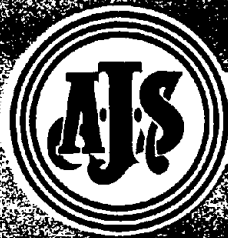


A PLEASURE TO OWN—A JOY TO RIDE



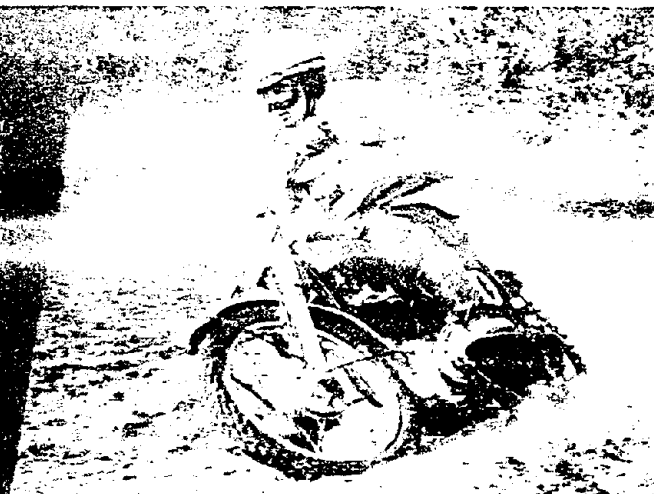
QUALITY MOTOR CYCLES for 1958

To motorcyclists throughout the world, the name A. J. S. is automatically associated with quality, high performance, unfailing reliability, and superb finish. Never have these characteristics been more apparent than on the 1958 range of models described in this catalogue.

Behind each model is an unprecedented background of knowledge and experience extending over many years and a worldwide dealer organization equipped to give service and to ensure complete satisfaction.

The 1958 Programme includes models designed specifically for every purpose: Touring, Trials, Scrambles, and Racing—all are catered for by the comprehensive range of models which command universal approval.

*AJS—A PLEASURE TO OWN
—A JOY TO RIDE*



A-J-S MOTOR CYCLES

Proprietors: ASSOCIATED MOTOR CYCLES LTD

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

Telephone: WOOLWICH 1223. Telegrams: ICANHOPIT, LONDON TELEX

Telex No. 22617

Individually built and bench tested to an acceptance figure of 38 B.H.P. each Model 7R is supplied ready for immediate racing under current F.I.M. regulations.

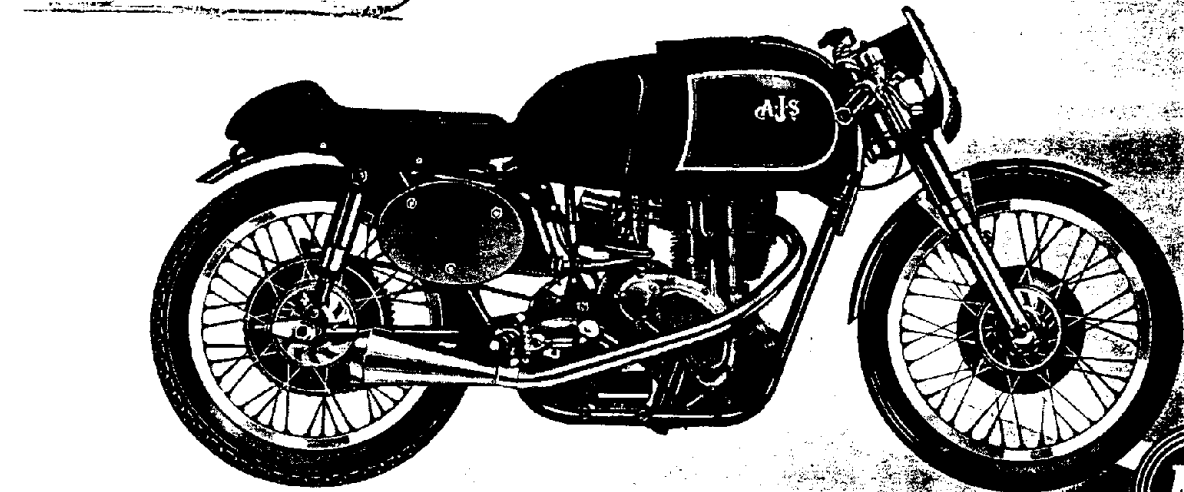
Capacity 349 c.c. Bore 75.5 mm. Stroke 78 mm.

