

Lotus 2-Eleven

MODEL TESTED 1.8 supercharged SVA pack

- Price £40,945 ● Power 252bhp ● Torque 179lb ft ● 0-60mph 4.0sec
- Fuel economy 20.3mpg ● CO₂ emissions na ● 70-0mph 43.3m ● Skidpan 1.01g

If, like us, you think that the Lotus Europa misses the mark somewhat, then take a look at this. The 2-Eleven is the antithesis of the Europa.

Eleven years after the introduction of the original Elise, Lotus has created the most extreme variant yet of the car that has ensured its survival during the past decade. The 2-Eleven, conceived initially with no thought of it turning into a production car, might just become one of the most memorable versions yet of all the cars based on Lotus's little aluminium platform.

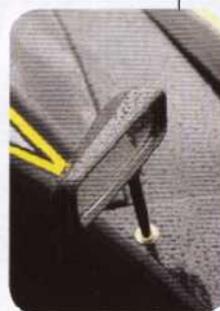
WE LIKE Astonishing performance ● Great steering ● Easy to fix, even after track day offs



1 Front air vents are for the air intake (right) and engine bay (left). They also ease the path of fast-moving air to the rear intakes.



2 If the 340R was designed mainly to look good, the 2-Eleven has been created to be used. This panel on each front corner is small and easily replaced. That's handy because it could be first in the firing line if you whack a cone or nudge a tyre during a track day.



3 Race-type mirrors are light and easy to adjust, which is just as well because it's all too easy to clout them when getting in.



4 The front splitter on this SVA-spec car looks cooler, splits air and is, at 100mm, very low. But is it a nuisance on the road? Not a bit of it. Use it to surf over speed ramps: it's marine ply, so a replacement is far cheaper than an Elise front clamshell. Track-spec 2-Eleven gets a longer splitter.

It's expensive but comparable to its rivals. And the claims – 338bhp per tonne and 0-60mph in less than four seconds – suggest this might just be the best driver's Lotus in a decade.

DESIGN AND ENGINEERING



Underneath the 2-Eleven's new bodywork are mechanicals that will be familiar to Lotus enthusiasts. The cockpit section is pure Mk1 Elise; this has higher sills than the Mk2 car (which is easier to get in

and out of), and is therefore stiffer.

The rest of the chassis is from the latest Elise. The back end houses the Toyota-sourced, 1791cc engine with variable valve timing, mated to a supercharger and tweaked to the same level as Exige 255 Cup one-make race cars: 252bhp at 8000rpm and 179lb ft of torque at 7000rpm.

SVA-equipped cars get a catalytic converter; track-only cars do without but are, perversely, even quieter than SVA cars so they pass more track day noise regulations.

As with the Elise, suspension is double wishbones at each end, with →

HISTORY

The 2-Eleven was born as the Lotus Circuit Car, a concept designed and built in 11 weeks to celebrate the centenary of the Shelsley Walsh hillclimb in 2005.

Enough punters were interested in the car, so here it is in production form. But is it the successor to the 340R? "It's an engineer's response to the 340R," says Lotus's Nick Adams. "That was a styling-led car. The 2-Eleven has been designed by track day enthusiasts, for track day enthusiasts."



WE DON'T LIKE Total absence of weather protection ● Hefty price ● Lack of colour options



5 Rear diffuser, plus the front splitter and rear wing, means that at 100mph the 2-Eleven is generating 63kg of downforce. That, coupled with its light weight, makes it a supreme track performer; given a dry run, we reckon it would have set a new record around our MIRA layout.



6 SVA car's rear wing isn't that subtle (it's from an Exige S), but it is more so than the barn door plonked on the rear of the track version.



7 The roll-over bar on the 2-Eleven is FIA race approved, although unlike some of the Lotus's rivals it lacks a 'Petty bar' (a piece of roll cage running from behind the driver's head to the passenger footwell). That's good news if you actually want to carry a passenger...

