshaft, with individually balanced steel fly wheels and twopiece crankpin, supported by two ball, one roller mein bearings: duralumin caged roller big-end bearing: steel connecting rod: alloy piston: cast iron cylinder barrel with integral pushrod tunnels: gear type oil pump: ignition by battery and coil with independent emergency start circuit.
GEARBOX. Separate four speed box: wide tooth heavy duty pinions: multi-

plate clutch with integral rubber, vane shock absorber: primary drive housed

in cast alloy oil bath. COLOUR FINISH. All black and chrome.

Well-known for good all-round pulling power, this big, beefy 650cc twin sets new standards for reliability and stamina.

tor reliability and stamina.

ENGINE. 646cc o.h.v. vertical
twin (72mm bore x 79.3mm
stroke). Both the barrels and
heads are separate for ease of
maintenance. Alloy cylinder
heads: stellite tipped valves: coil valve springs: one piece rockers adjustable by eccentric spindles: hiduminium push-rods: lever cam followers: separate gear-driven camshafts: one piece three bearing crankshaft plain big-end bearings: forged alloy connecting rods: alloy pistons: cast-iron cylinder barrels: two separate camshaft driven gear type oil pumps: ignition by battery and coil. GEARBOX. Separate four speed

box: wide tooth heavy duty pinions: multi-plate clutch with integral rubber vane shock

absorber.
FORKS. "Roadholder" forks with built-in thief proof lock: progressive two way oil damping: single rate springs housed within large diameter heat treated tubular stanchions: light alloy sliders, with chromed steel extensions. COLOUR FINISH, All black and chrome.

650cc 650cc



Speed . . . Safety . . . Handling Ease . . . A.M.C.'s winning formula - translated here into this exceptional twin. Steppedup speed which does not affect the low

down flexibility of the motor when fitted with the optional extra

Safety—summed-up by top-rate roadholding and braking, goes hand in hand with steering light enough to ensure complete handling ease. Specification is similar in many respects to the standard 650cc twin, but the following alterations.

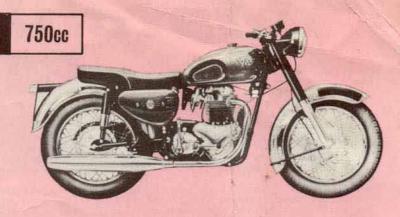
ENGINE. Highly tuned with 8.5:1 compression ratio, Magneto ignition.

MUDGUARDS. Chrome plated steel blades. COLOUR FINISH. Black frame, fork covers etc., with cherry red and chrome petrol tank and cherry red oil tank and toolbox.

The most oustanding Matchless qualities are blended powerfully with the potent Atlas engine, resulting in exciting performance, coupled with superb roadholding and braking.

ENGINE 750cc o.h.v. vertical twin (73mm bore x 89mm stroke); alloy cylinder head; parallel induction tracts with large diameter inlet valves; forged steel rockers; alloy pushrods; iron alloy tappets; single high performance camshaft; built up forged steel crankshaft with large diameter central iron flywheel: plain big end bearings; two piece connecting rods; alloy pistons; cast iron cylinder: gear type oil pump; carburation by twin Amal Monoblocs: ignition by Magneto with automatic advance and retard. FORKS. "Roadholder" with built in thief proof lock: two way oil damping: large diameter heat treated tubular steel stanchions: alloy sliders with chromed steel extensions.

COLOUR: All black and chrome.



G15CSR

G15

G85CS

500cc

750cc A super sports machine of very high performance designed to meet the special needs of the British enthusiast.

ENGINE. Magneto Ignition with auto advance unit.
FRAME. Duplex type bolted and brazed construction, using malleable lugs where necessary for strength.

SUSPENSION. Teledraulic front fork. Light alloy fork sliders. Swinging arm rear suspension supported by two plain bearings, lubricated from a built-in reservoir of 1½ ounces capacity. FINISH. Red oil tank, Toolbox, Red and Chrome Tank, Chrome chainguard, suspension unit covers and springs. Polished alloy mudguards. Chrome plated Headlamp and Speedo/Rev. counter plate. Frame parts Black Enamel.

