

*This press pack accompanied the UK launch of the second generation Lexus GS in January 1997. Some changes were made to the model range during its time on sale, which can be tracked using the Timeline feature available on the Lexus GS archive web page. Additional assets and information relating to the second generation GS range may be obtained from the Lexus press office if required.*

## NEW LEXUS GS300

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October 1997

## **NEW LEXUS GS300**

- **All new, compact body**
- **Longer wheelbase, more headroom, larger boot**
- **Class leading interior space and equipment**
- **Class leading ride and handling**
- **More performance from high-tech engine**
- **Vehicle Stability Control for active safety**

The new Lexus GS300, which reaches Lexus' UK dealers in January, is designed to set new standards of performance, safety and luxury in the executive car class.

Completely restyled to create a dynamic high-performance saloon for the next century, the Lexus GS300 also boasts some of the most sophisticated automotive technology available.

A new Vehicle Stability Control system automatically corrects the car if it detects instability during cornering and there is two-step safety control of airbags and seatbelt pre-tensioners with force-limiter. Lexus Navigator, a touch-screen satellite navigation system is optional equipment.

The Lexus GS300 is equipped with a three-litre, six cylinder engine which is fitted with continuously variable valve timing and electronic throttle control. Power is boosted to 218 bhp at 5,800rpm and torque is increased to 219 lb.ft at the lower engine speed of 3,800 rpm.

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The engine drives through a new five speed, intelligent automatic gearbox which can adapt its gear shift pattern to suit driving style and road conditions. Gear changes are fast and smooth with a response time that is the fastest in the class.

Fuel economy is improved over the previous model by about 10 per cent while acceleration is also better - the GS300 reaches 62 mph in 8.2 seconds from rest. Top speed is 143 mph.

Although slightly shorter than the model it replaces, the new Lexus GS300 is considerably larger inside. Both cabin space and headroom are improved, there is more boot space too.

In their pursuit of perfection, Lexus engineers have found further improvements in passenger comfort. Wind and road noise have been cut to barely audible levels while a new double wishbone rear suspension provides smooth and secure ride and handling. High speed stability and aerodynamics are excellent.

The new Lexus GS300 is unmatched for active and passive safety. The Vehicle Stability System is tuned to provide cornering stability without affecting the enjoyment of the car's performance. Anti-lock braking and traction control maintain safe braking and acceleration.

The new Lexus GS300 has a highly rigid body structure which surpasses all current European and USA crash tests. Front and side airbags are standard equipment.

The sporting style of the GS300 is emphasised by the exciting new interior and instrument panel design. Three separate Optitron meters indicate vital functions in silhouette with black needles and scale against a striking white background. These instruments black out when the ignition is switched off.

Fully equipped as standard, the new Lexus GS300 represents a complete package for drivers seeking a class leading luxury performance saloon. On the road prices are £31,200 for the GS300 S derivative - just £815 more than the less well specified model it replaces - and £34,070 for the SE which is exactly the price of the outgoing GS300. The SE adds leather upholstery, electric sunroof, headlamp washers, heated and memory function seats as standard over the S level.

## NEW LEXUS GS300

### Key Points

- All new body with revised engines and suspension
- Longer wheelbase, but shorter overall length, lower weight
- Increased headroom and boot capacity (25%)
- 3.0 litre straight-six with VVTi
- Two fully specified grade levels, S and SE
- Vehicle Stability Control (VSC) with ABS and Traction Control as standard
- Side Airbags as standard
- Ten per cent reduction in fuel economy over old car makes GS300 best in class
- Quicker (0-62 mph in 8.2 sec.) than previous car
- On the road prices are £31,200 for the GS300 S and £34,070 for the GS300 SE
- On sale in the UK from early January 1998
- Sport derivative being developed and due for introduction later in 1998
- Drag coefficient down from 0.31 to 0.29
- Glass area increased by 10 per cent and higher seating position for clearer view
- Larger windscreen wiping area
- Larger and better heating for rear view mirrors
- Two-step control for faster activation of both front airbags with pre-tensioners
- Rear seat has three, full three-point inertia seat belts
- Transponder built-in key to engage immobiliser for added security
- New five-speed automatic gearbox which adapts to driving style and road. Also senses uphill and downhill driving to smooth ride by controlling upshift to fifth when on undulating roads. Options for "power" or "snow" settings.
- Gearbox downshift time lag has been reduced by 35 per cent and actual shift time by 46 per cent for faster response
- New transmission fluid developed especially for Lexus
- Intelligent throttle control system gives improved response, yet reduces pedal input in "snow" setting to aid traction control
- Option of Lexus Navigator GPS navigation system
- Six-disc CD player with Auto Sound Leveller as standard
- Lower NVH