Single cylinder, chain driven O.H.C., Magnesium alloy crankcase, etc., light alloy cylinder head, shrunk in valve seats, steel disc flywheels, roller bearing big end bearing with duralumin cage, twin gear oil pumps, Grand Prix Amal carburettor, Lucas racing magneto, welded duplex cradle frame, rear swinging arm, oil damped telescopic forks and rear spring units. 8½" diameter brakes, magnesium alloy hubs, straight spokes; 4-speed close ratio gearbox; light alloy wheel rims 2.75" x 19" front, 3.25" x 19" rear Dunlop racing tyres; 5 gallon petrol, 8 pints oil light alloy tanks; flexibly mounted rev. counter.

Model

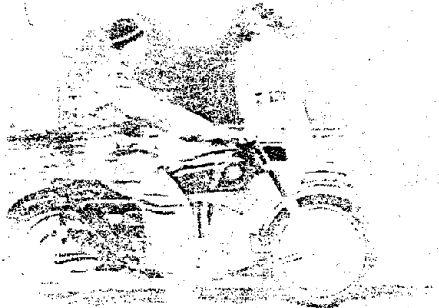
7R

349 c.c. O.H.C.



The most successful 350 c.c. production racing motor cycle in the world.

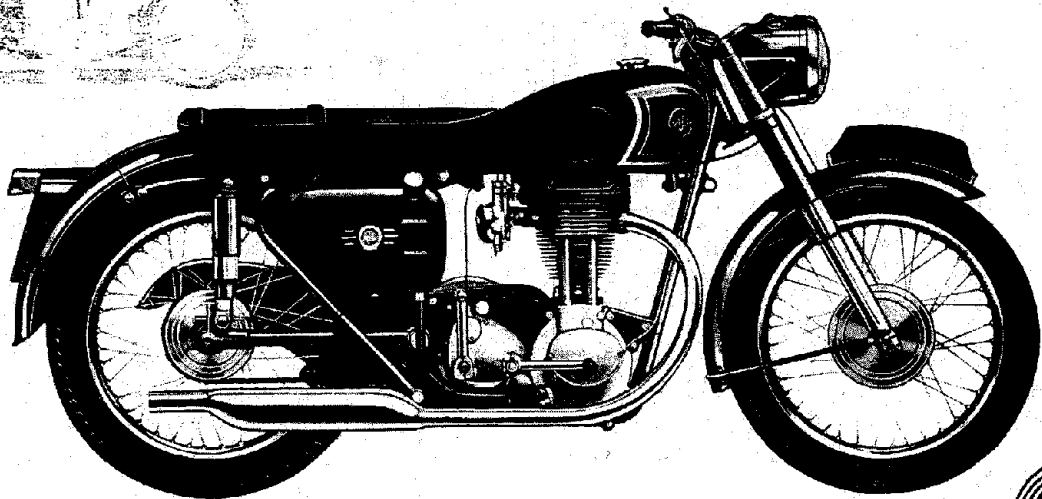




Model

16MS

347 c.c. O.H.V.



**A clean and efficient O.H.V. 350 that provides a highly satisfactory performance
with comfort and economy.**

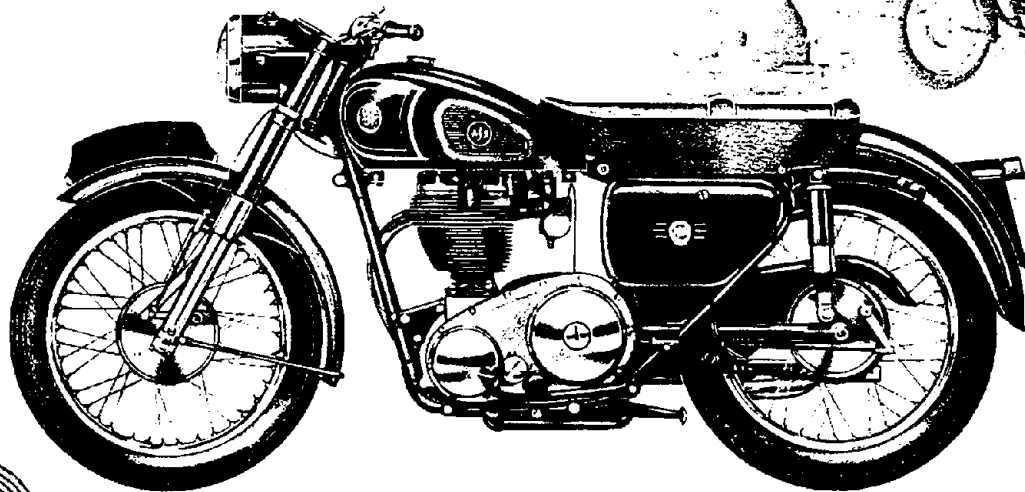
For full specification see pages 14 and 15.



