

# LOTUS



# ELAN

LOTUS CARS LIMITED  
CHESHUNT • ENGLAND



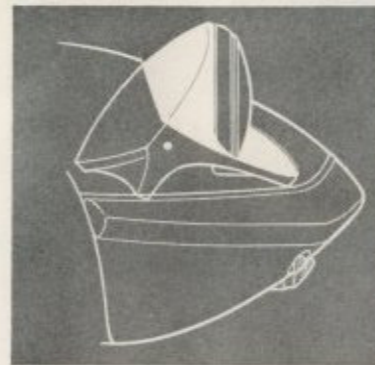
Constructed around a backbone of race-winning experience . . .

# Lotus Elan S2

Years of painstaking design, research and experience reached their spectacular conclusion in the production of the Lotus Elan. Even to the untrained eye the sleek and crisp styling of the glassfibre-reinforced-plastic coachwork immediately creates the impression of a beautifully balanced motor car. Compact yet spacious, fast but also

quiet and docile, superbly finished and equipped but low in price. The Lotus Elan represents so great an advance in sports car design as to be unique.

From its precision engineered twin overhead camshaft engine to its functional foam filled bumpers this car portrays a totally new outlook in automotive engineering. Numerous features of the Lotus Elan are directly conceived from its renowned predecessor and forerunner—the Lotus Elite—and backed by the design resources of today's most successful manufacturer of specialised performance cars, the Elan offers a safe, proven, economical and unbelievably exciting sports car well worthy of the reputation which has made the Marque world famous, on road and track.



#### Retractable Headlamps

To facilitate a lower wing line, giving uninterrupted vision of the road ahead to within a few feet from the front of the car, a retractable headlamp system has been devised. Each headlamp is coupled to a vacuum cylinder which is in turn coupled to a vacuum reservoir of ample proportions, the whole system activated by manifold depression. The fingertip control switch for the headlamps is conveniently situated on the fascia panel and incorporates a flashing device for daytime use. When the headlamps are locked in the raised position they comply with the regulation distance from the ground to lamp centre line.

#### Foam Filled Bumpers

Full width resilient Polyurethane foam filled glassfibre bumpers are fitted front and rear, and will not crack, dent or bend on minor impact.

#### Luggage Accommodation

A separate lockable luggage compartment is provided at the rear of the car with carpeted floor to accept suitcases, etc., and additional soft luggage can be stowed in the space behind the seats.

#### Weather Protection

A completely weatherproof P.V.C. fabric hood is provided as



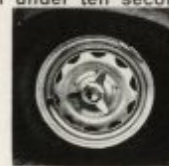
standard equipment. Separate clip-on glassfibre-reinforced plastic 'Cant' rails surround the side window apertures and carry the hood supporting rails. A P.V.C. strip along the front of the hood fits snugly into a recess along the top of the windscreen rail and a solid rail running around the rear of the hood below the flexible rear window panels is located by hood retaining lugs mounted on the body. Additional clip-on fasteners ensure complete draughtproofing. A detachable fully lined hardtop is available as optional extra equipment, plus a tailored tonneau cover.

#### Engine Accessibility

The bonnet is self opening when released by two pull controls on the fascia, pivoting on nylon runners, affording accessibility for routine engine servicing. If required, the complete bonnet can be easily detached from the car in under ten seconds.

#### Knock-On Wheels

Latest in a brilliant succession of Chapman designs is the optional extra knock-on wheels with Lotus patent attachments.





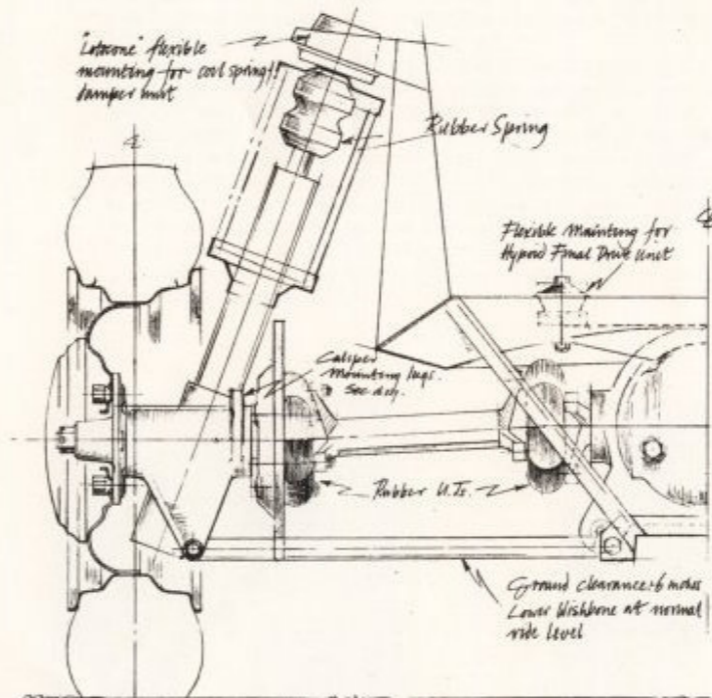
Considerable thought has been applied to the placing of the seats in relation to drivers of varying heights. With the seat in its furthest forward position the squab is at its highest point and the backrest more upright, in the rearward positions the squab is lower and the backrest slightly reclining. This system ensures clear vision of the road ahead, and perfect accessibility for foot pedals and controls.

