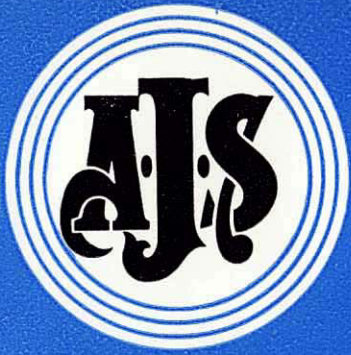


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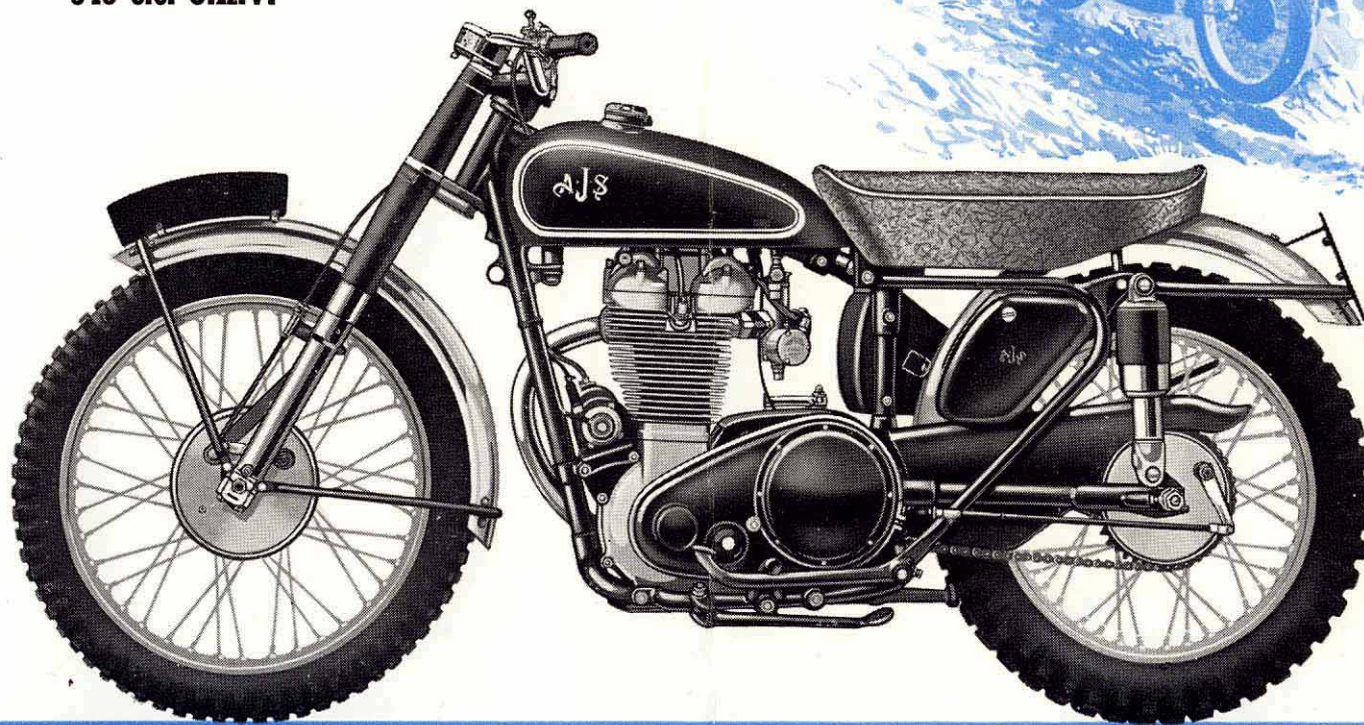
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2  
EXCITING  
NEW



# MOTO-CROSS MODELS

**Model**  
**16MCS**  
**348 c.c. O.H.V.**



In designing these two new Moto-cross Models every effort has been made to take full advantage of the invaluable experience gained by actual participation in innumerable International events.



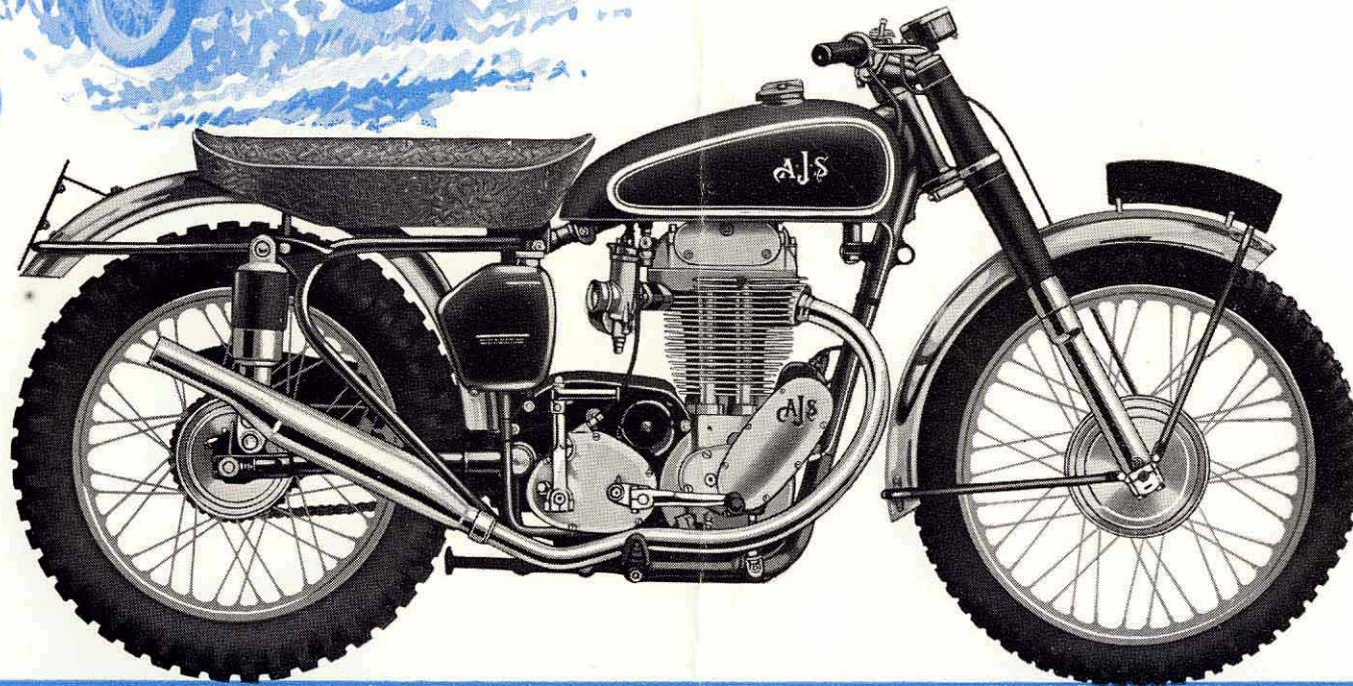
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**Model**