Model

18S

498 c.c. O.H.V.



Quiet and tractable but capable of a high maximum speed the Model 18S is the ideal all-purpose mount.

For full specification see pages 14 and 15

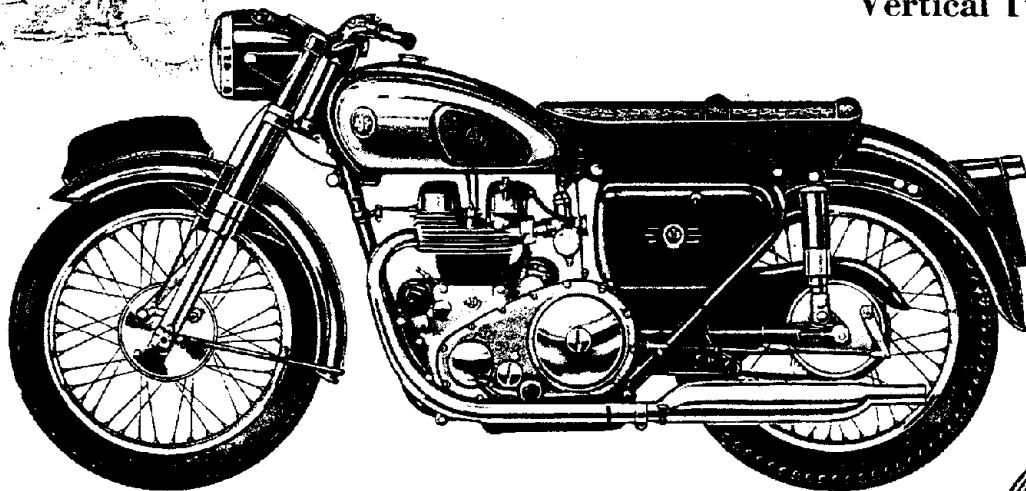


Model

20

498 c.c. O.H.V.

Vertical Twin



A model of great technical interest that provides an outstanding performance with unflinching reliability.

For full specification see pages 14 and 15.

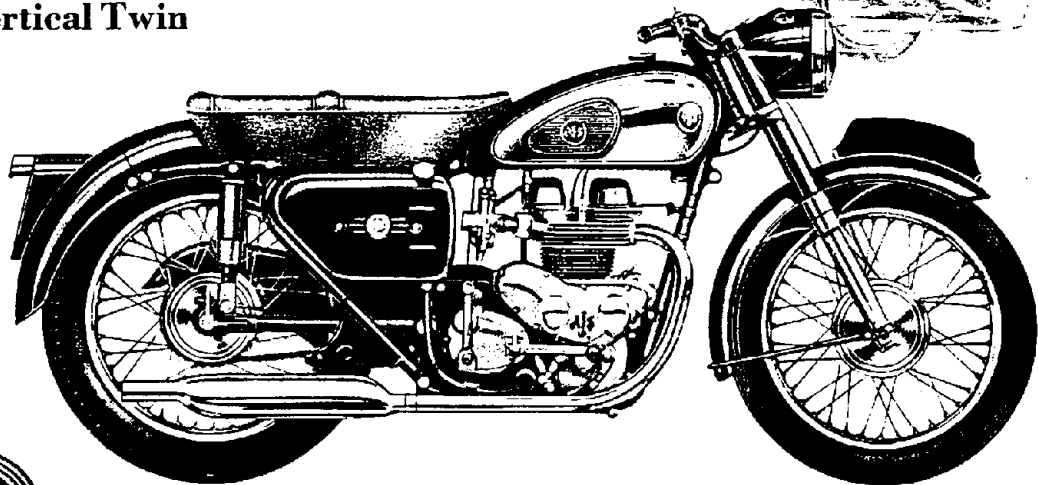


Model

30

600 c.c. O.H.V.

Vertical Twin



For the high speed enthusiast who requires an exceptional performance that can be used to the full with absolute safety.

For full specification see pages 14 and 15.