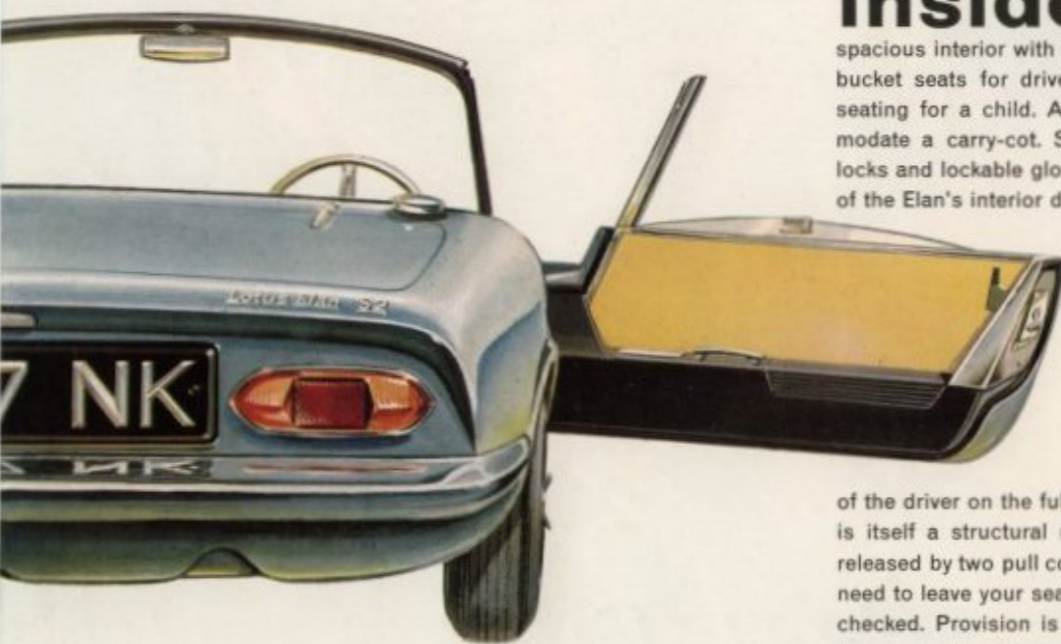


## Absolutely precise steering and road holding

The roadholding, steering and braking qualities of Lotus cars are already legendary in the world of motoring. Designed and developed by the Lotus design team, led by Colin Chapman, the chassis and suspension of the Lotus Elan derive many inherent characteristics from Lotus Sports and Formula One racing cars. The ordinary Lotus Elan is not a racing car, yet the inbuilt qualities of reliable braking power combined with high speed controlability under all conditions, certainly contribute to the car's high safety factor.

The heart of the Lotus Elan is an immensely strong and torsionally stiff welded steel backbone chassis. Fully independent load compensating wishbone/coilspring suspension is employed on all four wheels and braking is by hydraulically operated calipers on 9½ inch diameter discs on the front wheels; the 10 inch diameter rear discs are of Lotus design. Telescopic shock absorbers, rubber cushioned drive and suspension mountings provide incredibly smooth and vibration free motoring on all types of road surface. Highly responsive rack and pinion steering is employed, and the column is of the fully adjustable collapsible type. The transmission contains a four speed gearbox with synchromesh on all four forward ratios. Regular chassis greasing points have been eliminated on the Lotus Elan, cutting considerably the costs of routine servicing.