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- The electric windows, which are all one-touch with safety cut-out, can be operated from remote key
- Cruise control, timed rear window demister, electric boot and fuel filler cap, auto dimming rear-view mirror and interior light delay are all standard
- Air conditioning automatically switches to recirculate if emission sensor detects high concentration of exhaust gases in ambient air
- Chassis development carried out in Europe, including the UK
- Power steering pump is electronically controlled to reduce flow at higher speeds - this improves fuel consumption by 1.3 per cent
- Overall weight reduced with better balance, 53 per cent front: 47 per cent rear.
- C- pillars shaped to reduce drag around rear screen

## **STYLING - STRIKING NEW SHAPE ADDS SPACE**

- **Aggressive, modern, distinctive style**
- **Long cabin and short overhangs for maximum space**
- **Independent lamps visible through clear glass to add character**
- **Rear lamps reflect front lamp styling with independent pattern**

The Lexus GS300 is the performance model at the core of the Lexus range, offering many of the same luxury qualities as the larger LS400 but in a more youthful, dynamic package.

Since its introduction in 1993 it has attracted a strong following among enthusiast drivers, eager to enjoy its blend of powerful engine, good handling, luxury and Lexus build quality. The new Lexus GS300 was conceived to build on these characteristics.

Three fundamental design objectives were laid down for the new GS300: class leading performance, class leading safety and class leading luxury. The new design had to provide the optimum balance between luxury and sportiness, while also possessing a style to take the car forward into the next century.

The new Lexus GS300 is shorter than its predecessor but more spacious inside. It is also slightly higher and fractionally wider to give a more purposeful, squat look to the car as a whole. At 4805mm in length and 1800mm wide, the Lexus GS300 is exactly comparable with its major European rivals in the performance luxury class.

The new Lexus GS300 achieves the dynamic high performance of front engine, rear-wheel drive with the space efficiency of a front-wheel drive saloon. Boot space has also been increased and weight distribution is better.

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The aerodynamics of the new car are better too. The drag coefficient (Cd) is 0.29, down from 0.31, while the yaw coefficient which measures straight line stability is 0.045, down from 0.06.

By lengthening the wheelbase, and reducing the front and rear overhangs from the previous car, the design team has not only achieved the objective of more space but also created a "mono piece" cabin effect. This is further emphasised by the flush fitting doors.

The profile of the Lexus GS300 is based on a simple geometric ellipse which is then given a functional aerodynamic treatment to create what the designers referred to as an "aero-ellipse" shape. This aero-ellipse theme recurs throughout the design and echoes are to be found in the clear glass covering the headlamps, the rear light clusters and the window contours.

The ellipse is particularly noticeable as a styling element of the side windows at the rear, where it serves to emphasise the long cabin and lighten the rear three-quarter pillars. The rear wheel flare, below this point, is progressive to allow light to catch the semi-circular profile. At the front the wheel flare reflects a Z-shape to suggest a dynamic forward movement.

### **Dramatic frontal design**

The frontal design of the Lexus GS300 takes some styling clues from the Lexus Coupe which is sold in the USA, but essentially creating a bold new look for a high performance, world sports saloon. The car is instantly recognisable, even from a distance.

The four independent headlamps are viewed through plain glass and the turn indicator lamp is also inside the lens to give added emphasis to the design. The bonnet is strongly convex to give height, while the full width front bumper and integral fog-lamps suggest a low centre of gravity.

At the rear of the GS300, the lamp pattern mirrors that at the front with the twin rear fog lamps mounted into the boot lid for instant recognition. Once again the contours are shaped to suggest performance with a low centre of gravity emphasised by the strong rear bumper line and dual exhaust pipes.

### **Strong colours and trim**

In keeping with its role of a luxury performance saloon the Lexus GS300 is available in eight exterior colours which were developed especially to meet customer demand for brighter, more sporty combinations.

The colours include Baroque Red, Burnished Gold and Atlantis Blue alongside more traditional tones such as Spectral Blue, Pearl, Polar Silver, Astral Black and Imperial Jade.

The standard interior trim on the S derivative is a suede/velour cloth available in four colours. On the SE there is soft European leather, which comes in Ivory, Charcoal or Black.

Finally the overall style is completed with five-spoke 16-inch alloy wheels which reflect the sporty aspects of the GS300.