ENGINE. O.H.V. single-cylinder of 350 c.c. and 500 c.c. capacity. Model 16MCS 348 c.c. (bore 72 mm., stroke 85.5 mm.). Model 18CS 497 c.c. (bore 86 mm., stroke 85.5 mm.). Special features are twin camshafts, racing cams, racing hairpin valve springs and fully enclosed valve gear. The crankshaft assembly

comprises steel flywheels, high tensile steel connecting rod and large diameter caged roller big end bearing. A high compression racing piston is fitted and the cylinder is a die-cast light alloy casting with an iron liner. Lubrication is by dry sump with direct feed to big end bearing and valve gear.

CARBURETTOR. Amal Monobloc. 350 c.c. $1\frac{1}{4}$ " bore. 500 c.c. $1\frac{1}{4}$ " bore.

IGNITION. Lucas waterproof magneto.

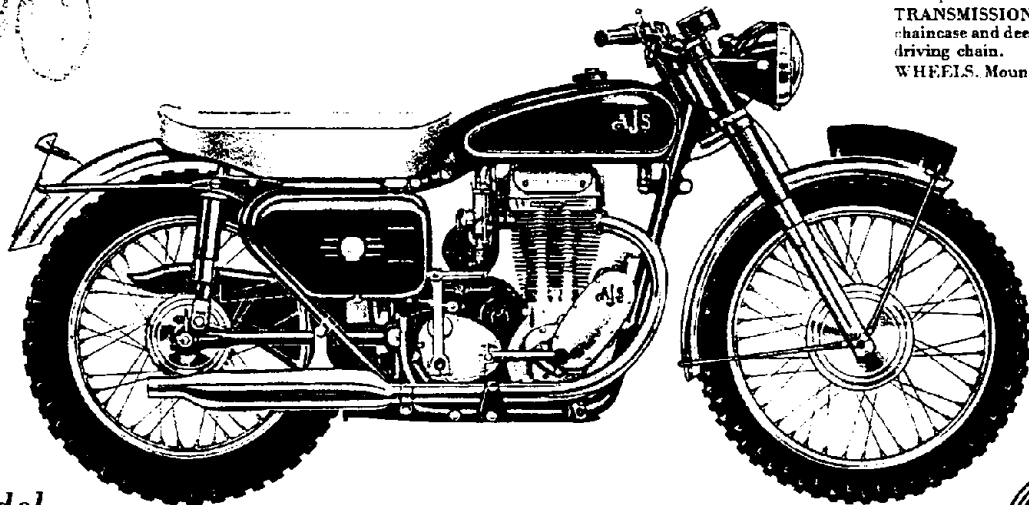
FORKS. Teledraulic with oil damping.

FRAME. Special Duplex cradle with swinging arm rear suspension. All joints are brazed.

GEAR BOX. A-J-S heavyweight with four speeds and multi-plate clutch.

TRANSMISSION. Oil bath primary chaincase and deep section guard for the driving chain.

WHEELS. Mounted on adjustable tap-



Model

16MCS

348 c.c. O.H.V.

Designed specifically for cross country speed events the Model 16MCS is exceptionally fast and steers magnificently.



MODELS

er roller bearings and fitted with full width light alloy hubs, wide rims and extra heavy straight spokes. Special heat treated rear spindle.

TYRES. Dunlop 'Knobbly' with security bolts. 3.00" x 21" front. 4.00" x 19" rear.

MUDGUARDS. Both front and rear are of polished light alloy with tubular steel stays.

SEAT. Special twinseat of Dunlopillo covered with Vynide.

FOOTRESTS. Substantial rests of forged steel.

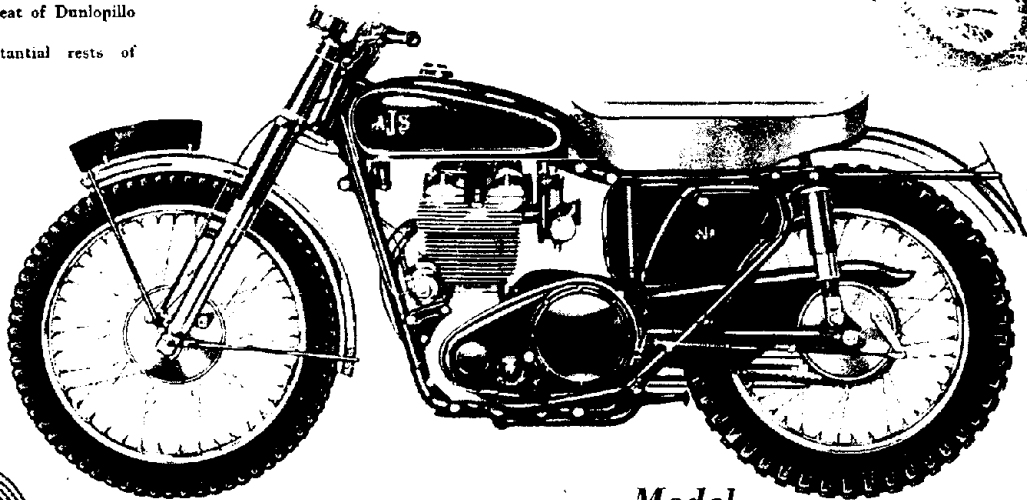
TANKS. Light alloy petrol tank of two gallon capacity. Steel oil tank.

