now with Hydrolastic suspension!

. . . . fluid control for super road holding

Specially developed from the Mini-Cooper, for use in trials, rallies, and competition events for the enthusiast who requires something extra

BMC World’s Largest Producers of Front-Wheel-Powered Vehicles. Over a Million Sold
The success story bestowed on the amazing Mini-Cooper saloon is now legend throughout the world. Outright winner in 1964 of such events as the Monte Carlo Rally, Tulip Rally, Spa-Sofia-Leige Rally, Austrian Alpine Rally, Circuit of Ireland Rally and the highest placed British entry in the 24 hour Le Mans, its performance is proved to be in advance of many cars of much bigger capacity. For the enthusiast who requires just a little extra for competition events such as speed trials and rallies the ‘S’-type Mini-Cooper has been specially developed.

The engine is entirely new, having been developed from racing experience. The special crankshaft is larger in diameter to give long life under competition conditions. Valves are of Nimonic steel and the connecting rods are of a special type, incorporating floating gudgeon pins.

Being 1-3 litres in capacity, this latest addition to the Mini range has phenomenal acceleration, and a 100 m.p.h. top speed to match! Now, Hydrostatic suspension and 145—10 SP41 tubeless tyres provide the necessary extra grip—tight roadholding for high-speed performance—a feature with which the Mini-Cooper is already well endowed.

First established as the smallest car to be fitted with front disc brakes, the system of the ‘S’-type Mini-Cooper has further super-safety features developed in parallel to its performance. Larger front disc brakes are fitted and the four-wheel hydraulic system includes a 5½ in. (0·14 m.) diaphragm servo providing assistance on the foot brake. A pressure-limiting valve in the line between the master cylinder and the rear brakes reduces the possibility of the rear wheels locking under high pedal pressure.

In spite of its tuned mechanical nature, the ‘S’-type Mini-Cooper nevertheless remains a perfect family sedan. Trimmed and equipped exactly as the Mini-Cooper sedan, the interior provides ample comfort for four adults with room for luggage in spite of its compact proportions.

Emphasis is definitely on the instrument panel in competition events. And there is no difficulty in deciphering what is happening in the ‘S’-type Mini-Cooper. The instruments are contained in a centrally placed oval nacelle, the speedometer contains a fuel gauge, warning lamps for ignition, headlamp high beam, and dirty oil filter. Separate gauges are provided for water temperature and oil pressure. Concealed illumination is provided for night driving.

*Hydrostatic is a registered trademark.
ENGINE: In-line, water-cooled, overhead-valve, 4-cylinder. Three-bearing counterbalanced crankshaft. In unit with clutch, gearbox, and final drive. Installed transversely as front of car. Bore 2.701 in. (70.6 mm); stroke 3.2 in. (81.33 mm); cubic capacity 77.9 cu. in. (1275 cc); compression ratio 9.5:1; standard b.s.p. 75 at 5,800 (78 gross) r.p.m.; maximum torque 80 lb. ft. at 3,000 r.p.m.


Lubrication System: Full pressure to engine bearings; sump forms oil bath for gear-box and final drive; internal gear-type pump driven by camshaft; full-flow oil filter with renewable element; gauge strainer in sump; magnetic sump drain plug; oil capacity, including transmission, 9 U.S. pints (4.5 litres) approximately, plus 1 pint (0.57 litre) for filter.

Ignition System: 12-volt, coil, and distributor with automatic and vacuum control.

Cooling System: Pressurized radiator with pump, fan, and thermostat; capacity approximately 63 U.S. pints (2.7 litres), plus 1 pint (0.57 litre) for heater.

CHASSIS: Transmission: Clutch, 7½ in. (184 mm). diameter designed to withstand high-speed running, hydraulic operation by pendant pedal. Gearbox 4-speed with basic ring synchronesh on second, third, and top; in unit with engine and final drive, remote control front floor gear change lever. Final drive to front wheels via helical spur gears, universal joints, and open shafts; drive casing in unit with engine and gearbox.