## **SAFETY - WORLD BEATING SYSTEMS**

- **Vehicle Stability Control gives active safety**
- **Improved stability and visibility**
- **Exceeds all European and US crash test criteria**
- **Two step passive system for airbags and seatbelts**

The safety and security of driver and passengers has always been an absolute priority for Lexus. The new GS300 takes development in this area still further with significant advances in both active and passive safety systems.

These systems are designed to work as a whole, helping the driver avoid accidents in the first instance and then, should a collision be unavoidable, ensuring that injuries to occupants, other drivers and pedestrians are minimised.

### **Vehicle Stability Control**

The Vehicle Stability Control (VSC) system which is standard equipment on all Lexus GS300 models represents a major step forward in active safety.

While the anti-lock braking maintains stability during rapid deceleration and the traction control applies during rapid acceleration, VSC is designed to maintain the stability of the car while turning. VSC reacts quickly to both vehicle oversteer and understeer and is designed to return the car to a stable state leaving the driver in full control.

The VSC systems takes its inputs from a number of performance sensors placed throughout the car. These include a steering angle sensor, G-force sensor, yaw rate sensor, brake pressure sensor and speed sensor.

Information from these sensors is fed to the central computer which is controlling VSC, anti-lock braking and traction control. The computer can influence both throttle position and braking circuits on each of the four wheels individually.

If the VSC senses that the car is about to oversteer it reduces engine power and applies brake pressure to the front wheel on the outer side of the corner. This generates a correcting force on the outer side of the car and brings the car back into line.

If the system senses that understeer is about to occur it reduces engine power and brakes both rear wheels individually according to the degree of understeer. This generates a correcting force on the inner side of the car and brings it back into line.

The VSC system warns the driver that it is about to operate by flashing a slip indicator and sounding a warning buzzer. There is also a VSC warning lamp which indicates if there is a fault in the system.

VSC is designed as a safety system and is not installed to improve the ultimate cornering performance of the car. As fitted to the GS300, VSC has been adapted to the sporting characteristics of the car and will allow the driver to continue to enjoy the excellent handling.

During testing, Lexus development drivers have tuned the VSC controls to strike the correct balance between driving pleasure and safety with progressive input from the VSC as cornering instability occurs.

### **Improved stability**

A series of design points, including new rear suspension, improved weight distribution and better aerodynamics have resulted in improved high speed stability and ride comfort for the GS300. These are covered in more detail in the section on handling and suspension.

With a higher seating position than previously and lower glass line (glass area has been increased by 10 per cent), the driver has clear vision of the road ahead and advanced warning of any potential hazards.

### **Minor active safety points**

Lexus engineers recognise their responsibilities when designing a performance saloon so, in addition to the major advances, the new Lexus GS300 has many minor but significant details which contribute to road safety. These include larger windscreen wiping area, larger viewing area of rear view mirrors and better heating of rear view mirrors.

### **Two step passive safety**

Both driver and passenger front airbags and side airbags are standard equipment in Lexus GS300. Moreover the airbag sensing equipment has been developed to judge quicker when to deploy. A two step control system operates on both the airbags and seat belt pre-tensioners : the pre-tensioners become active at speeds over 15 mph, and the airbags are operated at speeds over 20 mph.

The seat belts are fitted with both pre-tensioners and force limiters which help improve the initial restraining performance and reduce the force applied to the upper body.

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During the very early moments of impact the pre-tensioner draws the belt back to hold the occupant firmly in the seat. Then, as the forces on the upper body build up, the force limiter allows the belt to lengthen gradually again to keep the restraint load at a predetermined level.

### **Other passive safety**

The Lexus GS300 has been designed as a safety cell with an energy absorbing body around the protective cabin for driver and passengers. The car exceeds the criteria for the 60km/h offset deformable barrier crash test, the 50km/h full lap crash test and the European and US side impact tests.

A soft interior, particularly around the front pillars and the inner roof structure has been designed to ease the effect of head impacts during secondary collisions.

The rear centre seat is now equipped with a full 3-point inertia reel seat belt and headrest to improve passenger safety.

### **Security**

The multifunction wireless door lock system provides more than just a convenient way of locking and unlocking the doors. Used in conjunction with the master key it also provides security to the boot, glove box and fuel filler cap.

A transponder within the key fob emits a signal which must be received within the ignition system before the car can be started. If an attempt is made to start the car with the wrong key it remains immobilised.