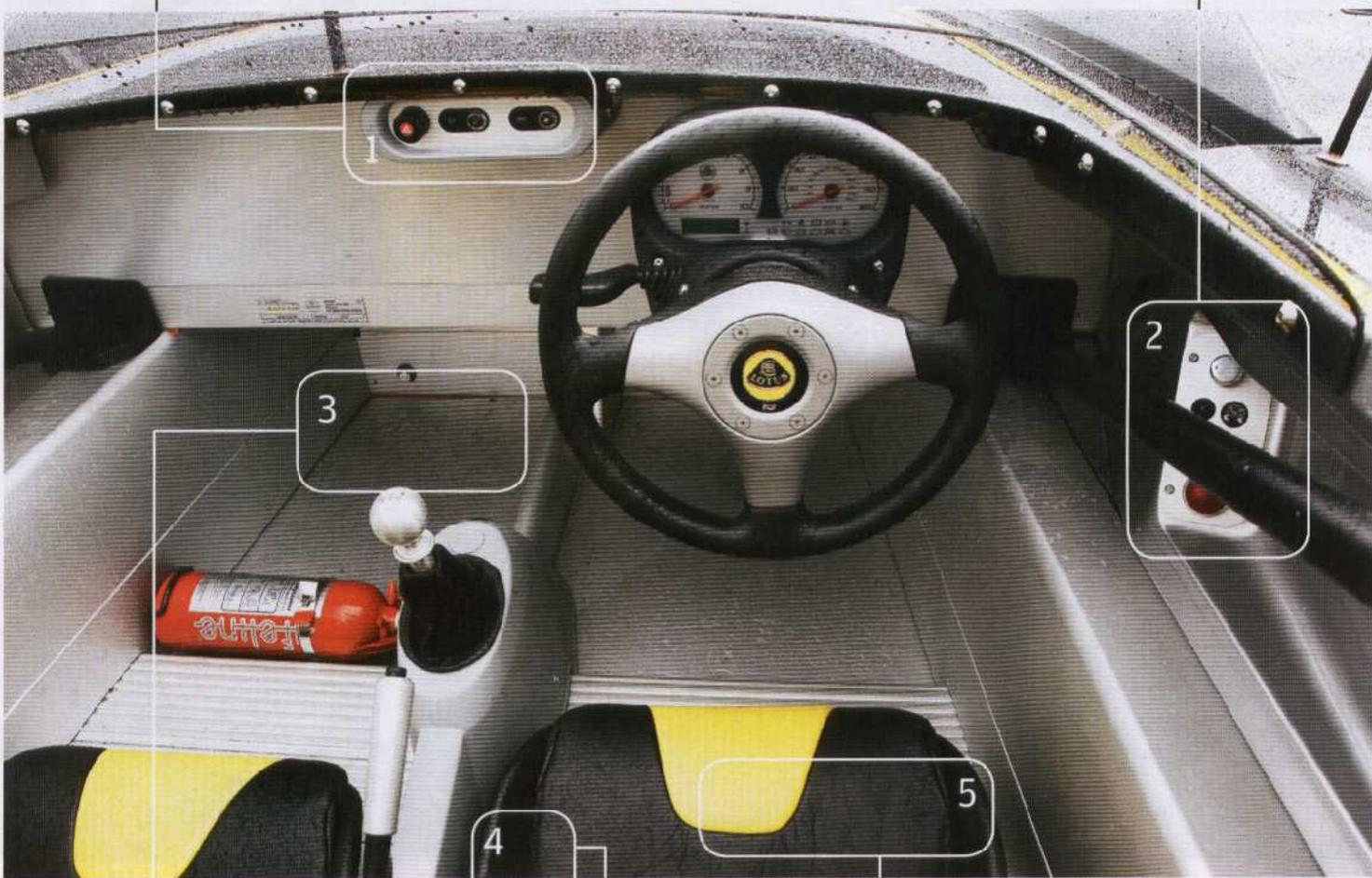


8 All 'Launch Edition' 2-Elevens get these graphics as a no-cost option. We're all for free stuff, but they do look a touch on the naff side.

1 This little 'lights pod' is standard on both road and track cars. But track cars get indicators, brake lights and 'rain lights' at the rear only.



2 The start button is the big, anodised red one. To operate the traction control, first you need to push the small button until it lights up, then you can tweak the 18-point dial with impunity.



3 Exige and Elise have a foot brace for the passenger, but Z-Eleven does without.



4 On this car the harnesses are all four-point items. On the track car they're race-approved six-pointers. Six-pointers can be retro-fitted to SVA models, though.



