Lotus Cars Australia



Lotus Dealer Product Overview

Please circulate to ALL sales staff

The Lotus Elise S





Key Pointers:

- **Positioning**: Entry level price with high level performance
- Features: High level standard specification, not a stripped-out version of the Elise R (111R)
- Class Leading: For acceleration, performance and handling



The Lotus Elise R





Key Pointers:

- **Positioning**: Premium Elise product with exceptional levels of performance
- Features: High level standard specification, but with additional Option Packs to further focus product attributes on the road and the track.
- **Award Winning:** Continues to set the benchmark in the performance sports car sector having won many international awards.



Lotus Elise S & R Performance & Powertrain Comparison

Performance :	Elise S	Elise R
0-100 km/h :	6.1 seconds	5.2 seconds
0-160 km/h :	17.4 seconds	13.2 seconds
Max Speed :	205 km/h	241 km/h
Fuel Economy:	8.3l/100 km	8.8l/100km

Powertrain :	Elise S	Elise R		
Engine :	Toyota 1ZZ-FE 1.8 litre VVT-i	Toyota 2ZZ 1.8 litre VVTL-i		
Transmission:	C56 5-speed manual	C64 6-speed manual		
Max Power:	100kW @ 6200 rpm	141 kW @ 7800 rpm		
Max Torque :	172 Nm @ 4200 rpm	181 Nm @ 6800 rpm		
Engine Management :	Lotus T4e system	Lotus T4e system		







Lotus Elise S & R Powertrain Differences

Core Variances:

- The Elise S uses the 1ZZ 1.8 litre Variable Valve Timing (VVT-i) engine and not the 2ZZ Variable Valve Timing & Lift intelligent (VVTL-i) system as found in the Elise R.
- The 1ZZ and the 2ZZ are completely different engines with primary differences as below:



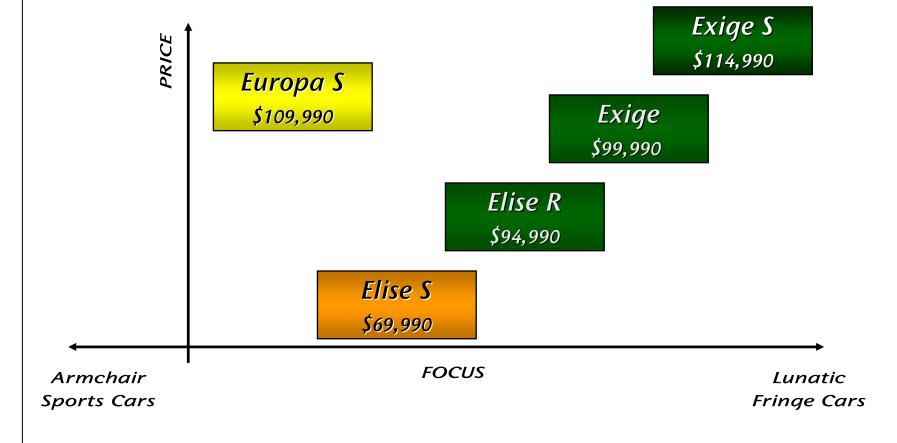
Elise S	Elise R		
Toyota 1ZZ-FE 1.8 litre	Toyota 2ZZ 1.8 litre		
VVT-i	VVTL-i		
Aluminium block with cast iron bore liners	Aluminium block with MMC bore liners		
173 kg	188 kg		
(fully dressed incl transmission)	(fully dressed incl transmission)		
Made by Yamaha	Made by Toyota		

• The 1ZZ engine also has (amongst others) different crank, pistons, rods and slightly different installation



Lotus Elise S & R Market Positioning

Where they fit into the Lotus range.......