## **PERFORMANCE - TRULY SPORTING**

- **Advanced, six-cylinder engine**
- **Improved power and torque**
- **Better acceleration and better fuel economy**
- **Variable valve timing**
- **New five-speed automatic transmission**

Since its worldwide launch in 1993 the Lexus GS300 has established a worldwide reputation as a true sports saloon, offering a blend of performance and luxury.

When the time came to create the new GS300 engineers were determined to maintain that reputation. Indeed, the desire to have class leading performance was one of the three fundamental concepts of the design brief.

The new Lexus GS300 is unashamedly a dynamic sports saloon, with performance and handling to match its sleek looks. Its acceleration, braking and ride will satisfy the most enthusiastic driver.

At the same time fuel economy has been improved by about ten per cent, making the GS300 among the best in its class.

The new five-speed automatic transmission offers smooth, responsive gear shifts and adapts its pattern to suit the driver's style and road conditions. A manual 'snow' switch selects the optimum pattern for driving in slippery conditions while the 'power' switch ensures the transmission holds the ratio through to higher engine speeds.

### **More performance from 3.0 litre engine**

The new Lexus GS300 is equipped with a revised version of the engine which was fitted to the previous model. This is a 6-cylinder, in-line, 2997cc engine with 'square' bore and stroke of 86mm.

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The latest developments, including the adoption of intelligent variable valve timing (VVT-i) and electronic throttle control (ETCS-i) mean that the latest engine offers considerable improvements in performance, fuel economy and quietness over its predecessor.

The new engine has a maximum power output of 218bhp at 5,800rpm compared to 209bhp at 5,800rpm for the old engine. Maximum torque is also up, at 298Nm compared to 275Nm (219 lb.ft. vs. 203 lb.ft).

Most importantly for smooth, safe driving, the torque curve of the new engine is much flatter with maximum pulling power now available at 3,800rpm, rather than the 4,800rpm of the previous engine. Low engine speed torque is also improved with 191lb.ft available at 3,400rpm.

The new Lexus GS300 now accelerates from rest to 62mph in 8.2 seconds and has a top speed of 143mph. The combined fuel consumption is 24.8mpg.

Further engine improvements have been achieved by the adoption of long dual exhaust manifold and pipe, a low back-pressure silencer, higher compression ratio and reduced friction losses throughout the engine.

### **Variable Valve Timing**

The Intelligent Variable Valve Timing (VVT-i) works by varying the engine intake valve open and close timing according to driving conditions and engine loading. Using VVT-i results in improved power and torque output plus better fuel economy and cleaner emissions due to more efficient fuel burning.



The VVT-i system operates by changing the position of the camshaft drive pulley relative to the camshaft. This system has the benefit of offering continuously variable valve timing and allowing the engine management computer to specify the optimum position for the full range of driving conditions.

Under high load and high engine speeds, when maximum power output is required, the valves open late to create intake inertia. Under high load and low engine speeds, when maximum torque is required, the valves open early.

### **Electronic Throttle Control system**

The intelligent electric throttle control system (ETCS-i) gives improved acceleration control under all driving conditions. It provides excellent response and stable vehicle control, especially when the road is slippery.

Using ETCS-i the throttle valve opening is controlled by a throttle actuator which is a small electric motor. Under normal road conditions the throttle opens in direct proportion to the accelerator providing maximum response and performance.

However, under slippery road conditions and with the snow mode selected, the actuator slows the throttle opening relative to the accelerator to suppress sudden engine output and provide improved acceleration control.

The ETCS-i is controlled by the engine management computer and communicates with the intelligent automatic gear shift and the traction control systems.

### **Lightweight, compact five-speed auto**

The new Lexus GS300 is equipped with a five speed automatic transmission which has been developed to match both the driving characteristics and luxury specification of the car.

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The adoption of five speeds and a wider range of gear ratios allows the transmission to take best advantage of the performance available from the engine and also achieve excellent fuel economy for the class. The new transmission gives good acceleration feel thanks to highly responsive shift control and gear changes are so smooth as to be virtually unnoticeable.

The transmission incorporates an auto-intelligent (AI) system which sets the optimum shift pattern according to driving style and road conditions. The AI also has an uphill/downhill shift control which ensures smooth travelling by controlling the upshift to the fifth, overdrive ratio when driving on undulating or winding roads.

A manual switch allows the driver to select 'snow' driving conditions when the road is especially slippery or 'power' mode when wanting to enjoy the car's performance to the full.

The time lag to the start of a downshift has been cut by 35 per cent and the shift time itself is down by 46 per cent. Because the gear change takes place faster - and backlash in gear splines has been reduced - the shift shock is also reduced making for smoother, more comfortable driving.

