



# AUSTIN MINI-COOPER 'S' MKII



# Dimensions

**INSTRUMENTS:** M.p.h. or Km.p.h. speedometer, with fuel gauge and warning lights to show dynamo not charging, headlamp high-beam position, and direction indicators working. Separate gauges for oil pressure and water temperature. The various switches, including combined ignition/starter switch, are mounted on a panel in the centre of the parcel shelf.

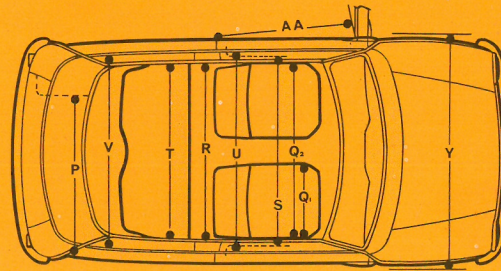
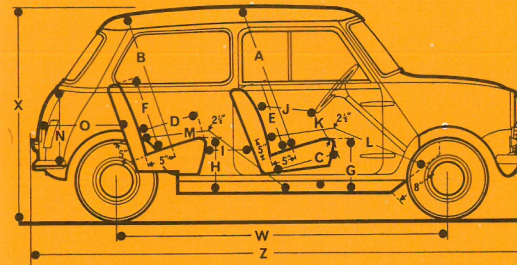
**ROAD WHEELS:** Pressed-steel, four-stud fixing. Ventilated wheels with 3½-in. or 4½-in. rims, and tubed 145—10 radial-ply tyres.

**SUSPENSION:** Front: independent suspension with Hydrolastic® displacers (interconnecting front to rear). Rear: independent; trailing arms. Hydrolastic® displacers incorporating auxiliary springs.

**OPTIONAL EQUIPMENT:** Rake-adjusting front seats. Electrically heated rear window. Sump guard.

**EXPORT AVAILABILITY:** For the specific Export requirements encountered throughout the world numerous production variations are available. The following items can therefore be alternatively supplied at no extra cost: right- or left-hand steering; headlamp and flasher equipment to suit any overseas territory. Optional equipment at extra cost includes: fresh-air heater; radio; laminated windscreen; locking fuel filler cap; rake-adjusting front seats; electrically heated rear window; sump guard.

**COLOURS:** A wide range of colours and trim is available. Current colour combinations can be obtained from your Distributor or Dealer.



	English	Metric
Front seat cushion to roof	A	2 ft. 11 in. 0-89 m.
Rear seat cushion to roof	B	2 ft. 11 in. 0-89 m.
Front cushion depth	C	1 ft. 6 in. 0-46 m.
Rear cushion depth	D	1 ft. 5 in. 0-43 m.
Front squab height	E	1 ft. 7 in. 0-48 m.
Rear squab height	F	1 ft. 8 in. 0-51 m.
Height of front cushion	G	1 ft. 1½ in. 0-34 m.
Height of rear cushion	H	1 ft. 1 in. 0-33 m.
Back of front squab to front of rear cushion	I	max. 11½ in. 0-29 m. min. 7½ in. 0-19 m.
Steering-wheel to front squab	J	max. 1 ft. 4½ in. 0-42 m. min. 1 ft. 0½ in. 0-32 m.
Steering-wheel to cushion	K	6½ in. 0-17 m.
Leg room—front	L	max. 3 ft. 7½ in. 1-10 m. min. 3 ft. 5 in. 1-04 m.
Leg room—rear	M	max. 3 ft. 8½ in. 1-13 m. min. 3 ft. 2½ in. 0-98 m.
Luggage boot height	N	max. 1 ft. 4 in. 0-41 m.
Luggage boot depth	O	max. 1 ft. 7½ in. 0-49 m.
Luggage boot width	P	max. 3 ft. 2 in. 0-97 m.
Width of front bucket seat	Q1	1 ft. 8 in. 0-51 m.
Overall width of front seats	Q2	3 ft. 7½ in. 1-10 m.
Width of rear cushion	R	3 ft. 5 in. 1-04 m.
Max. front seat width at cushion level	S	3 ft. 9½ in. 1-16 m.
Max. rear seating width at cushion level	T	3 ft. 5 in. 1-04 m.
Width over front seat at shoulder height	U	3 ft. 10 in. 1-17 m.
Width over rear seat at shoulder height	V	3 ft. 8½ in. 1-13 m.
Wheelbase	W	6 ft. 8 in. 2-03 m.
Overall height	X	4 ft. 5 in. 1-35 m.
Overall width	Y	4 ft. 7½ in. 1-41 m.
Overall length	Z	10 ft. 0½ in. 3-05 m.
Door entry width	AA	2 ft. 8 in. 0-81 m.
Kerbside weight (approx.)		11½ cwt. 584 kg.
Ground clearance		6½ in. 15-73 cm.