Rugged construction and reliable power unit . . . two important characteristics of the G85/CS specification, a specification tailored to the needs of the scrambles enthusiast

specification failored to the needs of the scrambles entitistant. ENGINE, 497cc (86mm x 85.5mm). All alloy o.h.v. single developed solely for scrambling. I\(\frac{1}{2}\)" Amal Grand Prix carburettor: alloy cylinder head with shrunk in valve seats and central plug. Racing hairpin valve springs: special high lift cams. Built up steel crankshaft assembly suported on two ball and one roller bearings. C.R.12.5.1. Gear type oil pump: competition supports high lead come subsets the magneto: high level open exhaust pipe.
GEARBOX. Four speed with wide tooth heavy duty pinions.

FRAME. Brazed up using chrome-Molybdenum steel tubing througout twin

down and seat tubes braced with malleable iron head lug. REAR SUSPENSION. Constructed with chrome-Molybdenum steel tubing supported on silent black bushes heavy duty chain adjusters: fully adjustable damped units.

FORKS. Special design for scrambling, long movement two way damping:

rubber gaiters, heat treated tubes.
MUDGUARDS. Polished alloy.
WHEELS. Front 3.00 x 20—Rear 4.00 x 18 competition tyres.
HUBS AND BRAKES. Alloy front hub 7" brake supported on 2 ball bearings. Elektron rear hub 84" brake supported on roller and ball bearings.
PETROL TANK, 2 gallon glass fibre rubber mounted.

PETROL TANK, 2 gallon glass fibre rubber mounted.
OIL TANK, Light alloy mounted above gearbox. Cap. 5 pts.

HANDLEBARS. Adjustable fitted with ball ends to controls.



Model	G2CSR	G3	G80	G12	G12CSR	G15	GISCSR	G85CS
Engine	OH. V 248	OH.V 348	OH.V 498	OH.V 646	он.у	OH.V 745	он.у	OH.V 498
Bore and Stroke	70 x 65	72 x 85.5	86 x 85.5	72 x 79.3	72 x 79.3	73 x 89	73 x 89	86 x 85.5
CR	9.5	8.8	7.6	7.5	8.5	7.6	7.6	12.5
Carburettor	Amal Mono	Amal Mono	Amal Mono	Amal Mono	Amal Mono	Amal Mono	Amal Mono	Amal GP
Gear Ratios	contail.	1947	and a	H. C.	I second and a second		Carried Street	120000000000000000000000000000000000000
Тор	6.5	5.5	4.79	4.6	4.3	4.5	4,2 5.1	7.5 9.1
Third	8.05	6.7	5.8	5.6	5.3	5.5	5.1	
Second	11.7	9.4	8.1	7.8	7.3	7.7	7.2	12.7
First	17.9	14.1	12.3	11.8	11.1	11.5	10.8	19.1
Electrics	Wipac	Lucas	Lucas	Lucas	Lucas	Lucas	Lucas	-
Cl	6V	6V	6V	12V	12V -	12V	12V	1
Chain Front	Duplex	½ x 305	₹ × .305	₹ x .305	½ x .305	1 x .305	₹ x .305	4 x .305
Chains Rear Tyres Front	½ x .305 3.25 x 17	\$ x .380 3.25 x 18	3.25 x 18	1 x .380 3.25 x 18	\$ x .380 3.25 x 18	3.25 x 18	∦ x .380	₹ x .380
Tyres Rear	3.25 x 17	3.25 x 18	3.50 x 18	3.50 x 18	3.50 x 18	4.00 x 18	3.25 x 18 3.50 x 18	3.00 x 20 4.00 x 18
Brake Diameter Front	6" x 11	8" x 1½	8" x 14		8" x 14	8" x 14	8" x 14	7" x 14
Brake Diameter Rear	6" x 1	7" x 14	7" x 11	8" x 1\frac{1}{4}	7" x 14	7" x 14	7" x 14	84 x 14
Petrol Tank (Gallons)	6" x i 3½ 2½ 29‡"	44			41	41	41	3 x 12
Oil Tank (Pints)	21	4	41/4	41/4	44 4	41/4	41/4	2 5 33"
Seat Height	291"	291"	291"	29}"	291"	29}"	32"	33"
Wheel Base	53"	55 13/32"	55 13/32"	55 13/32"	55 13/32"	55 13/32"	55 13/32"	567"
Ground Clearance	51/"	5+"	51"	5½"	51"	51/	51/	567" 8½"
Weight (lbs.)	330	390	399	426	426	426	426	291



MATCHLESS MOTOR CYCLES LTD.

ANG first and foremost makers of motor cycles

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