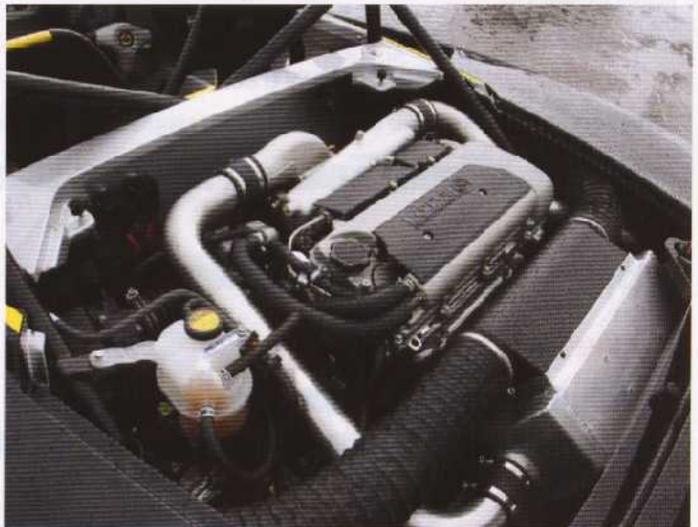
5 While this car's driver's seat slides fore and aft, the track-only car gets an FIA-approved seat that doesn't adjust on runners; it needs a spanner.



Inside out



Cabin is wide and actually quite comfortable, once you've clambered in

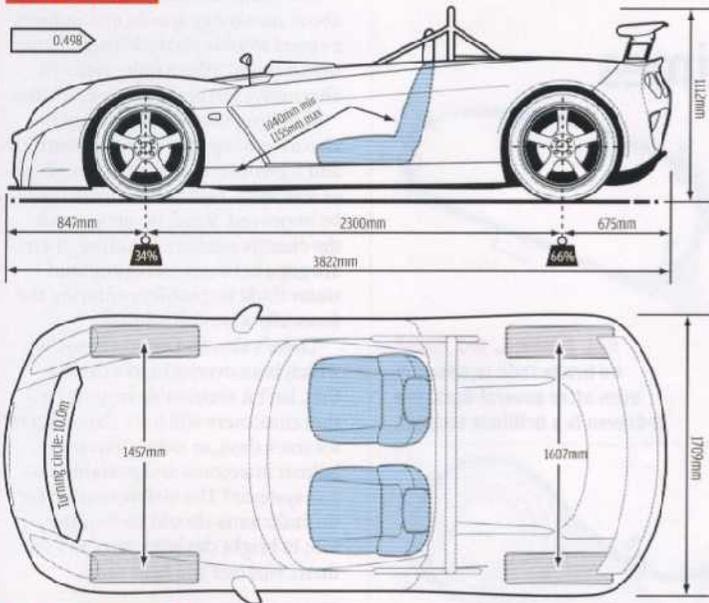


Tuned Toyota engine produces 252bhp and 179lb ft; it's surprisingly flexible

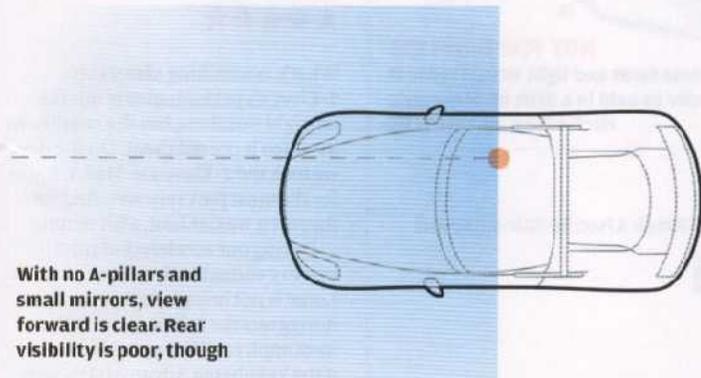


Trick Yokohama tyres have bags of grip; 'no step' stickers a rare nod to usability

HOW BIG IS IT?



VISIBILITY TEST



With no A-pillars and small mirrors, view forward is clear. Rear visibility is poor, though

← the ride height dropped to 100mm at the front and 110mm at the rear.

All 2-Elevens – at least in Launch Edition – get Ohlins two-way adjustable dampers and an adjustable front anti-roll bar, should you want to experiment in tweaking out the standard mild understeer. All owners will get a flash disk with some set-up tips, and even suggested settings for different British circuits.