How the Elise S sits with the Competition

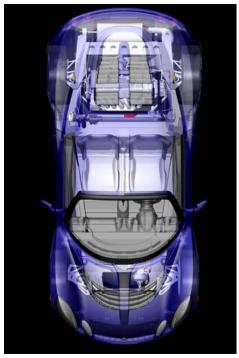


Manufacturer :	Lotus	Mazda	Audi	BMW	Mini
Model:	Elise	MX-5	TT	Z4	Cooper
Variant :	S	2.0i Sport	1.8	2.5 si	S
Engine Size (litres) :	1.8	2.0	1.8	2.5	1.6
Engine Output :	100 kW (134 hp)	118 kW (158 hp)	120 kW (161 hp)	160 kW (218 hp)	127 kW (170 hp)
Weight:	860 kg	1095 kg	1335 kg	1285 kg	1240 kg
Power to Weight :	116 kW/t	108 kW/t	90 kW/t	124 kW/t	102 kW/t
0-100 km/h	6.1	7.9	7.6	6.5	7.4
Top Speed :	205 km/h	209 km/h	217 km/h	216 km/h	222 km/h

Lotus Elise S & R Base Specification Enhancements

Both the Elise S and the Elise R take on Model Year updates as per the new Exige S. This includes a number of base specification changes alongside option pack variations. The base specification enhancements are as follows:

- **NEW** Light Emitting Diode (LED) rear light clusters
- **NEW** high specification interior with dual airbags
- NEW clean rear grille design
- **NEW** cabin sealing for reduced noise
- NEW seat design and interior trim colour range
- **NEW** lightweight pedal box
- **NEW** drive-by-wire throttle system



Lotus Elise S & R Base Specification Enhancements - Exterior

Rear Lights:

New design LED rear light clusters with integrated reflectors. LED lights are brighter, illuminate quicker than conventional filament bulbs and are 36% lighter (around 0.6 kg) than the MY04 rear light clusters.



Rear Grille Reflectors Deleted:

Since the reflectors have been integrated into the new rear lights, their deletion from the LH & RH grilles allow for a cleaner design.

Rear Logo – Return to the classic 'LOTUS' script:

The Lotus roundel has been deleted in favour of the classic script which dates back to the Elan S3 of 1965





Lotus Elise S & R Base Specification Enhancements - Exterior

Tyre Amendment :

New Yokohama Advan Neova AD07 LTS Tyres developed in conjunction with Yokohama. Attributes are:

- Unique carcass and belt construction to optimise vehicle handling
- Dedicated compound for superlative traction and superior wet performance
- High response, great stability and feedback to the driver

Tyre Sizes:

The new tyres suit the Elise S & Elise R standard cast wheels alongside the optional 'narrow front' (6") forged wheels

FRONT: 175 / 55 R16 80W
 REAR: 225 / 45 R17 91W

Soft Top Colour Options Discontinued:

Elise factory fit soft-top colour options are no longer available on vehicle order. They are only available through Lotus After-Sales







Lotus Elise S & R Base Specification Enhancements - Interior

- High specification leather steering wheel with driver airbag
- High specification dash panel with driver & passenger airbag
- Engine Push Start button
- Centrally located Alpine radio, CD player
- Front speakers relocated on top of dash panel
- New cubby-holes for storage purposes
- New sill covers
- Electric windows as standard *



Previous Interior
(with Touring Pack)



Revised Elise S & R Interior

NB: Image shown is US spec car for presentation purposes only.

^{* =} Introduced as a rolling change, thus not on first shipment of LCA Elise S, but will be as part of orders going forward



Lotus Elise S & R Base Specification Enhancements - Interior

New 'ProBax™' technology seats:

The new seats have been developed in conjunction with NuBax to:

- Maintain the natural curvature of the spine
- Reduce muscle fatique
- Increase blood flow by 30% over previous seats





- Available in black cloth on standard specification vehicles
- Black Leather or Suede-effect options with Touring Plus pack



Leather ProBax seat



Lotus Elise S & R Base Specification Enhancements - Interior

Interior Colours:

- Available only with Touring Plus Pack option on Elise S & Elise R
- Leather available in: Black, Red, Biscuit (beige), Cream (magnolia)
- Suede-effect available in : Black, Blue (bright blue), Red
- NOTE: Blue leather option discontinued

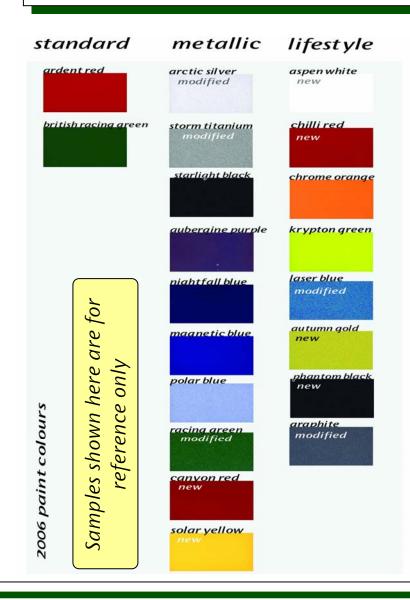


Elise 111R Factory Fit Full Carpet Set Colour Options Discontinued:

• Colour carpet sets now available only through Lotus After-Sales



Lotus Elise S & R Paint Options



Lotus have introduced numerous new paint colours as part of product enhancements, all of which are available on the Elise S and Elise R.

Paint Pricing Structure:

- Solid standard
- Metallic cost option
- Lifestyle additional cost option
- Custom POA

Lifestyle Paint Pricing Justification:

- Requires a special tinted clear coat
- Entails a longer spraying process

Australian Dealer Network Issues:

- New colour charts are already available
- Colour & Trim display amendments for Australia have been communicated



Lotus Elise S & R Mechanical Changes

Pedal Box :

- Extruded pedals replaced with stamped steel arms and extruded aluminium pads for weight reduction
- Revised brake pedal position and reduced pedal travel for improved heel-and-toe action



Throttle Control:

- Throttle pedal now 'drive-by-wire' for improved engine response with respect to pedal travel
- Recalibrated and tuned Engine Management System (EMS) to adopt 'drive-by-wire' throttle control.

Lotus Elise S & R Option Packs - Touring Plus pack

Available on.. CLISS ...and... CLISS

- 1. Leather or Suede-effect interior trim (colour options as per previous slide)
- 2. Full carpet set (Black)
- 3. Embroidered carpet mats (Black) with Elise logo
- 4. Auxiliary front driving lamps
- 5. Noise insulation panelling
- 6. Soft-top with noise/thermal insulation
- 7. Interior stowage net
- 8. Plain leather gear knob (Black)
- 9. Perforated leather handbrake lever gaiter (Black)
- 10. Trinket tray divider
- 11. Retractable aluminium cup holder
- 12. High specification Alpine CD/MP3 stereo with iPOD connectivity



Trinket tray divider



Auxiliary front driving lamp

NB: There are a number of Option pack differences between Exige S and Elise S & R product.

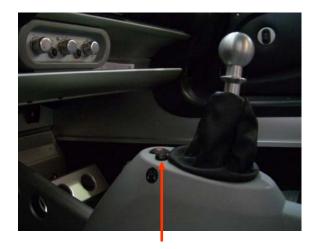
Please refer to Lotus Exige S Dealer Training presentation or relevant PoS material for comparisons.



Lotus Elise R Option Packs - Sport pack

Only available on...

- 1. Twin oil coolers
- 2. Switchable Traction Control System (TCS)
- 3. Sport Suspension (non-adjustable dampers & ride height)
- 4. Split-type 7-spoke 'narrow front' (6") ultra lightweight forged alloy wheels (Hi-Power silver)



Traction control button

NOTES:

- 1 Provide additional engine cooling for fast-road / track use
- Active over 8km/h reduces engine power output to maintain traction without taking over from the skill of the driver Fitment of traction control allows for optional torque-sensing type Limited Slip Differential (LSD) to be specified
- *Bilstein dampers with up-rated valving and stiffer Eibach springs (FR: 12% & RR: 8%) for more focused driving experience.*
- Forged and machined from solid to achieve a 6.6 kg overall advantage (FR: 6.0Jx16 H2 & RR 7.5Jx17 H2) 'narrow front' forged wheels are specifically designed to suit standard Yokohama Advan Neova AD07 LTS tyres

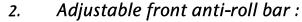
Lotus Elise R Option Packs - Super Sport pack

Only available on...

