

This press pack accompanied the UK launch of the third generation Lexus GS in April 2005. 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 third generation GS range may be obtained from the Lexus press office if required. Please note that a separate press pack was issued for the full hybrid GS 450h.

THE NEW LEXUS GS

1 The new Lexus GS at a glance

Key Points

2 Five Sense Appeal

3 Design and Life on Board

Exterior

Interior

4 On-Board Technology

Smart keyless entry

Satellite navigation and touch screen multi-function control

Parking assist sensors (steering sensitive)

5 Engines and Transmission

The new 3.0-litre V6 engine

The 4.3-litre V8 engine

Six speed automatic transmission

6 Driving Dynamics

Electric Power Steering (EPS)

Variable Gear Ratio Steering (VGRS)

Adaptive Variable Suspension (AVS)

7 Safety

Pre-Crash Safety (PCS)

Adaptive Cruise Control (ACC)

Vehicle Dynamics Integrated Management (VDIM)

8 The new Lexus GS and the UK Market

Competitor comparisons

Cost of ownership

9 Technical specifications

10 Equipment lists

1 THE NEW LEXUS GS AT A GLANCE

KEY POINTS

- All-new third-generation Lexus GS luxury sports saloon
- First Lexus model to be launched globally, as the brand moves into new markets for the first time
- First production model to exhibit the new Lexus design philosophy L-finesse
- New model benefits from stiffer body than previously with longer wheelbase and wider front and rear track
- Four model grades for the UK – GS300, GS300 SE, GS300 SE-L and GS430
- GS300 models powered by new 3.0-litre V6 engine with dual VVT-i
- Adaptive Variable Suspension system and Vehicle Dynamics Integrated Management (VDIM) with active steering control, standard on GS430
- Flagship GS430 equipped with 4.3-litre V8
- 3.0-litre V6 produces 245bhp for 0-62mph in 7.2 seconds and has 148mph maximum speed
- 279bhp 4.3-litre V8 accelerates from 0-62mph in 6.1 seconds and has 155mph top speed
- New electronically-controlled, close-ratio six-speed automatic transmissions for each engine, featuring sequential shift mode
- Standard speed sensitive Electric Power Steering, with new Variable Gear Ratio Steering on GS430
- Awarded best-in-class score of 35 points for adult occupant protection in the latest Euro NCAP tests
- 10 airbags standard on GS300, including driver and front passenger knee airbags
- 12 airbags standard from SE upwards, including outer rear seat side airbags

- All models equipped with ABS, Electronic Brakeforce Distribution, Traction Control and Vehicle Stability Control
- Smart Key entry and start-up standard on all models
- European-first steering guided parking sensors and rear monitor, standard on GS300 SE grade and higher
- All models feature Bluetooth® connectivity for hands-free use of compatible communications equipment
- Automatic interior lighting sequenced to follow driver's entry and vehicle start-up procedure
- High Intensity Discharge headlamps with Adaptive Front-lighting System (AFS) fitted as standard on all GS models
- Soft boot closing function standard on all models
- Adaptive Cruise Control and Pre-Crash Safety system standard on GS430 (optional on GS300 SE-L)
- DVD-based satellite navigation with touch-screen display, rear parking monitor and Electronic Traffic Avoidance standard on GS300 SE grade and higher
- Leather upholstery and electrically adjustable heated and ventilated front seats standard on GS300 SE, GS300 SE-L and GS430
- Luxury interior with fine leather, metal and wood detailing on SE upwards
- 10-speaker audio system standard on GS300 and GS300SE; higher grades equipped with premium 14-speaker Mark Levinson® hi-fi
- On sale in the UK from 15 April
- On-the-road prices from £30,400 (GS300)
- Insurance groups are 16E for GS300 and SE, 17E for SE-L and 18E for GS430

A NEW LEXUS FOR THE WORLD MARKET

The all-new, third generation GS is a car that breaks new boundaries for Lexus. It is the first model from the prestige brand to be marketed globally and it has the distinction of being the first production model to display the powerful and sleek styling of L-finesse, the design principles that will shape a whole new generation of Lexus vehicles.