The body design itself is driven by functionality. At 100mph, the SVA-pack 2-Eleven generates 63kg of downforce. In track form, with a longer front splitter and bigger, adjustable rear spoiler, it gives 62-83kg of negative lift.

All in, the body itself weighs just 40kg, so it contributes precious little to the overall 770kg, fully fuelled weight of our SVA-equipped 2-Eleven. But it's not an expensive composite; it's glassfibre with a lightweight, honeycomb-style textile core mat in the middle of it.

There are a large number of small body panels, too, all bolted to the chassis, rather than bonded, for ease of repair. By comparison, the old 340R had a one-piece clamshell that needed removing if you so much as wanted to change the battery. The

2-Eleven has a removable panel at the rear and several panels at the front, in case of minor track day offs.

INTERIOR



There's not a great deal to report here. All SVA 2-Elevens will get the same things: two ProBax seats with four-point harnesses, a Stack speedo/revcounter console, buttons for the lights, an anodised start button and the traction control switch. There's not much else.

It's a wide, roomy interior, and the seats, which look thinly padded, actually prove extremely comfortable, even over long distances. Choosing a driving position is easy; the only seat adjustment is a fore/aft slide, and the steering column doesn't adjust at all. This is less of a problem than it sounds. Set your driving position for legroom and the diddy steering wheel seems to fall in the right place – high and close – for fast driving.

But there are issues, the main one being that the Perspex wind deflector deflects too little wind. It's as high as SVA regulations will allow, but needs to be taller still, or more upright. →

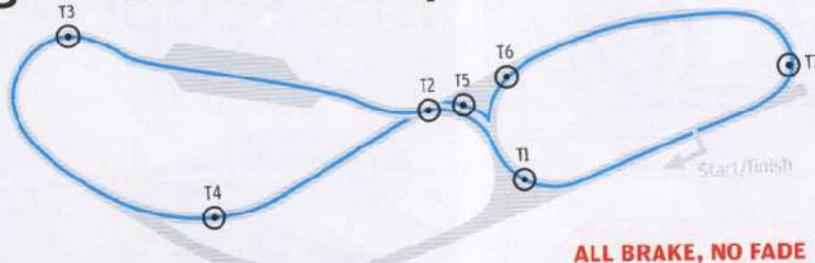
TRACK NOTES

Lower weight means lower lap times

DRY CIRCUIT

Cloudy, 15C
Lotus 2-Eleven
 1min12.71sec
Lotus Elise 111S
 1min20.64sec

Despite only getting a few dry-ish laps, the 2-Eleven went as quick as a Ferrari 599 around here. On a fully dry day it would definitely be our quickest yet.



CLEARED FOR LIFT-OFF

Standard set-up promotes understeer in steady corners, but a lift loosens the rear. Quickly.

ALL BRAKE, NO FADE

No brake fade to speak of even after several laps. The 2-Eleven is a brilliant stopper.

WET CIRCUIT

Lotus 2-Eleven
 1min11.50sec
Lotus Elise 111S
 1min08.25sec

A decent performance despite light weight (especially at the nose) and extreme tyres. Has a tendency to understeer but can be pushed through it on the power. Enjoyable.

TC HAS A SENSE OF FUN

Traction control (even on harshest setting) allows a little rearward slip – about a quarter-turn of lock.

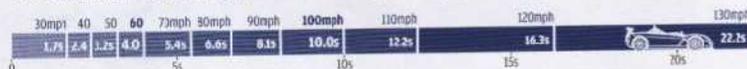


NOT FOR DRIFTING

Extreme tyres and light weight make it harder to hold in a drift on concentric circles than an Elise 111S.

ACCELERATION Showers, greasy track, 18c

LOTUS 2-ELEVEN (Standing 1/4 mile 12.9sec @ 111.7mph; standing km 23.9sec @ 131mph; 30-70mph 3.7sec; 30-70 in 4th 6.6sec)



LOTUS ELISE 111S



BRAKING 60-0mph 2.45sec



← Wind tugs at a helmet at anything above motorway speeds and induces a speed wobble above 90mph. Lotus says it might offer a taller retro-fit alternative for, ahem, 'non-road' use.