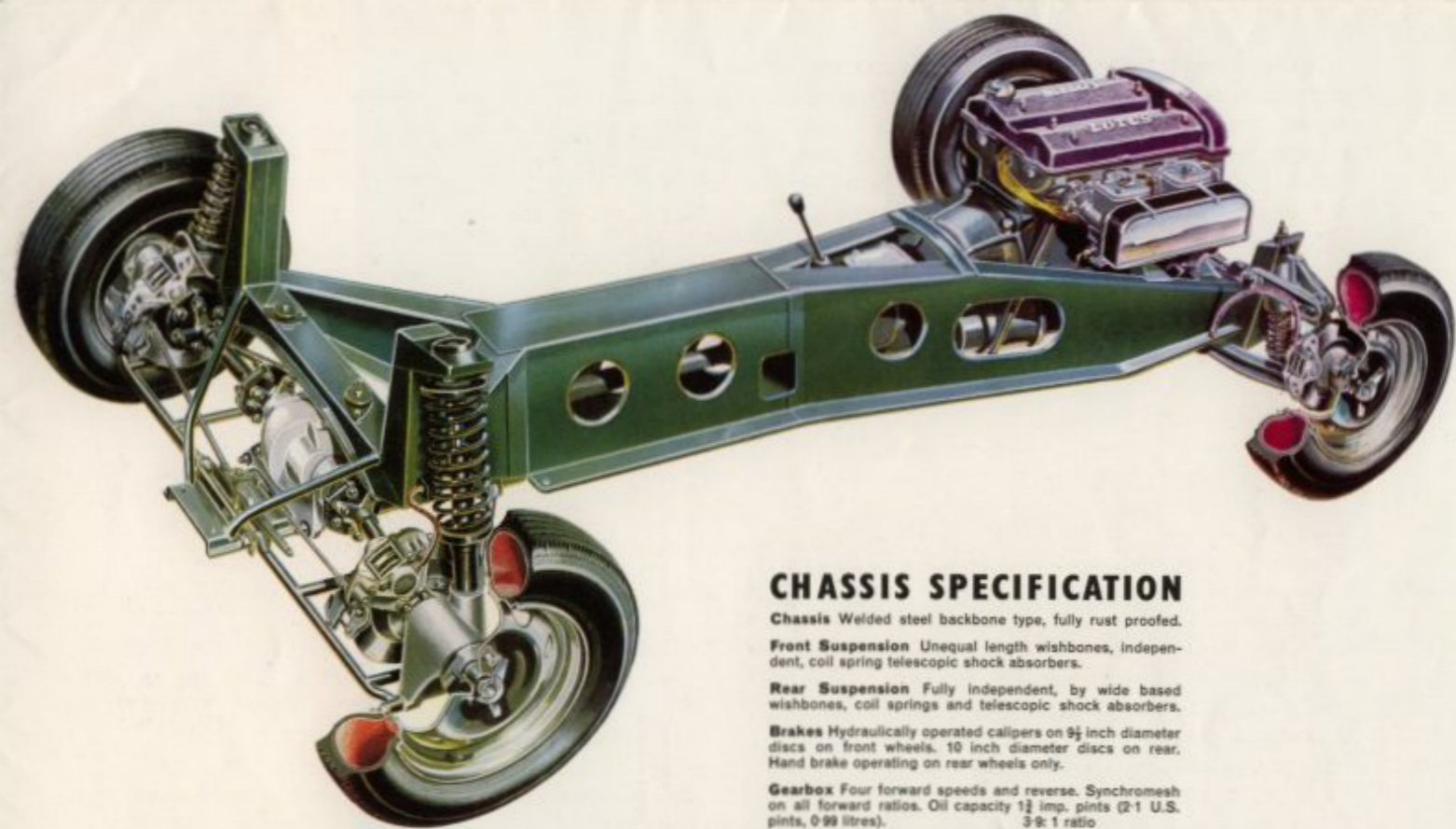
## step inside

Full length, wide opening doors give ease of entry for driver and passenger.

The compact form of the Lotus Elan belies the well appointed spacious interior with fully adjustable, deep squab-shaped bucket seats for driver and passenger, plus occasional seating for a child. Alternatively, this space will accommodate a carry-cot. Sliding side windows, precise door locks and lockable glove compartment are further features of the Elan's interior design.

The sloping bonnet provides completely unobstructed vision of the road ahead. A glance at the instruments is all that is needed to obtain accurate readings. A longer look reveals elegant, sensibly placed instrumentation with all controls within easy reach

of the driver on the full width high gloss fascia panel, which is itself a structural member of the car. The bonnet is released by two pull controls on the fascia thus avoiding the need to leave your seat when oil and water levels are being checked. Provision is made for a very powerful fresh air type heater/demister unit to ensure maximum comfort in all climates.