FINISH. Black stoved enamel on Bonderized surface. Polished light alloy and chromium plate.

EQUIPMENT. Steel crankcase shield. Speedometer. Tool kit. Prop stand. Spring-up central stand.

OPTIONAL EQUIPMENT. 3½ gallon petrol tank. 2 gallon steel petrol tank. Standard gear ratios. Standard wheels and tyres.

OPTIONAL EXTRAS. Quickly detachable lighting equipment. Quickly detachable rear wheel.



With its oversquare racing type engine the Model 18CS has proved consistently successful in Scrambles from Sweden to Australia.

Model

18CS

497 c.c. O.H.V.

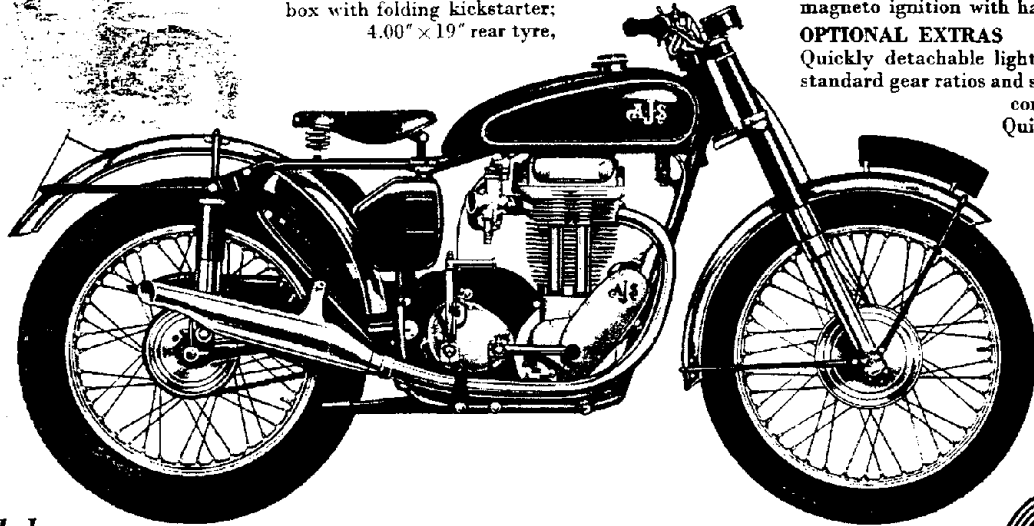
COMPETITION MODEL

The Model 16MC differs from the standard specification in the following major respects:
Short wheelbase, high ground clearance frame of welded construction; adjustable waterproof saddle; small capacity light alloy tank; wide ratio gear box with folding kickstarter;
4.00" x 19" rear tyre,

2.75" x 21" front tyre—Trials Universal; very heavy gauge straight spokes; polished light alloy mudguards; Lucas waterproof magneto; crankcase shield; light alloy cylinder barrel retained by through bolts; magneto ignition with hand control.

OPTIONAL EXTRAS

Quickly detachable lighting equipment, standard gear ratios and standard or high compression ratio.
Quickly detachable rear wheel.