As well as being sold in Lexus's established territories in Europe and North America, the new GS will also pioneer new markets in Russia, China and, for the first time, Japan. In

the UK it will reinvigorate Lexus's position in the premium sports executive market, offering style, performance and unbeatable specification.

More distinctive in appearance than any Lexus before, it promises even higher ownership rewards, underpinned by the handling and performance delivered by its taut new chassis and high-performing new 3.0-litre V6 and 4.3-litre V8 engines. Across the range, unmatched active and passive safety systems are provided, including Lexus's advanced Pre-Crash Safety system, Vehicle Dynamics Integrated Management (VDIM), Adaptive Front-lighting System (AFS) and a suite of up to 12 airbags.

The new Lexus GS will go on sale in the UK on 15 April with on-the-road prices starting at £30,400 for the GS300 model.

Introducing L-finesse

Lexus moves its design thinking into a new dimension with L-finesse, developing an approach to vehicle styling that is both contemporary and unmistakably Lexus. The new GS is the first production model to be created according to L-finesse, paving the way for a complete new generation of Lexus models.

Developed in a three-year project, L-finesse shows Lexus adopting a bolder approach to design than ever before. The GS expresses L-finesse through its simple but dynamically powerful lines and proportions, inspired in part by a Japanese cultural heritage.

The superb road presence provided by the car's sporting poise and profile is matched by an interior that takes Lexus quality and attention to detail to even higher levels. That becomes clear as soon as you open the door and prepare to start the engine, with a sequenced interior lighting system that moves with you to illuminate door handles, footwells and steering wheel.

A longer wheelbase and improved interior layout provide better leg and headroom than in the previous generation model, while the availability of features such as the advanced dual-zone climate control (standard on all models), heated and ventilated front seats and premium hi-fi equipment make life on board as pleasant as possible.

Technology for the easy life

The new GS adopts a Smart Key system for simple door locking and engine start-up and makes use of an advanced new glass screen system to ensure the Optitron instrumentation read-out remains perfectly clear in all light conditions. A 10-speaker sound system with six-disc in-dash CD player is fitted as standard, but drivers of higher grade versions can enjoy the superior sound experience offered by a Mark Levinson® designed hi-fi, unique to Lexus.

The Lexus DVD-based satellite navigation system is offered with a simple touch-screen operating system that also lets you operate the audio and air conditioning functions and, where compatible, Bluetooth® control of your mobile telephone.

For even greater ease of use, voice control functions are also available, capable of recognising a multitude of commands.

The new GS is also available with the Lexus Parking Assist system, which uses a rear-view camera linked to the central display screen to provide ideal guidance for reverse manoeuvres. There is also less risk of unwelcome scrapes thanks to front and rear parking sensors that operate in line with the car's steering angle – another 'first' in Europe for Lexus.

Power to please

The new Lexus GS is offered with two engines. GS300 models are powered by an all-new 3.0-litre V6, a chain-drive DOHC unit that produces 245bhp at 6,200rpm and 310Nm of torque at 3,500rpm. That permits 0-62 acceleration in 7.2 seconds and a top speed of 148mph. Using stoichiometric direct fuel injection technology and dual-VVT-i (Variable Valve Timing – intelligent), it achieves an excellent balance between performance and fuel economy.

The flagship GS430 model is equipped with the formidable 4.3-litre V8, delivering 279bhp and a maximum 417Nm of torque. Acceleration from rest to 62mph can be despatched in 6.1 seconds, while the top speed is limited to 155mph. Performance is aided by VVT-i with an ETCS-i drive-by-wire electronic throttle control.

Both engines are matched to a close ratio, electronically-controlled six-speed automatic gearbox with a sequential shift mode allowing the driver to make manual gear selection when desired.

Dynamic precision

The all-new platform on which the GS is constructed offers greater rigidity and has a longer wheelbase and wider rear track than the previous generation model, factors which contribute much to the car's excellent poise and handling.

The new GS also adopts new speed-sensitive electric power steering, which on the GS430 model further benefits from a Variable Gear Ratio Steering system that provides assistance to suit the driving conditions, ensuring excellent feedback to the driver at high speed, while making slow speed manoeuvring effortless.