*These specification details do not apply to any particular vehicle which is supplied or offered for sale. The manufacturers reserve the right to vary their specification with or without notice and at such times and in such manner as they think fit. Major as well as minor changes may be involved. Therefore, although every effort is made to ensure the accuracy of the particulars contained in this brochure, neither the Company nor the Distributor or Dealer by whom this publication is issued shall be liable for any inaccuracy in any circumstances whatsoever. Consult the Dealer with whom your order is placed for details of the specification of any particular vehicle. This publication shall not constitute in any circumstances whatsoever an offer by the Company to any person. All sales are made by the Distributor or Dealer concerned subject to and with the benefit of the standard Conditions of Sale and Warranty given by the Distributor or Dealer, copies of which may be obtained from him on request.*



**BRITISH LEYLAND (AUSTIN-MORRIS) LIMITED**  
**BIRMINGHAM, ENGLAND**

10/70





# ACTION! ACTION! ACTION!

These are Mini-Coopers—in action. They've seen plenty of impressive reputation for safety and reliability. They've a way—like winning the Monte Carlo Rally for three (? f Reasons for the Mini-Cooper's rally and track successes stability and comfort; front-wheel drive for sure, firm ro stopping-power; and the kind of acceleration that puts behind you.

It's not only in competition that these qualities matter in an eminently practical proposition for the pleasure moto





seen plenty over the last few years—and built up an  
y. They've also notched up a formidable list of honours on the  
r three (? four) years in succession, for instance.

k successes are obvious: Hydrolastic suspension for  
ure, firm road-holding; disc brakes for really emphatic  
n that puts overtaking problems where they should be—

ies matter in a car either. They make a Mini-Cooper 'S'  
asure motorist as well.

 **Mini-Cooper 'S'** Mk II





# SPECIFICATION

**ENGINE:** In-line, four-cylinder, water-cooled, overhead valve with three-main-bearing counterbalanced crankshaft. In unit with clutch, gearbox, and final drive. Installed transversely at front of car. Bore 2.78 in. (70.61 mm.); stroke 3.2 in. (81.28 mm.); cubic capacity 77.9 cu. in. (1275 c.c.); compression ratio 9.75 : 1; standard b.h.p. 76 at 6,000 r.p.m. (78 gross). Maximum torque 79 lb. ft. at 3,000 r.p.m.

**GEARBOX:** Four-speed, all-synchromesh; in unit with engine and final drive; remote-control, central-floor gear-change lever. Final drive to front wheels via helical gears, universal joints, and open shafts; drive casing in unit with engine and gearbox.

**Final drive:** 3.44 : 1 (18/62)

Gear Ratios	3.44 : 1 (18/62) final drive	
	Overall	Road speeds at 1,000 r.p.m.
Reverse 3.20 : 1	11.022 : 1	—
First 3.20 : 1	11.022 : 1	5.02 m.p.h.
Second 1.92 : 1	6.599 : 1	8.39 m.p.h.
Third 1.36 : 1	4.674 : 1	11.84 m.p.h.
Fourth 1.00 : 1	3.444 : 1	16.07 m.p.h.

**FUEL SYSTEM:** Two S.U. carburettors, type HS2, with combined air cleaner and silencer with two paper elements and hot-air intake tube. S.U. electric fuel pump, mounted under tank at rear. Fuel tank capacity 5½ gallons (25 litres) with additional 5½ gallon (25 litre) fuel tank in boot. Fuel filters in pump and fuel tanks.

**LUBRICATION SYSTEM:** Full pressure to engine bearings; sump forms oil bath for gearbox and final drive; eccentric lobe-type pump driven by camshaft; oil cooler; full-flow oil filter with renewable element, gauze strainer in sump; magnetic sump drain plug. Oil capacity, including transmission, 8 pints (4.5 litres) approximately, plus 1 pint (0.57 litre) for filter.