Model

16MC

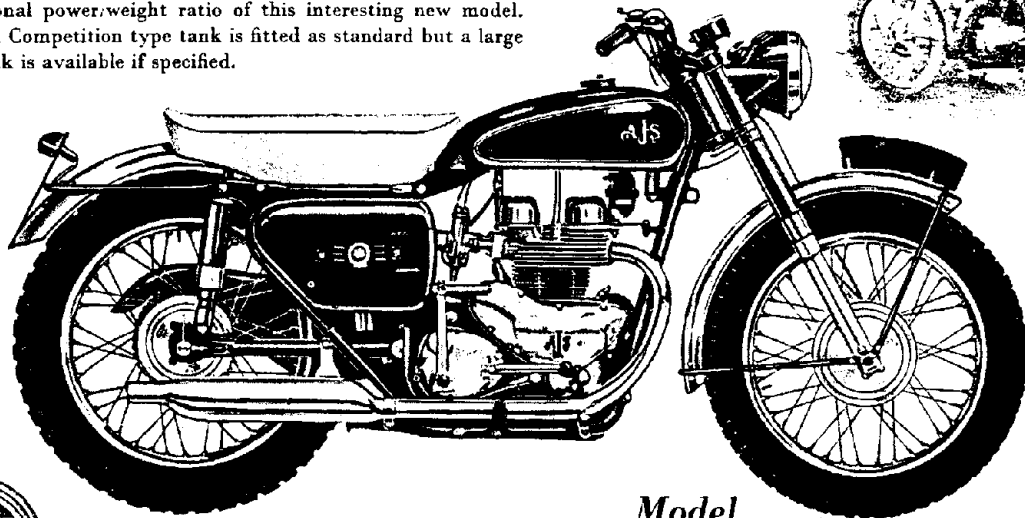
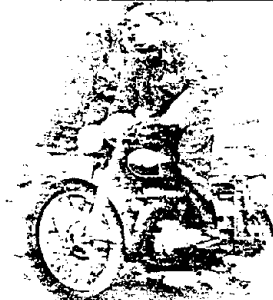
347 c.c. O.H.V.

Short wheelbase, high ground clearance, light weight, perfect balance, excellent slow running, carefully chosen wide ratio gears—tailor made for the Trials enthusiast.



THE NEW 600 c.c. SPORTS TWIN

Designed primarily for the North American market, the new Sports Twin consists of a high compression, high power output version of the 600 c.c. twin cylinder engine fitted to the Scramble frame, which has been redesigned to take either the single cylinder or twin cylinder engine. A siamesed exhaust system and single silencer contribute to the exceptional power/weight ratio of this interesting new model. The 2 gallon Competition type tank is fitted as standard but a large capacity tank is available if specified.



Model

For the enthusiast whose special requirements necessitate low weight, perfect handling at all speeds and an exceptional power output.

30CS

600 c.c. O.H.V.

A.J.S. SUCCESSES

G. L. JACKSON

Innumerable successes
in major trials

W. NILSSON

1957 World Moto-cross Champion

G. H. WARD

Winner of Experts Grand National
Shrubland Park Scramble

G. A. MURPHY

1957 T.T. Races, Motorecycling Challenge Cup



TECHNICAL DATA

MODEL	16MC	16MS	18S	20	30	30CS	16MCS	18CS
Bore/Stroke (mm.)	69 × 93		82.5 × 93	66 × 72.8	72 × 72.8		72 × 85.5	86 × 85.5
Capacity (c.c.)	347		498	498	592		348	497
No. of cylinders	1		1	2	2		1	1
Compression ratio	6.5	7.5 or 6.5	7.3 or 6.3	8.0 or 7.0	7.4 or 6.75	8.5	9.9	8.7
Carburettor: Amal	Monobloc 376/59T	Monobloc 376/5	Monobloc 389/1	Monobloc 376/6	Monobloc 376/78	Monobloc 376/78	Monobloc 389/18	Monobloc 389/12
Choke size	1 $\frac{1}{16}$ "	1 $\frac{1}{16}$ "	1 $\frac{1}{8}$ "	1	1 $\frac{1}{16}$ "	1 $\frac{1}{16}$ "	1 $\frac{1}{8}$ "	1 $\frac{1}{8}$ "
Throttle Slide No.	3	3 $\frac{1}{2}$	3 $\frac{1}{2}$	4	3 $\frac{1}{2}$	4	3	3
Main Jet No.	210	210	260	220	280	280	270	440
Tyres: Rear	4.00" × 19"	3.25" × 19"	3.50" × 19"	3.50" × 19"	3.50" × 19"	4.00" × 19"	4.00" × 19"	
Front	2.75" × 21"	3.25" × 19"	3.25" × 19"	3.25" × 19"	3.25" × 19"	3.00" × 21"	3.00" × 21"	
Brake dimensions	7" diam. × $\frac{1}{2}$ " wide		7" diam. × $\frac{1}{2}$ " wide		7" diam. × $\frac{1}{2}$ " wide		7" diam. × $\frac{1}{2}$ " wide	
Gear ratios: Top	6.5	5.8	5.0	5.25	5.0	5.0	6.5	5.8
Third	9.6	7.8	6.8	7.1	6.8	6.8	8.8	7.3
Second	15.5	10.3	8.9	9.3	8.9	8.9	11.5	10.3
First	21.3	15.5	13.4	14.0	13.4	13.4	17.4	15.5
Chains: Rear	$\frac{3}{8}$ " pitch × 0.380" width		$\frac{3}{8}$ " pitch × 0.380" width		$\frac{3}{8}$ " pitch × 0.380" width		$\frac{3}{8}$ " pitch × 0.380" width	
Front	$\frac{1}{2}$ " pitch × 0.305" width		$\frac{1}{2}$ " pitch × 0.305" width		$\frac{1}{2}$ " pitch × 0.305" width		$\frac{1}{2}$ " pitch × 0.305" width	
Seat height	32 $\frac{1}{2}$ "	31 $\frac{1}{2}$ "	31 $\frac{1}{2}$ "	31 $\frac{1}{2}$ "	31 $\frac{1}{2}$ "		32 $\frac{1}{2}$ "	
Ground clearance	10"	5 $\frac{1}{2}$ "	5 $\frac{1}{2}$ "	5 $\frac{1}{2}$ "	5 $\frac{1}{2}$ "	6 $\frac{1}{2}$ "	6 $\frac{1}{2}$ "	
Overall width	28"		28"		28"		28"	
Overall length	83"	86 $\frac{1}{2}$ "	86 $\frac{1}{2}$ "	86 $\frac{1}{2}$ "	86 $\frac{1}{2}$ "	85 $\frac{1}{2}$ "	85 $\frac{1}{2}$ "	
Overall height	43"	41 $\frac{1}{2}$ "	41 $\frac{1}{2}$ "	41 $\frac{1}{2}$ "	41 $\frac{1}{2}$ "	43"	43"	
Wheelbase	54"	55 $\frac{1}{2}$ "	55 $\frac{1}{2}$ "		54 $\frac{1}{2}$ "		55 $\frac{1}{2}$ "	
Weight (lbs.)	320	375	387	394	396	380	326	329
Oil tank capacity (pints)	4		4		4		4	
Petrol tank capacity (galls.)	2	3 $\frac{1}{2}$	3 $\frac{1}{2}$		3 $\frac{1}{2}$		2	