Lexus GS300 fuel economy is improved by advanced lock-up clutch control which allows lock-up to take place at lower vehicle speeds than previously and also when the accelerator is off. This latter control also improves engine braking.

The transmission's light weight and compact size has been achieved by the development of a new high efficiency torque converter while hydraulic control circuits have been miniaturised. A new automatic transmission fluid has been developed especially for Lexus.

## **INTERIOR EQUIPMENT - CLASS LEADING COMFORT**

- **Class leading space and comfort**
- **Reductions in noise and vibration**
- **Sports seating with built in side airbags**
- **Sporty, silhouette-style instrumentation**
- **6-disc CD player and Auto Sound Leveller**
- **Pollution sensing air conditioning**
- **“Lexus Navigator” touch screen satellite navigation (optional by market)**

The Lexus GS300 is unashamedly a sports saloon where the comfort of the driver and passengers is a design priority alongside class leading performance and safety.

The interior styling of the GS300 and the equipment installed combine to create an environment that is both aggressive and sporty but with style and taste. This is a car which manages to be both lively and luxurious in true Lexus fashion.

Despite the fact that the new GS300 is 160mm shorter than the model it replaces, the interior is larger in every dimension. The wheelbase is 20mm longer and the usable cabin space (from driver's feet to rear passenger hip point) is 25mm longer. In fact, the cabin offers the space efficiency of a front-wheel drive car while the Lexus continues to provide the full driving enjoyment of rear-wheel drive.

The cabin feels more spacious too, thanks to 10 per cent more glass area and a higher seating position for both driver and passengers. The oval shape of the cabin takes its theme from the striking exterior style and roof height has been increased by 25mm to offer increased headroom.

The luxury feel of the interior is enhanced by the deep pile carpets, walnut panels and sports seats trimmed in suede velvet on the S and soft, high grade European leather upholstery on the SE. Seats are finished with piping and detailed sewing work to add character.

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The seats themselves are broadly rounded to offer maximum support during performance driving while the driving position emphasises the sporting nature of the car. The instrument panel sweeps around the three-spoke, leather steering wheel, adding a dynamic element to dashboard design.

Both driver and front passenger seats are fully adjustable with electric power for height, reach, recline, tilt and lumbar support. A seat memory control is standard on the SE.

### **Quieter, better ride**

Out on the open road, passengers in the GS300 travel almost in silence. Road noise has largely been eliminated by careful shaping of body sections which transmit vibration and wind noise has also been reduced by careful aerodynamic shaping.

Door mirror shape and positioning, screen pillar shape and body surfaces have been tuned to reduce abnormal whistling sounds. Thicker glass for the windscreen and side windows also helps reduce noise transmission.

The new double wishbone suspension provides a flat, smooth ride and the floating front and rear subframe isolate the major mechanical components from the bodyshell.

### **Sporty instrumentation**

The main instrument panel features three individual meters, reflecting the 'triple-eye' styling cues from the front and rear lights. The meters themselves are blacked out until the ignition is switched on, after which the background is illuminated to throw the pointer and scales into silhouette.

This is a reverse effect from the previous Optitron meter and the result is both dramatic and practical with clear scale visibility under all conditions. An automatic light control system changes the meter luminance according to the brightness of the surrounding area outside the car.

The centre console sits back towards the driver to create a natural divide between driver and front seat passenger. The main control panel is positioned high in the console with a priority switch layout giving easy access to all major switches.

To the rear of the console, the auto-shift lever is positioned close to the driver and a new, large volume cupholder has been added. The large front armrest has a two stage design and now incorporates an accessory socket for powering a car phone or other device.

Standard equipment on the GS300 includes one-touch power windows for all seats with a safety cut-out system in the event of a jam or some object coming between the window frame and the glass. The windows can also be closed and opened using the remote central locking transmitter or by holding the key turned in the driver's door lock.

Other standard equipment includes cruise control, timed rear window defogger, electric boot and fuel cap opening, an illuminated entry system which keeps the interior lights on for 15 seconds, and a rear view mirror which responds to glare by reducing its reflectivity.

## **Audio equipment**

The seven speaker audio system incorporates a six disc CD cartridge which is conveniently located in the front passenger glove box, making changing discs speedy and simple. The system is equipped with Automatic Sound Leveller which adjusts pre-set tonal ranges to compensate for external sound during driving.

Speaker locations are two at door mirror level, two in the front doors, two in the rear doors and one base speaker in the rear parcel shelf.