Lightweight double wishbone front suspension and a compact multilink set-up at the rear deliver excellent ride comfort and cornering stability. On the GS430, Adaptive Variable Suspension (AVS) allows the driver to fine tune the damping system with settings for 'normal' or 'sport' performance. Selecting 'sport' also automatically adjusts the VGRS to provide quicker steering responses.

Close attention to aerodynamic efficiency and insulation provisions ensure that levels of noise, vibration and harshness are reduced to a minimum.

Safety as standard

Exceptional safety comes as standard with the new Lexus GS, a car designed from the start to meet the highest Euro NCAP requirements for passenger protection.

All versions are equipped with ABS with Electronic Brakeforce Distribution (EBD), Brake Assist (BA), Traction Control (TRC) and Vehicle Stability Control (VSC).

Passive safety systems include 10 airbags, including knee airbags for driver and front seat passenger and front and rear curtain shield airbags. All models except the entry level GS300 also feature rear passenger side airbags. Both front and outer rear passenger seatbelts have pretensioners and force limiters and there are ISOFIX attachments for the secure location of compatible child seats.

The GS430 model is the first in Europe to deploy Lexus's Vehicle Dynamics Integrated Management (VDIM), which co-ordinates the functions of the ABS, EBD, TRC and VSC together with the Electric Power Steering and Variable Gear Ratio Steering to ensure they operate as smoothly and effectively as possible, as the car reaches the limit of its performance.

Adaptive Cruise Control (standard on the GS430, optional on the GS300 SE-L) uses radar technology to ensure you keep a safe distance from the car in front and is linked to Lexus's Pre-Crash Safety system. This uses the same network of sensors to determine when a collision becomes inevitable and prepares the seatbelts and the emergency braking system to deliver the optimum performance at the split second they are needed.

Pedestrian safety has also been carefully addressed, with the bonnet, engine cowl and front bumper having a crushable design. The bonnet is shaped to disperse impact energy over a larger area and also to lessen the risk of serious head injuries, by off-setting the angle of head impact..

Safer night-time driving is enabled, thanks to High Intensity Discharge headlamps with Lexus's Adaptive Front-lighting System (AFS). Standard on all GS models, AFS monitors the vehicle's turning radius and moves the angle of the headlamp beams to improve forward lighting through bends in the road.

The new Lexus GS in the UK

The new Lexus GS will go on sale in the UK on 15 April, offered in four grades: GS300, GS300 SE, GS300 SE-L and GS430. Prices on-the-road will start at £30,400.

The GS300 specification includes Smart Key entry and push-button start-up system, 10-speaker sound system with in-dash six-disc CD player, speed-sensitive electric power steering, cruise control, sequenced interior lighting with LED technology, leather-trimmed multi-function steering wheel, advanced automatic dual-zone air conditioning, eight-way electrically adjustable front seats, tyre pressure warning system, Adaptive Front-lighting System, 17-inch alloy wheels, Bluetooth® connectivity and an eight-inch touch-screen display.

GS300 SE models add the Lexus DVD-based satellite navigation system with rear view monitor and steering-guided parking sensors, leather upholstery and additional lumbar adjustment plus heating and ventilation functions for the front seats.

The GS300 SE-L adopts an electric tilt/slide sunroof, 18-inch alloy wheels and a Mark Levinson® 14-speaker hi-fi system. Standard features on the GS430 include Adaptive Cruise Control with Pre-Crash Safety and a wood and leather trimmed steering wheel.

True to Lexus's reputation for providing unbeatable value for money, the new Lexus GS will perform strongly in terms of specification and ownership costs compared to its principle market rivals. The model demonstrates how Lexus continues to raise the standards for the market in terms of the equipment provided as standard and also the way in which its cars are designed to require less time and less money spent on routine maintenance. And if you are unlucky enough to suffer damage, repairs for typical low-impact collisions should cost less and keep your vehicle off the road for a shorter time than you might expect.

Competing in the premium E segment against rivals such as the BMW 5 Series, Jaguar S-Type, Audi A6 and Mercedes-Benz E-Class, the GS is set to increase Lexus's market share with 1,750 sales targeted for the remainder of 2005 and 2,500 in 2006.

