

The
Austin

MOTOR COMPANY LTD.

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SALES/EAW/EGR/DH

29th March, 1963

CIRCULAR LETTER NO. 430.

TO:- ALL DISTRIBUTORS & MAIN DEALERS (CARS)

Dear Sirs,

Mini Cooper - 'S' Type.

Another variation of the ubiquitous Mini is shortly to be announced and will be known by the above title. It is a competitions version of the Mini Cooper Saloon with an engine based on the Cooper - B.M.C. power unit, which has been so successful in Formula Junior racing.

Its performance in the hands of experienced and expert competition drivers will doubtless be watched with interest. In its basic form it remains a speedy and compact family saloon ideally suited to rallying.

This 'S' type Mini has a short stroke 1071 c.c. over square o.h.v. engine and has a max. power output of 70 b.h.p. as compared with 55 b.h.p. in the case of the ordinary Mini Cooper. Naturally, to provide safe stopping from high speeds, larger diameter (7 $\frac{1}{2}$ "") disc brakes are fitted.

It will be distinguishable by a special motif on the Radiator Grille, but it must be carefully borne in mind that this is an additional model for special purposes and in no way replaces the present Mini Cooper. It is intended in other words, that the car should only be made available to experienced competition drivers and not offered to the general motoring public.

Enclosed are Preliminary Specifications for your information. The price will be made known in due course.

Yours faithfully,
FOR THE AUSTIN MOTOR COMPANY LTD.



BY APPOINTMENT
TO HER MAJESTY QUEEN ELIZABETH II
MOTOR CAR MANUFACTURERS
THE AUSTIN MOTOR COMPANY LTD.

THE B.M.C. MINI COOPER S-TYPE

New 'Super' Mini Based on Formula Junior Engine

Yet another new variation of the ubiquitous Austin and Morris Mini is announced today by the British Motor Corporation. Known as the Mini Cooper S-Type it is a competitions version of the Mini Cooper Saloon with an engine based on the Cooper-B.M.C. power unit which has been used with outstanding success over the past few years in Formula Junior racing. Its performance in the hands of expert competition drivers in Britain, Europe and elsewhere will be watched with interest. In its basic production form it remains a compact, speedy family saloon, ideally suited to rallying but with further tuning it is expected to have great potential for production saloon car racing.

'Over-square' Engine

The S-Type Mini has a short stroke, 1071 c.c., o.h.v., 'over square' engine i.e., the bore dimensions (70.6 mm.) are greater than the stroke (63.26 mm.). With a compression ratio of 9 to 1 it has a power output of 70 b.h.p. (net) at 6,000 r.p.m. compared with 55 b.h.p. at 6,000 r.p.m. in the case of the ordinary Mini Cooper. Like the racing engine the power unit has special valve gear and strengthened three-bearing crankshaft to enable it to stand up to continuous high speed running without impairing its long life qualities. Alternative sets of gear ratios are available; the clutch is modified to withstand prolonged high speed running.

Unlike some makes of car where high performance variations are available no structural alterations have been made or are necessary to the Mini's body or suspension.

To provide safe stopping power from very high speeds, however, larger diameter ($7\frac{1}{2}$ in.) disc brakes are fitted at the front and a Hydrovac booster - which reduces pedal pressure - is incorporated in the braking system. In other respects the car is similar to the ordinary Mini Cooper but is distinguishable by a special motif on the radiator grille. It does not replace the already famous Austin and Morris Mini Coopers.

BRIEF SPECIFICATION

ENGINE: Bore 2.780 in. (70.6 mm.); stroke 2.687 in. (68.26 mm.); cubic capacity 1071 c.c. (65.35 cu. in.); compression ratio 9 to 1; b.h.p. 70 (net) at 6,000 r.p.m.; maximum torque 62 lb. ft. at 4,500 r.p.m.

FUEL SYSTEM: Twin S.U. Type HS2 carburettors; S.U. electric fuel pump. Tank capacity $5\frac{1}{2}$ gallons (25 litres) - 11 gallons with extra tank.

OVERALL GEAR RATIOS:

Standard:- With 3.765 to 1 final drive: 1st 12.04, 2nd 7.21, 3rd 5.10, 4th 3.76. Reverse 12.04. With optional 3.44 to 1 final drive: 1st 11.02, 2nd 6.59, 3rd 4.67, 4th 3.44. Reverse 11.02;

Alternative:- With 3.765 to 1 final drive: 1st 9.66, 2nd 6.70, 3rd 4.67, 4th 3.76. Reverse 9.66. With optional 3.44 to 1 final drive: 1st 8.84, 2nd 6.13, 3rd 4.27, 4th 3.44. Reverse 8.84.

ROAD WHEELS: 5.5 - 10 in. Dunlop SP tubed tyres on $3\frac{1}{2}$ in. or $4\frac{1}{2}$ in. rims.

SUSPENSION: Independent rubber all round with telescopic hydraulic shock absorbers.

BRAKES: Disc front, $7\frac{1}{2}$ in. diameter. Rear, drum 7 in. diameter X $1\frac{1}{4}$ in. wide. Hydrovac booster and pressure-limiting valve.

STEERING: Rack and pinion $2\frac{1}{3}$ turns from lock-to-lock.

OPTIONAL EXTRAS: Auxiliary fuel tank, $5\frac{1}{2}$ gallons (25 litres).

Oil cooler. Power unit sump guard.