Only available in conjunction with Sport pack

1. Track suspension (1-way adjustable dampers & ride height):

Bilstein dampers with adjustable bump & rebound (10 settings)
Also allows for adjustable ride height (-10mm adjustment) for tailoring vehicle handling characteristics



Tubular design adjustable anti-roll bar secured to chassis with Nylon blocks (5 settings)

3. Split-type 7-spoke 'wide front' (6.5") ultra lightweight forged alloy wheels (Hi-Power Silver) :

Forged and machined from solid to achieve a weight of just 6.4 kg





Adjustable dampers



Forged wheels



Lotus Elise R Option Packs – Super Sport pack (cont..)

Only available on...

Only available in conjunction with Sport pack

- Yokohama Advan A048 LTS tyres 3. (FR: 195/50 R16 84W RR: 225/45 R17 90W)
- BS4 T45 steel roll-over hoop and struts 4.
- 5. Double shear Track Control Arm (TCA) brace





'Double shear' TCA brace

NOTES:

- Bilstein dampers with adjustable bump & rebound (10 settings) Also allows for adjustable ride height (-10mm adjustment) for tailoring vehicle handling characteristics
- Tubular design adjustable anti-roll bar secured to chassis with Nylon blocks (5 settings) 2
- Forged and machined from solid to achieve a 6.4 kg overall advantage (FR: 6.5]x16 H2 & RR: 7.5]x17 H2) 3 'Wide front' forged wheels are specifically designed to suit Yokohama Advan A048 LTS tyres only
- Street-legal competition tyre with Lotus specific compound that provides dry grip over a wide range of temperatures 4 with 'single block' tread design increasing tread stiffness and wide centre area enhancing cornering stability, on-centre feel and steering response.
- Motorsport quality steel provides increased roll-over protection for customers intending to race their cars. 5 Enables fitment of 6-point FIA approved roll-cage available separately through Lotus Sport & Performance
- 'Double shear' mounting for inboard ends of rear TCA's provides increased tolerance to track kerb abuse 6

Lotus Elise R Stand-alone Options (only Elise R)

Only available on...

- 1. Torque-sensing Limited Slip Differential (LSD):

 Only available in conjunction with Traction Control System (TCS)
- 2. Black wheels and rear diffuser finish



LSD unit contained within gearbox

NOTES:

- Limits velocity difference between driven wheels to transmit torque more efficiently for improved traction. Ideal for low speed, high acceleration driving around tight corners as experienced on Autotest events LSD is only available as an add-on to the optional TCS in order to maximise its benefits and performance.
- 2. Option allows to specify standard 8-spoke wheels & anodised rear diffuser in black for a more aggressive look Black finish 'narrow front' (6") and 'wide front' (6.5") forged wheel sets are available through Lotus After-Sales



Lotus Elise S & R Stand-alone Options

Available on.. CLISS ...and... CLISS

- 1. Switchable Traction Control System (TCS)
- 2. Paint Metallic, Lifestyle or Custom
- 3. Hard-top (body colour)



Traction control button

NOTES:

1. Active over 8km/h – reduces engine power output to maintain traction without taking over from the skill of the driver Fitment of traction control allows for optional torque-sensing type Limited Slip Differential (LSD) to be specified

Lotus Elise S & R Australia Marketing Material

Please find below information on material that will be available for the Lotus range

Lotus Elise Point of Sale (material combines both Elise S & Elise R):

• Elise In Brief:

Double sided flier to be used for general purposes. Available end Oct 2006. Parts numbers TBC



• Elise Brochure:

Full 12 page brochure for general purposes Available end Oct 2006. Parts numbers TBC



Lotus Exige S Point of Sale:

(For your information)

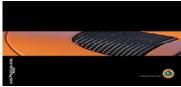
• Exige S In Brief:

Double sided flier to be used for general purposes. Reprinted version with amendments available end Oct 2006.