Climbing over the high body is also a challenge for even the dextrous and a genuine nuisance for the short or less agile. And fit and finish could be improved. Resin is visible from the chassis sections' bonding, there are gaps between extrusions and water finds no problem entering the footwells when it's raining.

There's also no 12v power socket, which is an oversight in a car like this. Isn't it reasonable to assume that customers will have dataloggers for track days, or radar detectors, helmet intercoms and portable sat-nav systems? The visible marker for the indicators should be brighter, too; in bright daylight you can't see them. Nor can you hear them.

PERFORMANCE



What's astonishing about the 2-Eleven's performance is not the outright numbers, but the conditions in which it proved them. On the day we took the 2-Eleven to MIRA, it was for the most part very wet. And for the rest it was, at best, a bit damp.

During our acceleration runs it was dry enough only to confirm that Lotus is not being optimistic when it suggests the 2-Eleven is a 3.8sec-to-60mph car. We've no doubt that if the Yokohama Advan A048s were allowed to operate with some heat, we'd have bettered 4.0sec to 60mph.

However, the 2-Eleven isn't helped here by its frankly iffy gearshift. At its best it's merely unobtrusive; at its worst it's difficult and notchy. Good job, then, that the supercharged engine is far more flexible than 140bhp per litre would suggest. It's



ON THE LIMIT

The 2-Eleven is designed to push into gentle understeer as it reaches a

steady-state limit. By which time, in dry conditions, it's already going at a heck of a rate; the Yokohama Advan A048 tyres generate masses of grip.

You can push through the understeer with the throttle from here, even with the traction control in its start-up format, which allows a

small amount of rear slip (seven per cent) before cutting the engine's power. Typically, this is an eighth to a quarter-turn of opposite lock, enough

Under the skin



tractable at any speed, is relatively strong above 2500rpm and comes into its own at about 5000rpm.

The 2-Eleven also has among the best set of stoppers we've tried. Even during track testing there was absolutely no brake fade. Granted, the 2-Eleven weighs just 755kg, but even so a 60-0mph time of just 2.45sec is astonishing. They're servo-assisted and – to the chagrin of some original Elise fetishists – have ABS. We'd like a little less assistance at the top of the pedal, and although we entered the ABS zone sooner than we wanted while trailing the brakes into one of the turns on track, we'd rather have that than a lock-up.

RIDE AND HANDLING



The 2-Eleven is the lightest, most agile Lotus in years. Its steering geometry is basically the same as the Elise's but is noticeably easier at town speeds, and that's all down to the 2-Eleven's reduced kerb weight. In truth, it's just about ideally weighted now; with only 265kg over the front wheels, there's really no need for power assistance. But it's still as wonderfully accurate

and direct as ever, and has a fantastic, linear response to inputs.

As your speed rises, the steering's weight returns to one that'll be familiar to anyone who has driven an Elise. But the 2-Eleven always feels fleetier of foot than an Elise or an Exige. It turns in more easily and its body movements are even more impeccably controlled.

Its ride, however, is worse than a regular Elise's. Like most very light cars, especially stiffly sprung ones like this, the 2-Eleven is easily deflected by bumps and surface imperfections. It's better at high speeds than low ones, where the car skips over bumps rather than being knocked all over the place, but there's usually a little crash from the suspension and the body as the 2-Eleven hits poor surfaces.

Nevertheless, it's not too severe. It's as good as a de Dion-axled Caterham, and given that a full-face helmet is all but essential anyway, you feel a little removed from the harshness.