SPECIFICATION

FRAME

Duplex cradle type with malleable lugs and brazed construction. Integral pillion footrests and sidecar lugs. Swinging arm mounted on self-lubricating bearings and controlled by oil-damped suspension units.

MUDGUARDS

Highly efficient design with tubular stays and detachable rear section for wheel accessibility.

BRAKES

7" diameter internal expanding front and rear. Accommodated in full width light alloy hubs with straight spokes. Adjustable taper roller bearings and finger and shim adjustment to both brakes.

FORKS

Self-lubricating A-J-S Teledraulic with oil damping. 3-rate springs and polished sliders.

FOOTRESTS

Rubber covered and adjustable.

STANDS

A prop and centre stand are fitted to all models. Both are of the spring-up type.

TYRES

Dunlop—rear studded, front ribbed.

The 350 c.c. Model has a 3.25"×19" rear tyre.

The 500 c.c. Single-cylinder Model and the

Twin-cylinder Models have a 3.50"×19" rear tyre.

The front tyres of all standard models are 3.25"×19".

See separate specification for details of Competition Models.

TOOL BOX

Pressed steel and mounted on the left-hand side of the machine. It is of large capacity and the front portion shrouds the battery.

ELECTRICAL EQUIPMENT

Electric horn. 6-volt 12 amp./hour battery, combined dipper switch and horn button mounted on the handlebar. 7" headlamps are fitted to all road models. The illuminated speedometer is flush mounted in the headlamp shell. The rear lamp is a plastic moulding and incorporates a reflector.

See Engine specification for generator details.

TRANSMISSION

The primary chain is enclosed within a polished alloy chaincase. An inspection cap is provided so that the chain tension may be checked. A deep and efficient guard protects the whole of the top run of the rear chain.

GEAR BOX

The A-J-S gear box is of robust design with four speeds, kickstarter, multi-plate dry clutch and foot operated positive stop gear change.

SEAT

Luxurious twinseat of exclusive design. Vynide covered Dunlopillo.

TANKS

The petrol tank is of pressed steel with welded seams. It is fitted with a quick-action filler cap, two taps and is rubber mounted. The oil tank is of pressed steel and has a capacity of 4 pints.

FINISH

Three coats of best quality stoved enamel on Bonderized surface. Wheel rims, exhaust system, handlebars, etc., heavily chromium plated. Timing case, fork sliders, primary chaincase, etc., highly polished. The tank of the Model 30 is Royal Blue with detachable chromium plated panels.