Elise Brochure:

Full 12 page brochure for general purposes Available now. Part No. ICL 121

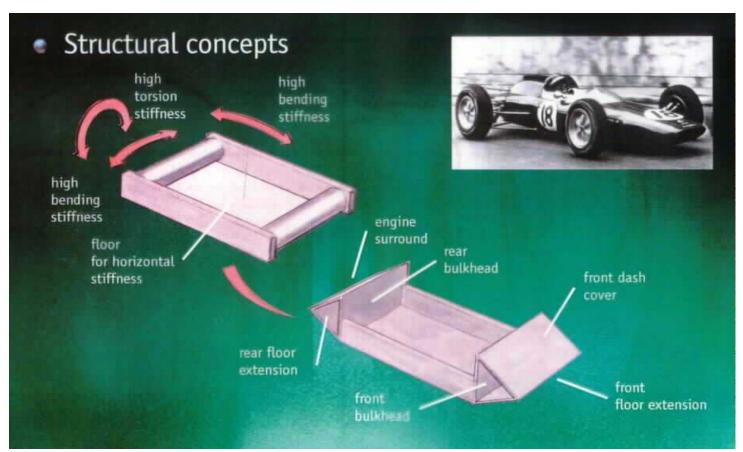


Lotus Cars Australia



Core Lotus Vehicle Attributes

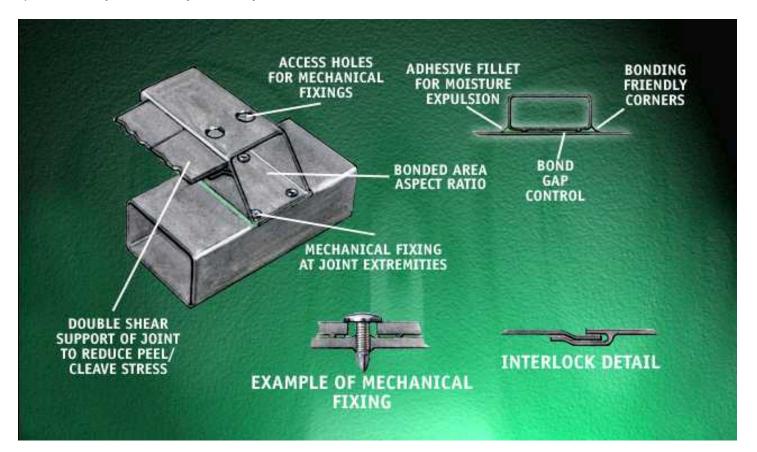
The chassis takes the philosophy of the world's first monocoque Formula One Car - the Lotus 25...



Inset: Lotus 25



.....and with clever use of advanced technologies such as structural design, adhesive fastenings and lightweight Aluminium...



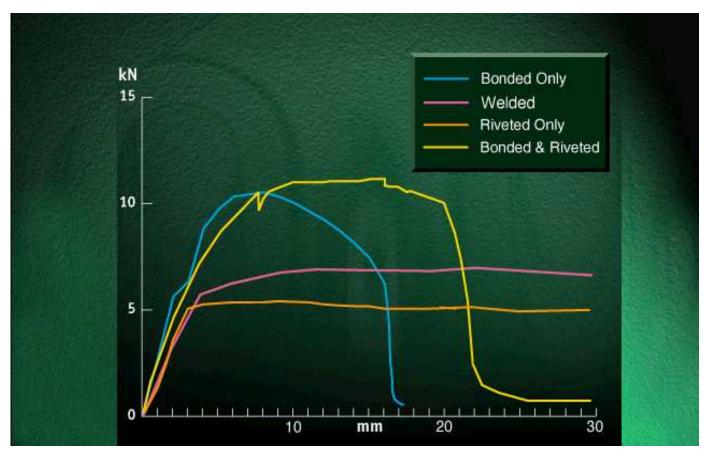


.....Lotus produced the world's first extruded & bonded aluminium chassis weighing 68kg, as used on the Lotus Elise and the Lotus Exige S.