## **Air conditioning**

The air conditioning system for the Lexus GS300 reflects the luxury environment demanded by the driver and passengers. Temperatures can be set individually by either driver or front seat passenger.

There are manual controls for fan setting and for front and rear demisting, plus fan speed and vent control. The outside temperature display is incorporated into the air conditioning panel.

In order to help prevent pollution from other traffic entering the car, an exhaust emission sensor monitors the concentration of exhaust gases in the atmosphere and automatically switches the inlet flow between ambient and recirculated air.

The air conditioning system itself is more compact and lighter in weight while still delivering the same performance as previously. Noise levels have been cut and a reduction in ventilation resistance results in power saving, which again improves the fuel consumption of the car as a whole.

### **Lexus Navigator GPS system**

The Lexus GS300 offers the option of Lexus Navigator, a sophisticated GPS navigation system with touch screen control which also operates the air conditioning and in-car entertainment systems. The screen can be used to select navigation, audio, air-conditioning or trip computer functions and can also be used for system diagnostics.

The navigation function uses both Global Positioning Satellites (GPS) and dead reckoning to provide highly accurate route planning. Map data is supplied on a country by country basis on CD-Rom and the navigation system then determines the location of the vehicle. Free up-date discs will be given to owners as the maps of the UK become available. Initial UK customers will receive free CD updates until the whole of mainland UK is mapped.

The navigation can be used to plot a route to a predetermined destination using both display and voice indication. Frequently visited places and well known landmarks can all be pre-programmed into the system.

The display also indicates the remaining distance and expected time of arrival at the destination, street names and sign boards, and head-up direction. It will automatically re-search when off-route and offer alternative routes in case of a diversion.

In audio mode the system will control volume, FM radio settings and CD player settings, including disc and track. The trip computer mode can provide running distance, running time, average speed and average fuel consumption readings between a pre-selected range of start and finish points.

## COMPETITOR PRICE/ SPECIFICATION COMPARISON

- **More standard specification than any rival**
- **SE model has no price increase over old model equivalent despite higher specification**
- **S model has all performance and safety features as standard**

The new GS300 range starts with the S at £31,200. Once rivals have the options added they need to match the Lexus standard specification the price comparisons show that it costs less than the BMW 528i SE, Mercedes E280 Classic, Jaguar XJ6 3.2 and Audi A6 2.8 SE.

### New Lexus GS300 Standard Specifications and Competitor Option Pricing

	Lexus GS300S	BMW 528i SE	Mercedes E280 Classic	Jaguar XJ6 Sport	Audi A6 2.8 SE
On The Road Price	£31,200	£30,880	£33,480	£34,475	£29,175
Automatic Transmission	✓	£1,220	✓	✓	£1,158
Alloy Wheels	✓	✓	£773	✓	✓
Climate Control A/C	✓	✓	£1,007	✓	✓
CD Autochanger	✓	£425	£600	£380	£392
Cruise Control	✓	£390	✓	£380	£387
Electric Front Seats	✓	£1,495	£964	£1,180	£1,438
Electric Steering Column	✓	✓	✓	✓	x
Side Airbags	✓	✓	✓	✓	✓
Traction Control	✓	✓	✓	£1,065	✓
3 Year Warranty	✓	✓	x	✓	✓
Spec Adjusted Price	£31,200	£34,410	£36,824	£37,480	£32,550



The GS300 SE derivative is priced at £34,070 on the road. Again, once the competition are loaded with the options needed to match the standard specification of the Lexus, the GS300 is the best value.

**New Lexus GS300 SE Standard Specifications and Competitor Option Pricing**

	Lexus GS300SE	BMW 528i SE	Mercedes E280 Elegance	Jaguar XJ8 3.2	Audi A6 2.8 SE
On The Road Price	£34,070	£30,880	£35,340	£35,675	£29,175
Automatic Transmission	✓	£1,220	✓	✓	£1,158
Alloy Wheels	✓	✓	✓	✓	✓
Full Leather Upholstery	✓	£1,580	£1,900	✓	£1,593
Climate Control A/C	✓	✓	£1,007	✓	✓
CD Autochanger	✓	£425	£600	£380	£392
Cruise Control	✓	£390	✓	£380	£387
Electric Sunroof	✓	£990	£1,254	£920	£995
Electric Front Seats(with driver memory)	✓	£1,495	£964	£1,180	£1,438
Heated Front Seats	✓	£320	£365	£415	£344
Electric Steering Column	✓	✓	✓	✓	x
Headlamp Washers	✓	✓	£313	£370	£359
Side Airbags	✓	✓	✓	✓	✓
Traction Control	✓	✓	✓	£1,065	✓
3 Year Warranty	✓	✓	x	✓	✓
Spec Adjusted Price	£34,070	£37,300	£41,743	£40,385	£35,841

The Lexus Satellite Navigation system will be available as a £2,350 price list option for both GS300 models.