The Association of British Insurers (ABI) has awarded the new GS300 and GS300SE insurance group 16E, the SE-L version is in group 17E and the GS430 is in group 18E.

The new Lexus GS requires servicing every 10,000 miles (Health & Safety Check) with major servicing required at 20,000 mile intervals. In line with all other Lexus models, the new GS will be sold with 3 years/60,000 miles warranty with 3 year paint and 12 year anti-perforation warranties.

2 FIVE SENSE APPEAL

GS Chief Engineer Shigetoshi Miyoshi of the Lexus Development Centre Product Development Group gives his personal insight into the creation of the new high-performance Lexus GS, its significance for the global promotion of the Lexus brand and the possibilities for its future development.

Shigetoshi Miyoshi had a long-held ambition to be a chassis engineer, a career he embarked upon when joining Toyota straight from university. He was immediately rewarded by being tasked with designing the company's first rack-and-pinion steering system.

He subsequently worked on engineering projects for the Corolla, before moving to Brussels to work for three years as a liaison engineer for the development of Toyota's Burnaston plant in the UK, providing a link between Toyota in Japan and its European suppliers.

Mr Miyoshi then moved on to his first assignment with Lexus, in charge of product planning for the SC. After this four-year term he moved on to become chief engineer for the SC430 before taking up his role with the new GS project.

The third generation GS is of great importance to Lexus's development in a truly global market. It is emerging at a time when the marque is being developed in locations as diverse as Japan, Europe, Russia and China and as it begins the replacement of virtually its entire product range by the end of 2007.

"It isn't as if we chose GS in preference to the RX400h or another model," said Mr Miyoshi. "It was simply a matter of timing. As you know, from a two-model line-up just 15 years ago, the Lexus brand has suddenly grown up. In some areas, the direct competition may still outperform Lexus, but, especially in the USA, the Lexus brand is now very famous.

"This also means that the Lexus brand must become even more advanced and dynamic," he said. "The new GS is simply the first manifestation of a careful brand development and a unique new design philosophy, conceived to widen the appeal of Lexus to a global level, take another step up from the competition, and achieve the success Lexus has enjoyed in America on a worldwide scale."

Mr Miyoshi admits that adopting a sophisticated new design philosophy can make the complexities of engineering more demanding, but that that makes the job more enjoyable.

“If this makes the engineering more demanding, then it’s more fun for me. If the job were easy, then anyone could do it. When it becomes that much harder, then the real challenge begins.

“L-finesse is fundamentally geared towards styling in design rather than engineering work. But within the mantle of this new design philosophy, and harmonising with it, we have adopted a similar engineering approach, based on what we call the Five Senses Appeal: touch, taste, smell, sight and sound. Appealing to the five senses of the customer is fundamental to the way in which every element of the new GS is designed,” he said.

“Firstly, just looking at the car, we want those who see a Lexus to experience the hunger of envy that can only be satisfied by ownership,” he said.

“From the styling aspect, there are many points, such as the shape of the grille being reflected in the navigation console, where we have achieved a synergy between interior and exterior design.

“Touching the car for the first time is extremely important and here we bring together L-finesse and Five Senses Appeal, as well as Lexus Quality Innovation, which is concerned with static performance in such matters as component fit, panel gaps and door opening. Even at the point of first contact with GS, every detail has been considered in the context of appealing to the five senses, from the feel and action of the door handle and the sophisticated operation of the interior lighting synchronised with the driver’s actions to the sound of the door closing and the acoustics of the cabin before the engine is switched on.

“The smell and feel of the interior, even the amount of give in the armrest upholstery are considered, not to mention the opening of a console box or ashtray. The speed and action of the damping are very important in portraying luxury and, much like the switchgear, should have a uniform feel throughout the cabin, regardless of temperature, age or frequency of operation.

“Then there is the starting of the engine, the quick response tachometer coming to life.”

Listing so many examples of the relentless attention to detail which is a hallmark of the first realisation of L-finesse in a production Lexus, Mr Miyoshi is reluctant to highlight any one element he considers to be the car's most impressive attribute.