CARBURETTOR

An Amal Monobloc is standard for all models. The throttle is controlled by a twist grip and air control is by a handlebar mounted lever.

EQUIPMENT

Illuminated speedometer, ammeter, electric horn, comprehensive tool kit, tyre pump and a full instruction book.

OPTIONAL EQUIPMENT

Low compression piston, studded front tyre.

OPTIONAL EXTRAS

Air cleaner, safety bars, steering lock, stop light, pillion footrests, luggage carrier and pannier equipment, chromium plated tank panels.

SPECIFICATION

ENGINES

Twin Cylinder

Single port with overhead valves and manufactured in two capacities:

500 c.c. (66 mm. bore \times 72.8 mm. stroke).

600 c.c. (72 mm. bore \times 72.8 mm. stroke).

An outstanding feature of this engine is the extreme rigidity and immense strength of the entire unit. This has been obtained by using a one-piece, three bearing crankshaft, a die-cast crankcase of spherical section, and separate cylinder heads and barrels. Caged roller bearings support the crankshaft on the timing and driving sides, and a plain Vandervell at the centre. Plain Vandervell big end bearings are fitted to the forged light alloy connecting rods. Long holding down studs which pass right through the cylinder heads and barrels into the crankcase, contribute to engine rigidity.

Gear driven twin camshafts, forged rockers mounted on eccentric spindles to facilitate adjustment and alloy push rods operate the valves. The valve gear is fully enclosed by die-cast covers.

The famous controlled expansion wire-wound pistons are used. These pistons carry three rings. The top compression ring is chromium plated for long life.

The die cast light alloy cylinder heads are heavily finned and incorporate integral rocker supports and cast in valve seats.

Deeply spigotted into the crankcase, for maximum support, the cylinders are machined from high grade close grain cast iron.

Twin gear pumps of large capacity and driven direct from the camshafts, operate the dry sump lubrication system. The delivery pump feeds oil from the separate tank, under pressure, to all moving parts via the centre crankshaft bearing. Oil is returned from the sump by the scavenge pump. The system includes three filters, a metal gauze filter in the feed line, a fabric filter in the crankcase and a magnetic filter in the sump.

The Lucas magneto, which is fitted with a manual control is flange mounted to the timing case behind the cylinders, and the 60-watt dynamo is mounted in a machined recess in the front of the crankcase. Both are gear driven.

The engine of the Model 30CS is fitted with high compression pistons, etc., which is responsible for its higher power output.

Single Cylinder

Single port with overhead valves and manufactured in two capacities:

350 c.c. (69 mm. bore \times 93 mm. stroke).

500 c.c. (82.5 mm. bore \times 93 mm. stroke).

These highly developed O.H.V. single cylinder engines are capable of maintaining their maximum performance for long periods without loss of efficiency and with complete reliability.

The robust crankshaft assembly consists of individually balanced flywheels, two piece

crankpin, triple row caged roller big end bearing and a forged high tensile steel connecting rod. The die cast light alloy crankcase supporting this assembly incorporates two large diameter ball races on the drive side and a plain flanged bronze oil distributor bearing on the timing side.

Both the iron cylinder and the die cast light alloy cylinder head are deeply finned, the valve seats are cast in and the stellite tipped chromium plated valves are operated by Duralumin push-rods, double hairpin valve springs and twin cam wheels.

The possibility of seizure is virtually eliminated by the use of a controlled expansion wire wound piston.

A high output A.C. Generator is directly driven by the drive side mainshaft and the stator is rigidly mounted in the cast aluminium primary chaincase, which in turn is spigotted into the crankcase to ensure perfect alignment.

If the ignition switch is left on accidentally, an emergency position is provided which permits direct ignition. The contact breaker is enclosed on the timing side and driven from the inlet camshaft. Control is automatic.

Positive lubrication to all moving parts is provided by the comprehensive dry sump system and oil is circulated by a duplex rotary reciprocating plunger pump driven from the timing side mainshaft. The feed pipe from the separate oil tank is fitted with a gauze filter and the crankcase drain plug incorporates a magnetic filter.

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 authorized 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 or liabilities whatsoever, statutory or otherwise, all such implied conditions, warranties and liabilities being in all cases excluded. Any statement, description, condition 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 motorcycle, motorcycle 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 con-

dition, 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 specification, supplied with our motorcycles, motorcycle combinations, sidecars or otherwise.

THE A-J-S FREE SERVICE SCHEME

It is strongly recommended that owners of new A-J-S 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.