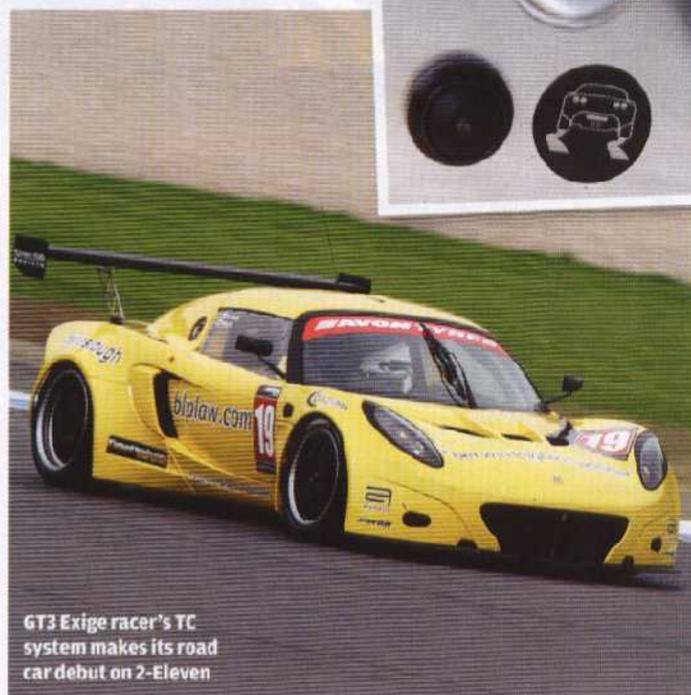
On our test track, we snatched only four dry laps on the dry handling circuit in anything like dry conditions, yet the Lotus still breezed to 1m12.7sec, one of the fastest times we've set around the course. Even →

TRACTION CONTROL

Unlike the traction control systems found on regular road cars, the 2-Eleven's operates solely on the engine, rather than combining it with brake control. So it sounds very cool when it throttles back and reacts quickly to wheel slip.

It has 18 stages; at its harshest it allows the rear wheels to slip seven per cent more than the fronts, so it lets the tail kick a tad wide before feathering the throttle. Its other stages allow more slip, until it's off.

The system was initially developed for the Lotus Sport Cadena Exige, which won last year's British GT3 Championship. But expect to see it on more roadgoing Lotuses than just the 2-Eleven.



GT3 Exige racer's TC system makes its road car debut on 2-Eleven



to allow the more heavily loaded rear (66 per cent of the weight is over the back) to move around without overtaking the front.

If you lift mid-corner, it's a slightly different story. At lower speeds the back end comes around quickly but controllably; the steering's linearity



means the quick dose of corrective lock you intuitively dial in will probably be the right amount, and normality is quickly restored.

However, the 2-Eleven is not a machine that appreciates being provoked at higher speeds. Lift and the back swings around quickly.

Crunching numbers



WHAT IT COSTS

LOTUS 2-ELEVEN

On-the-road price	£40,945
Price as tested	£40,945
Value after 3yrs/15k miles	na
Typical PCP pcm	na
Contract hire pcm	na
Cost per mile	na
Insurance/typical quote	20/PCA

EQUIPMENT CHECK LIST

ABS	■
Airbags	na
Variable traction control	■
Cross-drilled discs	■
Forged alloy wheels	■
Adjustable dampers	■
Adjustable front anti-roll bar	■
Adjustable ride height	■
4-point driver harness	■
4-point passenger harness	■
6-point FIA roll bar	■
Fire extinguisher	■
ProBax sport seats	■
Battery isolator switch	■

Options in **bold** fitted to test car

■ = Standard na = not available

RANGE AT A GLANCE

2-Eleven	252bhp	£39,995
2-Eleven SVA Pack	252bhp	£40,945

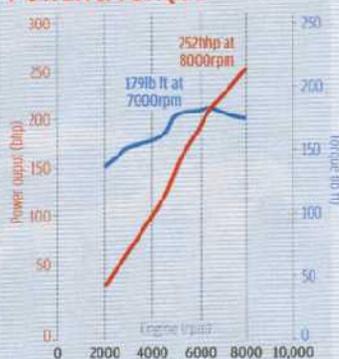
TRANSMISSIONS

Six-speed manual	std
Auto	na

ENGINE

Installation Type	Mid, transverse
Made of	4cyls in line, 1796cc, petrol, supercharged Aluminium head and block
Bore/stroke	92.0/75.2mm
Compression ratio	11.5:1
Valve gear	4 per cyl
Power	252bhp at 8000rpm
Torque	179lb ft at 7000rpm
Red line	8500rpm
Power to weight	338bhp per tonne
Torque to weight	240lb ft per tonne
Specific output	140bhp per litre

POWER & TORQUE



CHASSIS & BODY

Construction	Aluminium monocoque
Weight/as tested	745kg/770kg
Drag coefficient	0.498
Wheels	7 x 16in (f), 8 x 17in (r)
Tyres	195/50 R16 (f), 225/45 R17 (r)
	Yokohama Advan
	AO48 LTS
Spare	None

