



**AUTOCAR  
ROAD  
TEST**

4196

# Lotus Elise

**Test Date** 17.07.96 One of the most exciting cars of the decade, the Elise would change forever how we'd look at small, affordable sports cars. An icon was born

## HISTORY

The Elise, we are sure, marks a reference point in the history of the motor car. It encapsulates a blend of handling, performance, ride and refinement that is unique at its price. Like most cars that come out of Hethel, it is brimming with technical innovations. Yet as a finished product it is the compactness and feather-light weight that grab the headlines.

At no time in the past three decades have Colin Chapman's original philosophies been so accurately produced. The mid-engined Elise is one of the most exciting sports cars of the decade.

## DESIGN & ENGINEERING

Central to the Elise's elegantly simple design is the adoption of extruded aluminium technology. While all Lotus products for three decades have relied on a fabricated steel backbone chassis, the Elise is supported by a unique extruded and bonded aluminium perimeter structure. As well as helping Lotus meet the 700kg weight target, this improves torsional stiffness and crash worthiness.

Only the engine subframe, suspension



**Not only does Elise chassis have fluency and balance, but the ride quality would shame many family cars**



mountings, wishbones, anti-roll bar and rollover hoop are steel. Julian Thomson's styling makes the most of the car's squat proportions with a harmonious mix of flowing, muscular curves and functional cooling and ventilation ducts.

## ON THE ROAD

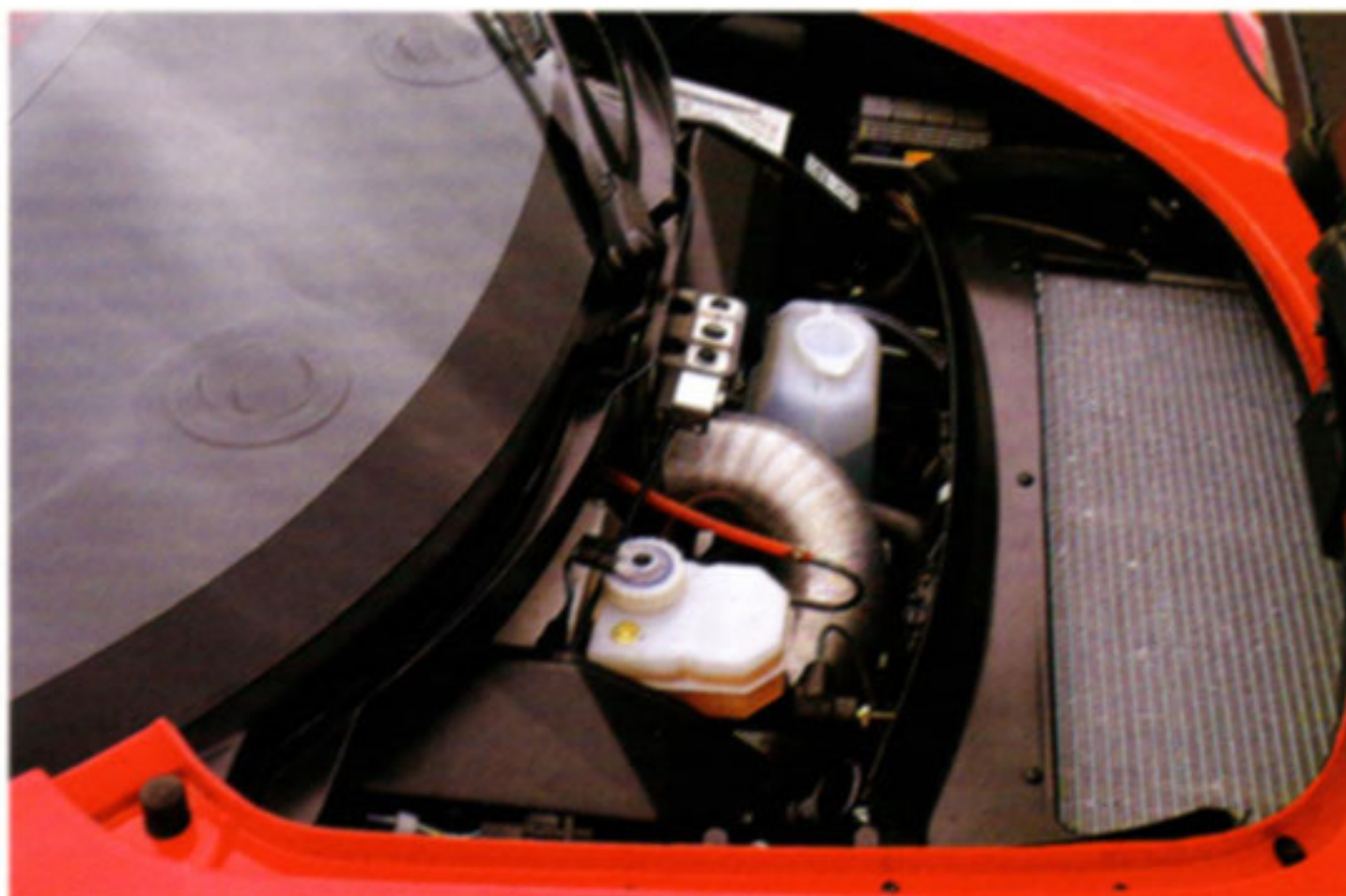
The Elise accelerates vividly, reaching 0mph in 5.5sec and sprinting between 0-70mph in 5.8sec. By 100mph (17.4 sec) the serious acceleration has started to tail away, although it isn't until 120mph that the brick wall in its aerodynamics starts to appear.