## CHASSIS - PRECISION WITH COMFORT

- **New, double wishbone rear suspension**
- **Improved underfloor airflow**
- **New type, speed sensing power steering**
- **Improved braking performance**

The new Lexus GS300 has been designed around a handling and suspension package that is suitable for the demands of a car with class leading performance. This means precise, positive driver control at all times without sacrificing the ride comfort that is so important in the luxury sector.

Toyota engineers have worked with prototypes in many European countries, including the UK, and suspension tuning for European road surfaces has been thorough.

Both front and rear suspension is double wishbone type which offers maximum stability and precision, especially in cornering. The front suspension, carried over from the previous model, has had minor geometry changes so that an optimum balance is obtained with the new rear geometry.

At the rear a new double wishbone suspension has been developed. This provides greater stability in cornering and better flat riding comfort through a number of detailed geometry changes including an overall extension of the width of the suspension member and development of side force induced toe-in.

The coil spring location is reversed on the shock absorber which releases boot space and helps improve ride comfort. The roll centre heights have been optimised to improve ride comfort and also to give better stability through maximum tyre performance.

The entire suspension system is more rigid to improve camber and steer control while, at the same time, reducing any flexing during sudden braking or accelerator movements. Stability under heavy braking is improved by reducing movement of the contact patch between road and tyre.

### **Improved high speed stability**

In a further effort to improve stability, particularly at high speeds, the underbody shape of the floor has been styled to improve airflow and flow around the rear tyres is controlled by a fairing. This, along with other aerodynamic improvements around the C-pillars, has reduced the coefficient of yaw ( $C_y$ ) to 0.045, compared to 0.06 for the previous model.

The new Lexus GS300 has a more conventional, speed sensing, power steering system than the hydraulic reaction system which was fitted to the previous model. A roller rack guide has also been added to the steering gearbox to give increased feel and more positive steering control at all vehicle speeds.

The power steering pump is now an electronically controlled variant flow type and the effect of reduced flow at higher vehicle speeds is to improve overall fuel consumption by about 1.3 per cent.

The highly sophisticated braking system, which works in conjunction with the Vehicle Stability Control (VSC), is fitted with high performance hydraulic servo assistance which offers more power and a quicker response than in previous models. Traction control and anti-lock braking are standard equipment.

The Lexus GS300 is fitted with high performance 16-inch, 225/55 low profile tyres.

## **BODY - STRENGTH AND BEAUTY**

- **Rigid body structure**
- **High tensile steel construction**
- **Improved weight distribution**
- **Reduced noise, vibration and harshness (NVH)**
- **Improved luggage space**

Body construction and chassis design play a key role in the strength and beauty of the new Lexus GS300. The highly rigid body structure is not only an important factor in passive safety, it also contributes to reduced noise transmission, improved handling and high speed controllability.

Compared to the previous Lexus GS300 model, bending rigidity has been improved by 25 per cent and distortion rigidity by 32 per cent. The majority of the body panels are made from pressed high tensile steel which offers light weight and high strength.

The weight distribution of the car has been improved by reducing the front overhang and moving both the engine and battery further back in the engine compartment. At the same time, the fuel tank has been moved forward under the rear passenger seats with the combined effect of improving boot space and weight distribution.

The weight balance is now 53 per cent front and 47 per cent rear which has the positive effect of cutting the moment of yaw inertia and giving the car better stability at high speed and when cornering. Straight line stability at high speed has also been improved by careful sculpting of the C-pillars to reduce the aerodynamic drag around the back screen.

In their continuing pursuit of perfection Lexus engineers have reduced noise, vibration and harshness still further. Sources of vibration, such as engine and differential, are mounted on 'floating' subframes which help isolate the mechanical units from the body.

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The floor panel has been broken up into sections to reduce vibration transfer and noise caused by changes in road conditions and vehicle speed has also been reduced. On the other hand, the engine induction system has been tuned to produce a pleasant sound becoming to the Lexus brand.

Boot space has been increased, from 404 litres to 515 litres. Luggage net hooks have been fitted and there is space for both a first aid kit and a warning triangle.