**IGNITION SYSTEM:** 12-volt; coil and distributor with automatic control.

**COOLING SYSTEM:** Pressurized radiator with pump, fan, and thermostat; capacity approximately 5¼ pints (3 litres), plus 1 pint (0.57 litre) for heater when fitted.

**TRANSMISSION:** 7⅞ in. (182 mm.) diameter diaphragm-spring clutch designed to withstand high-speed running; hydraulic operation by pendent pedal.

**STEERING:** Rack and pinion; 2⅓ turns lock-to-lock; two-spoke 15⅓ in. (0.40 m.) diameter steering-wheel; turning circle 28 ft. (8.53 m.). Track (with 3½-in. rim wheels): front 3 ft. 11⅝ in.







ping from large-diameter  
system in the world—  
d between you and the  
d as a damping medium,  
s. Apart from giving you

a far more comfortable ride, Hydrolastic suspension means you can use the terrific potential of Mini-Cooper 'S' performance to even greater effect. The Mini Cooper 'S' excels in safety features such as wide windscreen and rear window for good vision, extra thick padding to the parcel shelf, and a multi-purpose switch on the steering column which controls the self-cancelling direction indicators, headlamp dipping and flashing, and the horn. The seating has been styled and contoured to provide maximum support when motoring at the high average speeds of which this car is capable.



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rods and enlarged

gudgeon pins. Larger ports in the cylinder head improve gas-flow characteristics and enable bigger valves of Nimonic 80 steel to be fitted. Valve guides are also different, being of copper-nickel construction, and the design of the valve gear generally is such that valve-crash does not occur until approximately 7,000 r.p.m. ! The power curve of the 'S'-type power unit is of a completely different character to the standard Mini, and therefore a different distributor, without vacuum control, is fitted together with sparking plugs designed for continued high-speed running. In the gear train of the 1275-c.c. Mini-Cooper 'S' power unit, helical-toothed gears of immense strength are used to take advantage of the full power this amazing engine develops.

(1·21 m.); rear 3 ft. 10 <sup>1</sup>/<sub>16</sub> in. (1·18 m.). Track (with 4 <sup>1</sup>/<sub>2</sub>-in. rim wheels): front 4 ft. 0 <sup>1</sup>/<sub>16</sub> in. (1·24 m.); rear 3 ft. 11 <sup>1</sup>/<sub>16</sub> in. (1·21 m.).

**BRAKES:** Foot—four-wheel hydraulic, operated by pendent pedal. Pressure-limiting valve installed in system. 7 <sup>1</sup>/<sub>2</sub>-in. diameter discs at front and 7-in. × 1 <sup>1</sup>/<sub>2</sub>-in. drums at rear, supplemented by 5 <sup>1</sup>/<sub>2</sub>-in. diaphragm servo. Hand brake—central pull-up lever which operates on rear wheels.

**COACHWORK:** Four-seater, four-light, two-door saloon of all-steel unitary construction. Bonnet top hinged at rear edge and supported in open position by pivoted rod. Bonnet lock and safety catch incorporated behind radiator grille. Curved, toughened-glass windscreen with twin-jet windscreen washer. The doors are hinged at their forward edges by outside hinges. Each door has a large inside pocket and is fitted with two independently adjustable sliding windows. Exterior handle on driver's door has private lock, passenger's door locked from inside by trip catch. The doors are opened from inside by chromium-plated, lever-type handles. Hinged rear side-windows. Wide, curved rear window. Rear luggage compartment contains spare wheel and tyre and has drop-down, luggage-carrying lid with hinged number-plate and locking handle; capacity with lid closed 5 <sup>1</sup>/<sub>2</sub> cu. ft. (0·154 m.<sup>3</sup>). Bright plastic external finishers fitted to windscreen and rear window. Door window frames and lower panel sills have bright metal finishers. Wheel trims, rear number-plate lamp, fuel filler cap, also front/rear bumpers with over-riders. Entire interior trim in washable vinyl-coated fabric; windscreen bottom rail and side cappings trimmed black to eliminate windscreen reflections. Ashtray incorporated in fascia. Large, oval instrument panel, trimmed black, contains speedometer with oil pressure and water temperature gauges. Full-width parcel shelf beneath fascia containing central switch panel. Interior anti-glare mirror and dual sun visors. Adjustable front seats. Front and rear seat cushions upholstered with polyether; squabs upholstered with rubberized hair. Built-in anchorage points, to which your Distributor or Dealer can fit approved accessory seat belts. Companion box on each side of rear seat includes ashtray. Interior lamp fitted in roof. Parcel shelf behind rear seat and supplementary luggage space beneath. Kicking protectors fitted to doors and door sills. Entire floor, including plywood spare wheel cover in luggage compartment, covered in Veltone floor covering with under-felts. Fresh-air heater/demister fitted for Home market.