Q: Why has Lotus decided to bond and rivet the chassis together?

A: Because it is the strongest and lightest combination and far better than welding





13/10/2006

The Lotus Crash Structure

The Crash Structure found in both the Lotus Elise & the Lotus Exige is bonded to the front of the Aluminium Chassis. It follows Lotus Core Philosophies of:

- **Innovation**
- **Lightweight**
- Multi-functionality as it:
 - Provides a Crash Structure
 - Houses the Radiator
 - Allows for Air intake
 - **Provides Auxiliary Driving Lamp mounts**
- <u>Sacrificial Structure</u>: It can be easily and economically replaced
- Energy: Up to seven times more energy absorbing that the same weight of steel
- Form: The upper and lower sections are bonded together and have hexagonal crush tubes of tapering geometry and thickness (as below)







Lotus Suspension

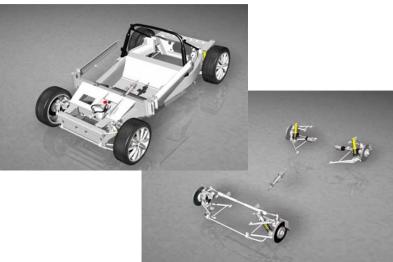
Suspension is a Lotus trademark and achieves the 'Holy Grail' of balance between Ride and Handling

Features:

- <u>Independent Suspension</u>: Front and rear comprising upper and lower wishbones
- <u>Eibach Co-axial spring/Bilstein telescopic damper unit :</u> Global standard damper settings, adjustable on certain Option packs)
- <u>Front anti-roll bar</u> (ARB): Also with adjustable ARB on certain Option packs)
- <u>Tyres</u>: The 'forgotten component' of suspension with a unique LTS compound in both the Yokohama AD07 and A048 tyres

Benefits:

- Stiff chassis means minor adjustments are instantly felt
- Outstanding road holding
- Instant response to driver input
- 'Adjustable' attitude
- Comfortable ride quality
- 'Tuneable' Exige & Federal model



Lotus Brakes & Lotus Steering

Lotus Brakes:

Developed with the objective of being lightweight and providing maximum feel.

Features:

- Lightweight cast iron discs front and rear
- AP Racing two piston aluminum fixed front calipers
- Brembo single piston sliding rear calipers
- 4-channel 'track-tuned' ABS as standard
- Servo assisted

Benefits:

- Low overall mass means same braking performance as cars with much larger (and heavier) disc size
- Maximum pedal 'feel' allows adjustable attitude under braking
- ABS developed not to be intrusive only to cut in late

Lotus Steering:

Developed with the objectives of providing pure steering with maximum feedback.

Features:

- Rigidly mounted rack and pinion
- 2.8 turns lock-to-lock
- No power steering

Benefits:

- Low mass requires minimal steering input
- Instant response
- Linear output relative to input



Lotus Body

Developed with the objective of being of lightweight construction and allowing for cost effective production

Features:

- Composite body, formed under high pressure
- 'Hand-lay' process for Exige most cost effective relative to production volume

Benefits:

- Thinner, lighter, stronger and higher quality finish than Mk1 Elise
- No corrosion
- Surface finish as good as steel pressing
- Good impact energy absorbtion & dissipation by fibres
- Reduced material wasteage





Lotus Cars Australia Contacts

For queries relating to Lotus Cars please contact the following:

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National Sales & Marketing Manager Marketing Assistant

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Syd Brooksby Parts Dealer Support

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General Manager Operations

Lotus Technical:

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