## TECHNICAL SPECIFICATIONS LEXUS GS300

DIMENSIONS	
<b>Exterior Dimensions</b>	
Length	4805mm
Width	1800mm
Height	1445mm
Wheelbase	2800mm
Track (front)	1535mm
(rear)	1510mm
<b>Interior Room Dimensions</b>	
Leg Room	FR. 1131mm RR. 871
Head Room	FR. 990 RR. 950
Head Room with sun roof	FR. 956 RR. 924
Shoulder Room	FR. 1466 RR. 1437
<b>Boot Space</b>	
Luggage Capacity	515 l
<b>Overhang</b>	
Front	835mm
Rear	1170mm

WEIGHTS	
Kerb Weight	1665kg
Gross Vehicle Weight	2120kg
Towing Capacity (Braked)	2000kg
Towing Capacity (Un-braked)	750kg
Fuel Tank Capacity	80 l
Drag Coefficient (Cd)	0.29

ENGINE	
Engine Type	2JZ-GE - Inline 6-cylinders, petrol
Valve Mechanism	24-valves DOHC (with VVT-i)
Block Material	Cast-Iron
Head Material	Aluminium
Displacement/Capacity	2997cc
Bore x Stroke	86.0 x 86.0mm
Compression Ratio	10.5
Fuel Injection Type	EFI
Ignition System	Electric spark advanced system
Octane Rating	95 RON
Max. Output	218bhp (163kW) / 5800rpm
Max. Torque	219 lb.ft (298Nm) / 3800rpm

TRANSMISSION	
Type	Front engine installation, rear-wheel drive
Gearbox Type	5-speed automatic
Gear Ratios automatic	
1st	3.357
2nd	2.180
3rd	1.424
4th	1.000
5th	0.753
Reverse	3.431
Differential	3.615

SUSPENSION	
Front	Double wishbone
Rear	Double wishbone

STEERING	
Steering Gear Type	Rack & Pinion
Steering Gear Ratio	17.2
Power Steering Type	Vehicle speed sensing
Turns lock-to-lock	3.38
Min. Turning Circle (radius)	5.5m

BRAKES		
Type	Front	Ventilated disc
	Rear	Solid disc
Parking Brake Type	Pedal type	
Brake Booster Type & Size	Hydraulic booster	
Anti-Lock Braking (ABS)	Standard	

WHEELS & TYRES	
Wheels	Aluminium, 7.5JJ
Tyres	225 / 55R16.94V

PERFORMANCE	
Max. speed	143 mph / 230km/h
0-62mph	8.2 sec.
0-400m	15.8 sec.

FUEL CONSUMPTION	
Fuel consumption - urban (mpg/l/100km)	17.7 / 16.0
Fuel consumption - extra urban (mpg/l/100km)	32.1 / 8.8
Fuel consumption - combined (mpg/l/100km)	24.8 / 11.4

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<b>EQUIPMENT LIST</b>		
<b>DERIVATIVE</b>	<b>S</b>	<b>SE</b>
16-inch aluminium wheels	✓	✓
Integrated front fog lamps	✓	✓
Electrically adjustable, electrochromic, power-heated outside rear wide view mirror	✓	✓
Remote entry system for doors and boot	✓	✓
Pole auto antenna linked by radio	✓	✓
Cruise control	✓	✓
Power tilt and telescopic steering column	✓	✓
5-speed automatic transmission	✓	✓
Power window with auto-up function (with jam protection)	✓	✓
Microprocessed automatic air conditioning	✓	✓
Rear window demister with timer	✓	✓
Delayed interior light system	✓	✓
Electrochromic inside rear view mirror	✓	✓
Power adjustable front seats (with memory function on SE)	✓	✓
LW/AM/FM (RDS) radio with cassette and 7 speakers	✓	✓
6-disc CD auto changer in the glove box	✓	✓
Vehicle Stability Control System (VSC)	✓	✓
Traction control system	✓	✓
ABS	✓	✓
Front airbag & side airbag for driver and passenger	✓	✓
Front seatbelt pre-tensioner with force limiter	✓	✓
Leather wrapped steering wheel, shift knob	✓	✓
3-points rear seatbelts (ELR/ALR x 3)	✓	✓
Power tilt and slide sunroof (with jam protection)	x	✓
Head lamp cleaner	x	✓
Leather upholstery and seat heater	x	✓
Electro-multivision navigation system	O	O
Fully controlled intermittent wiper	✓	✓
Leather and wooden wrapped steering wheel and shift knob	✓	✓

✓ = Standard Equipment O = Optional equipment  
x = Not available

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