**ELECTRICAL:** 12-volt, 43 amp.-hr. capacity battery at 20-hr. rate located under floor of boot. Double-dipping headlamps, sidelamps in headlamps with separate bulbs; rear lamps, stop lamps, reflectors, and flashers are all combined in single units; rear number-plate lamp; roof lamp with integral switch; separate front amber flashers. Single lever on steering-column controls horn, headlamp flasher, dip switch, and self-cancelling direction flashers. Twin-blade self-parking windscreen wipers. Single Windtone horn. Concealed instrument illumination when sidelights are on.

## MINI-COOPER 'S' MK II



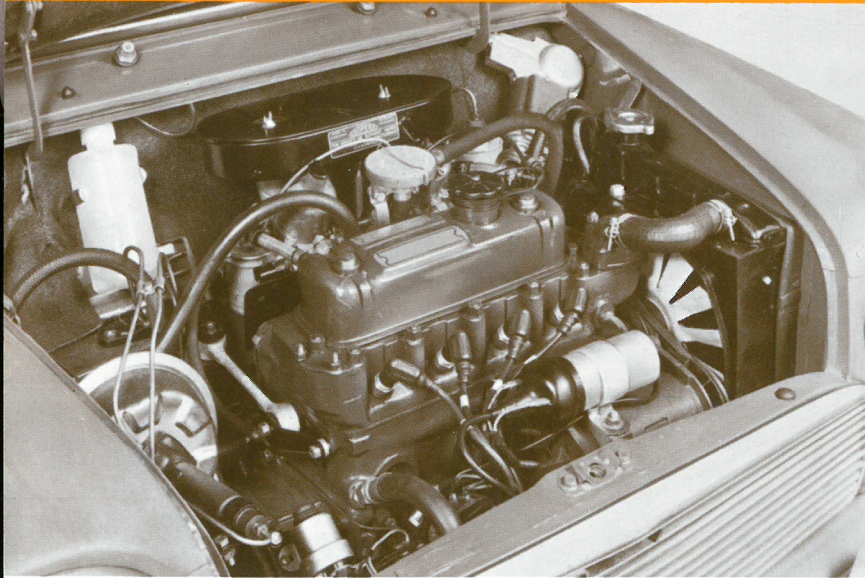
# The Mini with the most ...

The first thing that strikes anybody when they first get into a Mini-Cooper 'S' is the fantastic amount of space and leg room available. You don't have to look far to find the reason for it either—just lift the bonnet! The engine lies *east-west* across the chassis and consequently there's a big saving of valuable space. This revolutionary transverse engine is a characteristic of all the Minis—and like all strokes of genius you wonder why no one thought of it before!

Vital to any sports or competition car is a braking system to match performance. The power to stop

quickly is inherent in the Mini-Cooper 'S'. It has the sure safety of fast stopping from full speed by disc brakes on the front and drum brakes on the rear wheels.

The Mini-Cooper 'S' also incorporates the most advanced fluid suspension system in the world—Hydrobastic suspension. This means, in effect, that there's a cushion of fluid between the wheels and the road. Interconnected front and rear suspension units, using sealed-for-life fluid as a dampener, automatically compensate for uneven conditions between front and rear wheels. Apart from



The spacious interior of the Mini-Cooper 'S' Mk. II has attractive and comfortably styled seating.

The power unit of the Mini-Cooper 'S' is a twin-carburettor developed by BMC 'A'-series engine which was so successfully utilized as a transverse 'pack' for the normal Mini range. For the 'S'-type saloon, however, a special engine has been developed with the help of experience gained in racing powered cars in Formula Junior competition events. Because of the larger diameter the cylinder centres have been re-spaced in the crankcase, the top face of the cylinder block has been raised in order to accommodate the increased length. To withstand the greater stresses resulting from the increased power output the engine is fitted with a massive crankshaft with larger diameter main bearings, together with special connecting rods and

## MINI-C