TRANSMISSION

Type	Rear drive	Gearbox	6-speed manual
Ratios/mph per 1000rpm			
1st	3.11/5.3	2nd	2.05/8.0
3rd	1.48/11.1	4th	1.16/14.1
5th	0.91/17.9	6th	0.81/20.1
Final drive ratio 4.529			

ECONOMY

TEST	Average	20.3mpg
	Touring	25.8mpg
	Track	13.4mpg
CLAIMED	Urban	na
	Extra-urban	na
	Combined	na
	Tank size	43.5 litres
	Test range	194 miles

SUSPENSION

Front	Double wishbones, coil springs, anti-roll bar
Rear	Double wishbones, coil springs, anti-roll bar

STEERING

Type	Mechanical rack and pinion
Turns lock to lock	2.8
Turning circle	10.0m

BRAKES

Front	288mm ventilated discs
Rear	288mm ventilated discs
Anti-lock	Standard

CABIN NOISE

Idle	76dB	Max revs in third gear	109dB
30mph	85dB	50mph	88dB
70mph	93dB		

SAFETY

ABS, traction control	
EuroNCAP crash rating	na
Pedestrian rating	na

GREEN RATING

CO2 emissions	na
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ACCELERATION

MPH	TIME (sec)
0-30	1.7
0-40	2.4
0-50	3.2
0-60	4.0
0-70	5.4
0-80	6.6
0-90	8.1
0-100	10.0
0-110	12.2
0-120	16.3
0-130	22.2
0-140	-
0-150	-

ACCELERATION IN GEAR

MPH	2nd	3rd	4th	5th	6th
20-40	1.8	2.7	3.6	5.1	6.3
30-50	1.7	2.6	3.4	4.8	5.8
40-60	1.6	2.4	3.3	4.7	5.6
50-70	-	2.2	3.2	4.8	5.8
60-80	-	2.3	3.1	4.8	6.2
70-90	-	2.5	3.1	4.8	6.5
80-100	-	-	3.4	4.9	6.9
90-110	-	-	4.0	5.2	7.7
100-120	-	-	-	5.6	9.1
110-130	-	-	-	6.6	-
120-140	-	-	-	-	-
120-140	-	-	-	-	-

MAX SPEEDS IN GEAR

45mph	94mph	150mph
8500rpm	8500rpm	8380rpm
1	3	5
2	4	6
68mph	120mph	140mph
8500rpm	8500rpm	6957rpm

RPM in 6th @ 70/80mph = 3480/3980



THE SMALL PRINT *Power and torque-to-weight figures are calculated using manufacturer's claimed kerb weight. © Autocar 2007. Test results may not be reproduced without editor's written permission. For information on the Lotus 2-Eleven, contact Group Lotus PLC, Potash Lane, Hethel, Norfolk NR4 9JZ (www.group Lotus.com; 01953 608 000). Cost-per-mile figures calculated over three years/36,000 miles, including depreciation and maintenance but not insurance; Lloyds TSB Autolease (0870 600 6333). Insurance quote covers 35-year-old professional male with clean licence and full no-claims bonus living in Swindon; from What Car? Insurance (0845 123 2618). Contract hire figure based on a three-year lease/36,000-mile contract including maintenance, from Lambert (0870 962 3333).

AUTOCAR ROAD TEST

Read all of our road tests at www.autocar.co.uk

← so, we know we could have braked later and been back on the power sooner on at least two corners. On a dry day, this is probably a high 1m11sec car, which means it's (easily) faster than a Ferrari 599 GTB or Porsche 911 GT3 on the circuit.

Given its extreme tyres, rear-biased weight distribution and overall lightness, you'd be forgiven for thinking that the 2-Eleven would be pretty hopeless in the wet. And though its circuit time of 1m11.5sec is not one that would have you writing home, it's fairly respectable. At no point did the 2-Eleven feel like it was on tippytoes, and although it's slower than an Elise 111S, it's way faster than the aquaplaning-prone 911 GT3. The 2-Eleven's suspension could no doubt be tweaked to go a little faster, too.

BUYING AND OWNING

★★★★☆

Because this is an SVA-approved road car, there are no official economy figures and we have no depreciation values, but neither will be severe (only 100 a year will be built, which should keep residuals strong).