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<th>Gear Ratios</th>
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Steering: Rack and pinion; 2½ turns lock to lock: 2-spoke, 15 in. (40.6 cm) diameter steering-wheel; turning circle 31 ft. (9.45 m). Track (with 33 in. rim wheels)—front 3 ft. 11 in. (1.21 m); rear 3 ft. 10 in. (1.18 m). Track (with 41 in. rim wheels)—front 4 ft. 6 in. (1.24 m); rear 3 ft. 11 in. (1.21 m).

ROAD WHEELS: Pressed-steel, 4 stud fixing, 145-10 Dunlop SP41 tubeless tyres on 3½-in. or 4½-in. rims.

SUSPENSION: Front (includes final drive)—independent with arms of unequal length. Swivel hubs mounted on ball joints. Hydrostatic displacers mounted above upper arms. Upper arms mounted on needle roller bearings and lower arms on rubber bearings at inner end. Fore and aft location by rubber-mounted tin-rod. Rear—independent trailing arms with Hydrostatic displacers. Arms carry stub shaft for hubs, which have twin dual-purpose bearings. Hydrostatic displacers are interconnected front to rear.

BRAKES: Foot—All four wheels hydraulically operated by pendant pedal and supplemented by ½ in. dia. diaphragm servo. 7½ in. diameter disc brakes at front and 7 in. diameter x 1¾ in. wide drum brakes at rear. A pressure-limiting valve is introduced in the line between the master cylinder and the rear brakes. Hand—Central pull-up lever which operates on rear wheels.

ELECTRICAL: 12-volt, 43-amp-hr. capacity battery at 20-hr. rate, located under floor of boot. Double-dipping headlamps with foot-operated dip switch: sidelamps in headlamps with separate bulbs; rear lamps, stop lamps, reflectors, and flashers are all combined in single units; rear number-plate illuminating lamp; roof lamp with integral switch; separate front amber flashers, self-cancelling switch under steering-wheel with warning light in the end of the lever. Twin-blade electrical windscreen wipers. Single Windcane horn with push in centre of wheel. Concealed instrument illumination.

INSTRUMENTS: Speedometer, with fuel gauge and warning light to show dynamo not charging, dirty oil filter and headlamp high beam position. 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.

COACHWORK: Four-seater, 2-door sedan 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, laminated-glass, windscreen with window-jat windscreen washer. The doors are hinged at their forward edges by outside hinges. Each door has a large inside pocket and is fitted with 2 independently adjustable sliding glasses. Exterior handle on driver's side 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 quarter windows. Wide, curved rear window. Rear luggage compartment contains spare wheel and tyre, and has deep敦 fined, luggage-carrying lid with hinged number-plate and lockable handle. Bright plastic external finished fitted to windscreen and rear window. Door window frames and lower panel sills have bright metal finishes. Chromium-plated wheel embellishments, rear number-plate lamp, fuel filler cap, also front/rear bumpers with over-riders and tubular extensions. Entire interior trim complete in washable vinyl-covered, 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 runs beneath and contains central switch panel. Interior anti-slip safety matter and dual sun visors. Adjustable front seats. Front and rear seat cushions upholstered with polyester; squabs upholstered with rubberized hair. Companion box on each side of rear seats includes ashtray. Interior roof lamp fitted. Parcel shelf behind rear seat and supplementary luggage space beneath. Kicking protectors fitted under doors and door sill. Entire floor, including plywood spare wheel cover in luggage compartment, covered in hard-wearing carpet, with underfelt. Fresh-air heater/demister fitted. Extensive sound insulation material applied to the main body panels.

OPTIONAL EQUIPMENT: Heater, additional 65 U.S. gallons, (25-litre) fuel tank, oil cooler, 4½ in. rim wheels.

COLOUR COMBINATIONS: Exterior Colour (Exterior given first) Uplands Colour

- Old English White/Fiesta Yellow
- Black/Tartan Red
- Old English White/Surf Blue
- Old English White/Tweed Grey
- Black/Old English White
- Old English White/Almond Green
- Dove Grey/Periwlain Green

Colours are those available at time of publication.

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