## CHASSIS SPECIFICATION

**Chassis** Welded steel backbone type, fully rust proofed.

**Front Suspension** Unequal length wishbones, independent, coil spring telescopic shock absorbers.

**Rear Suspension** Fully independent, by wide based wishbones, coil springs and telescopic shock absorbers.

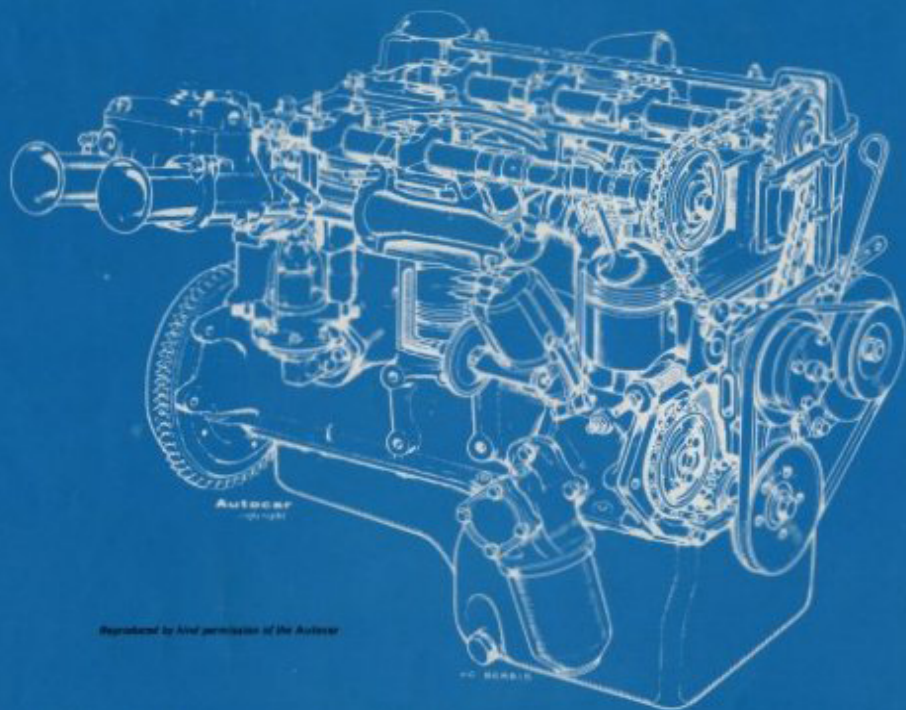
**Brakes** Hydraulically operated callipers on 9½ inch diameter discs on front wheels. 10 inch diameter discs on rear. Hand brake operating on rear wheels only.

**Gearbox** Four forward speeds and reverse. Synchromesh on all forward ratios. Oil capacity 1½ imp. pints (2.1 U.S. pints, 0.99 litres). 3.9: 1 ratio

**Final Drive** Chassis mounted hypoid unit, sound insulated. Oil capacity 2 imp. pints (2.4 U.S. pints, 1.13 litres).

**Steering** Rack and pinion, with telescopic and collapsible steering column. Optional right or left hand drive, 15 inch diameter dished wood-rimmed steering wheel, 2½ turns lock to lock.

**Wheels** 13 inch diameter special Lotus high speed wide base pressed steel. Four stud fixing. Bright metal hub caps. Or optional extra—Lotus patent knock-on disc wheels.  
**Tyres** 520 x 13.



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## ENGINE SPECIFICATION

Four cylinder. Block cast integrally with upper half of crank case. Bore 82.55 mm. Stroke 72.75 mm. Cubic capacity 1556 c.c. Firing order 1-3-4-2. Valve operation by twin overhead camshafts driven by a single stage roller chain. Compression ratio 9.5:1. B.H.P. 105 at 5,500 r.p.m. Torque 106 lb./ft. at 4,000 r.p.m. Five bearing crankshaft dynamically balanced. Separate inlet and exhaust ports for each cylinder, inlet manifolds cast integrally with cylinder head.

**Ignition:** 12 volt coil, automatic advance and retard distributor. 14 mm. long reach sparking plugs.

**Lubrication** High efficiency rotor type oil pump, externally mounted, with full pressure to main, big end and camshaft bearings. Full flow filter, accessible dipstick. Capacity of system 6½ imp. pints (7.5 U.S. pints, 3.75 litres).

**Fuel system** Jackshaft operated mechanical diaphragm pump. Two twin choke 40 DCOE Weber carburettors. Replaceable element air cleaner. Fuel tank capacity 10 imp. galls. (12 U.S. galls., 45.5 litres).

**Cooling system** Pressurised; Belt driven fan and water pump. Thermostatic heat control. Tube and fin radiator. Capacity of system 14 imp. pints (18.8 U.S. pints, 6.4 litres).