**18CS**

497 c.c. O.H.V.



Special attention has been paid to the question of suspension and steering in order that full advantage may be taken of the high maximum power and colossal acceleration provided by the new short stroke racing-type engine.

## SPECIFICATION

**ENGINE.** O.H.V. single cylinder of 350 cc. and 500 cc. capacity. Model 16 MCS 348 cc. (bore 72 mm., stroke 85.5 mm.). Model 18 CS 497 cc. (bore 86 mm., stroke 85.5 mm.). Special features are twin camshafts, racing cams, Duralumin push rods, racing hairpin valve springs and fully enclosed valve gear. The cranks, all assembly, prisms steel flywheels, high-tensile steel connecting rod, large diameter crankpin and a caged roller big-end bearing. A high compression racing piston is fitted. The cylinder head is a light-alloy die-casting and the cylinder barrel is a light-alloy casting with an iron liner. Lubrication is by dry sump with direct feed to the valve gear and the big-end bearing.

**CARBURETTOR.** Amal, Monobloc.

**IGNITION.** Lucas water-proof magneto. The ignition is manually controlled.

**FORKS.** 'Teledraulic' with oil damping.

**FRAME.** Duplex cradle with 'Teledraulic' suspension. All joints are brazed.

**GEARBOX.** Heavyweight with 4 speeds and multi-plate clutch. The kick-starter has a folding pedal. Ratios to suit Moto-Cross events.

**TRANSMISSION.** Oilbath primary chain case and deep section guard for the driving chain.

**WHEELS.** Mounted on adjustable taper roller bearings, and fitted with full-width light-alloy hubs, wide rims and extra heavy straight spokes.

**BRAKES.** 7 inch diameter by  $\frac{3}{4}$  inches wide.

**TYRES.** Dunlop 'Knobby'. Security bolts are fitted.

**MUDGUARDS.** Both front and rear are of polished light-alloy.

**HANDLEBARS.** Adjustable or both angle and height.

**SEAT.** Luxurious twinseat of Dunlopillo covered with black Vynide.

**FOOTRESTS.** Substantial rests of forged steel.

**EXHAUST SYSTEM.** Chromium plated pipe and silencer.

**TANKS.** Light-alloy petrol tank of 2-gallon capacity. Steel oil tank of  $\frac{1}{2}$ -gallon capacity.

**FINISH.** Black enamel on Bonderised surface. Polished light-alloy and chromium plate. The petrol tank is hand lined.

**EQUIPMENT.** Steel crankcase shield, speedometer, tool-box, light-alloy number plates and spring-up central stand.

**OPTIONAL EQUIPMENT.**  $3\frac{1}{4}$ -gallon petrol tank. Standard gear ratios. Standard wheels and tyres.

**OPTIONAL EXTRAS.** Exhaust pipe extension, quickly detachable electric lamps.

## TECHNICAL DATA

MODEL	16 MCS 350 c.c.	18 CS 500 c.c.
Compression ratio	9.9 to 1	8.7 to 1
Valve Timing Inlet opens b.t.d.c.	59°	
closes a.b.d.c.	69°	
Exhaust opens b.b.d.c.	74°	
closes a.t.d.c.	48°	
Carburettor Choke size (inch)	1-1/16	1-3/16
Amal Main Jet size	360	440
Ignition timing b.t.d.c.	41°	39°
Brake diameter and width (inches)	7 x 7/8	
Tyre sizes Front (inches)	3.00 x 21	
Rear (inches)	4.00 x 19	
Chain sizes Dynamo & Magneto	3/8 x 0.225	
(pitch x width inches) Primary	1/2 x 0.305	
Rear	5/8 x 0.380	
Gear ratios: Top, 3rd, 2nd, 1st	6.6, 8.6 11.2, 17.4	5.8, 7.6 9.9, 15.4
Ground clearance (inches)	6-1/2	
Overall height (inches)	43	
length (inches)	85-1/4	
width (inches)	28	
Seat height (inches)	32-1/2	
Wheelbase (inches)	55-1/4	
Weight (lb.)	321	324



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