Just as well the engine's flexible, too, because the cable-operated gearchange is neither as precise nor as clean as we would have liked. And the Elise's aluminium brakes are slightly disappointing - not because they aren't good (by most standards they're excellent) but because they lack the awesome retardation and feel available in cars such as the Caterham 7 and Porsche 911.

All this is forgiven, though. Even by the lofty standards that Lotus has set for itself with such as the Esprit and original Elan, the chassis of the Elise is exceptional. It changes the way we all look at and judge the ride and handling of affordable sports cars. Not only does it provide a richer team of fun and involvement than the hitherto unrivalled Caterham 7, it combines this with a ride quality that many family cars would do well to emulate.

## LIVING WITH THE CAR

Getting in and out of the Elise isn't an elegant business, but the driving position is superb despite the fixed wheel. The cabin has been designed by serious drivers for serious drivers; the economy of movement required to change gear, steer or pedal is proof of that. As is the lack of buffeting. With the windows down, motorway travel is more than acceptable; with them up the Elise is as refined and wind-free as a BMW Z3.



Not much room under the bonnet, but there is a small boot space



Potential problems with quality

But there are too many irritating quality problems for the Elise to be regarded as an everyday prospect. The hood blew off at speed and tore itself to pieces, the passenger's window started to stop and the driver's window had already developed a rattle.

Overall consumption finally fell to 28.7mpg because of some unusually ferocious and lengthy track work. On the motorway at 80-85mph, the Elise returned between 31 and 33mpg, and even our touring route produced an excellent 36.6mpg. So, even with the tiny 40-litre (8.8-gallon) tank, a real world touring range of 300 miles is entirely feasible.



Gets to 60mph in just 5.5sec

## VERDICT ★★★★★★☆☆

In several areas the Elise sets new standards of dynamic ability among affordable sports cars; its ride, handling, economy and performance are all of a quality that hasn't been realised collectively by a car of this type previously. Yet the truly groundbreaking aspect of the Elise is that it combines all these vital sports car assets with such refinement that driving it over long distances every day on motorways is a reasonable proposition. The only thing that stands between Elise and its place in history is if Lotus fails to right its niggling detail quality problems.



With the windows up, Elise is as refined as a BMW Z3. Styling works well except for clumsy rear spoiler

## Factfile

### LOTUS ELISE 1.8

#### How much?

Price	£18,950
Price as tested	£18,950

#### How fast?

0-30mph	1.8sec
0-60mph	5.5sec
0-100mph	17.4sec
0-150mph	na
0-200mph	na
30-70mph	5.8sec
0-400m	14.4sec/93mph
0-1000m	26.6sec/113mph
30-50mph in 3rd/4th	3.7/5.0sec
40-60mph in 4th/5th	4.9/8.3sec
50-70mph in 5th	8.3sec
60-0mph	3.0sec
Top speed	124mph
Noise at 70mph	79dBA

#### How thirsty?

Test average	28.7mpg
Test best/worst	36.6/16.9mpg

#### Govt figures

Combined/urban	39.4/28.9mpg
CO <sub>2</sub> emissions	na

#### How big?

Length	3726mm
Width	1820mm
Height	1202mm
Wheelbase	2800mm
Weight	723kg
Fuel tank	40 litres

#### Engine

Layout	4 cyls in line, 1796cc
Max power	118bhp at 5500rpm
Max torque	122lb ft at 3000rpm
Specific output	66bhp per litre
Power to weight	163bhp per tonne
Installation	Mid, transverse, rear-wheel-drive
Bore/stroke	80.0/89.3mm
Compression ratio	10.5:1
Valve gear	4 per cyl, dohc
Ignition and fuel	MEMS electronic ignition, multi-point fuel injection

#### Gearbox

Type	5-speed manual
1st	3.17/5.6
2nd	1.84/9.7
3rd	1.31/13.6
4th	1.03/17.2
5th	0.76/23.3
Final drive	3.94

#### Suspension

Front	Double wishbones, coils over monotube dampers, anti-roll bar
Rear	Double wishbones, coils over monotube dampers

#### Steering

Type	Rack and pinion
Lock to lock	2.7 turns

#### Brakes

Front	282mm ventilated discs
Rear	282mm ventilated discs

#### Wheel and tyres

Size	5.5x15in(f), 7.0x16in(r)
Made of	Cast alloy
Tyres	185/55 VR15(f), 205/50 VR15(r)

#### THE AUTOCAR VERDICT

Lotus redefines the roadster and creates a reference point in the history of the car. The only affordable sports car to make the Caterham 7 look second-best