Likewise, although the initial purchase price seems steep for a car that comes even without doors, it's not outrageous in the context of rivals like Caterham's CSR or the supercharged Ariel Atom.

This car's fixable nature, in case of track or single-car road offs, is also excellent, easily the measure of a normal road car.

Of more concern is the 2-Eleven's lack of weather protection. The Elise and its derivatives might have been dubbed "the Seven for the 21st century", but the one Colin Chapman made about halfway through the 20th century creams this car in terms of year-round usability. You'd drive a Seven to Le Mans with impunity. A 2-Eleven would need the same sort of planning as a motorbike trip.

AUTOCAR ROAD TEST

No 4813

Lotus 2-Eleven

AUTOCAR VERDICT ★★★★★

Great steering and handling, sensational performance



O If driving purity is all you care about, you need look no further than a Lotus 2-Eleven. Precious little on the market today offers such driving involvement and enjoyment. A Porsche 911 GT3 RS is a marginally superior driving machine, but demands two and a half times the 2-Eleven's price. A Caterham CSR runs the 2-Eleven close dynamically, but it does feel less sophisticated and has less delicate steering.

However, do not expect the 2-Eleven to be a car that you can just jump into and use all year round. Both the Porsche and (bizarrely) the Caterham – and Lotus's own Exige – make a mockery of the little 2-Eleven once conditions take a turn for the worse.

But if you're prepared to put the effort in, and the waterproofs on, the 2-Eleven delivers a uniquely thrilling driving experience. It is the most focused Lotus ever, and all the better for it.

TESTERS' NOTES



JAMIE CORSTORPHINE
A few places to put things wouldn't go amiss. Phones, wallets, loose change (the sort of things that harnesses stop you from hauling from your pockets), maybe maps and drinks too. A couple of strappy pouches would do it.



MATT PRIOR
Unlike a lot of sports cars, the 2-Eleven has a very spacious interior: extremely wide and with plenty of legroom. Feels like you're looking out of an LMP racer, too – no bad thing.

JOBS FOR THE FACELIFT

- A tonneau cover would be nice, perhaps hard across one side, or zippable across both.
- More colour options, please. What's all this 'Launch Edition' nonsense anyway?
- Add a power socket or two for the interior.
- A taller or more upright wind deflector is an essential.

AUTOCAR TOP FIVES



MAKE	LOTUS
Model	2-Eleven
Price	£40,945
Power	252bhp at 8000rpm
Torque	179lb ft at 7000rpm
0-60mph	4.0sec
Top speed	150mph
Fuel consumption	20.3mpg
Kerb weight	770kg
CO₂/tax band	na

MAKE	PORSCHE
Model	911 GT3 RS
Price	£94,280
Power	415bhp at 7600rpm
Torque	298lb ft at 5500rpm
0-60mph	4.2sec
Top speed	192mph
Fuel consumption	22.1mpg
Kerb weight	1375kg
CO₂/tax band	307g/km, 35 per cent

MAKE	LOTUS
Model	Exige S
Price	£34,945
Power	218bhp at 5500rpm
Torque	158lb ft at 5500rpm
0-60mph	4.1sec
Top speed	148mph
Fuel consumption	31.0mpg
Kerb weight	935kg
CO₂/tax band	216g/km, 30 per cent

MAKE	CATERHAM
Model	Seven CSR
Price	£37,000
Power	260bhp at 7500rpm
Torque	200lb ft at 6000rpm
0-60mph	3.3sec
Top speed	155mph
Fuel consumption	24.0mpg
Kerb weight	570kg
CO₂/tax band	na

MAKE	ARIEL
Model	Atom Supercharged
Price	£29,205
Power	300bhp at 7200rpm
Torque	191lb ft at 7150rpm
0-60mph	3.2sec
Top speed	155mph (claimed)
Fuel consumption	na
Kerb weight	456kg (claimed)
CO₂/tax band	na

Every Top Five See page 84

If track day lunacy takes priority over practicality...
★★★★★

...but if you want to carry more than your watch, take the GT3 RS.
★★★★★

The next-best track Lotus. Less agile and less fast.
★★★★★

Less sophisticated than Lotus, but good engine, and more practical.
★★★★★

Similar exposed lunacy. Less honed, but fast, and looks great.
★★★★★