“In the case of Lexus, power should always be number one,” he said. “Then again, handling should also be a number one priority. But a high performance vehicle should be safe, too, and I think in the future safety will be emphasised even more. Then, of course, there are the environmental considerations.”

One might think Mr Miyoshi would feel contented on completing the new GS, but that's not the case: “An engineer's demand for perfection is unlimited, so no matter how refined a solution he conjures up, he will always immediately start looking for ways to improve upon it.”

3 DESIGN AND LIFE ON BOARD

- Third generation GS is first production vehicle to present new Lexus design philosophy L-finesse
- Interior combines unparalleled build quality with cabin ergonomics and comfort
- Sequenced entry illumination system, incorporating LED technology
- Class-leading cabin acoustics with minimal NVH intrusion
- Smooth bodywork with aerodynamic package to promote high stability and low wind noise

The third generation Lexus GS is the first production vehicle to present the radical new Lexus design philosophy, L-finesse.

Wahei Hirai, Managing Officer of Lexus Global Design, said: “Over the past three years we have undergone a journey to refocus Lexus design based on two factors that we believe define both the history and the future of Lexus: the intensity of being at the ‘leading edge’ and the depth of ‘finesse’.

“We call this L-finesse and this is the philosophy that has driven the change in Lexus design towards a more contemporary, dynamic position in the premium market. Drawing

from Japanese aesthetic values, we have created a new dynamism based on the visual contrast between simplicity and elegance.”

This new philosophy marks a move towards a bold, more sculptural styling language that is fundamental to the future identity of the Lexus marque. It develops a strong visual synergy between both interior and exterior design of the GS.

The new Lexus GS is a paragon of luxury and exclusivity, integrating elegant, seamless coachwork with interior ergonomic excellence and unparalleled technical achievement. The concept of quality is re-evaluated, with attention given to even the smallest components to create an engaging and sophisticated driving experience that is unique to Lexus.

Exterior

The new generation GS has long, integrated and elegant lines. Across the bodywork there are subtle and intriguing contrasts in the surface ‘language’, demonstrated in the relationship between the crisp elegance of the bonnet and the curvaceous, sculptural form of the front wings and bumper.

The front end features a grille with vertical bars, four independent clear glass headlights and a deep air dam, which integrate to express the car’s sporting character and the new Lexus identity.

Kengo Matsumoto, General Manager of the Lexus Design Division, said: “In designing the LF-S concept vehicle, we modified the disposition of the key frontal elements. In dropping the position of the grille in relation to the headlights, we instigated a styling approach that will be common to future Lexus models, moving the marque towards a more dynamic feeling.

“The GS continues this trend, creating a new, unique frontal balance and countering the preconceptions of grille and headlight layout typified by other luxury brands. Creating a balance that goes against what seems natural is essential to the marque if Lexus design is to invigorate and yet remain inherently simple.”

In profile, the proportions of the GS's long cabin, with blacked-out B-pillars above a curved, sweeping belt line, are unique to L-finesse. The 'slingshot' shape of the side window section echoes the fluid strokes of Japanese calligraphy.

Wide wheel arches accommodate either 17-inch (GS300 and GS300 SE) or 18-inch alloy wheels. At the rear, the car's muscular flanks taper back to the LED light clusters above a strongly sculpted rear bumper and twin tailpipes.

Beneath the car a number of aerodynamic under-body elements have been designed to aid vehicle stability and reduce wind noise. These include three engine undercovers, front and rear tyre fairings, fuel tank side covers, floor covers and an aerodynamic differential cover plate.

On GS300 SE-L and GS430 models, a discreet rear spoiler is fitted to the bootlid, which further improves the car's aerodynamic performance at high speed.

In the UK the new GS is offered with a choice of nine body colours: Caspian Sky, Mesa Red, Kalahari Sand and Athabasca Shale are new, joining the current St Lucia Pearl, Palladio Silver, Astral Black, Boreal Green and Canterbury Blue shades.

Interior

Inside the car, craftsmanship qualities are expressed in the use of high quality wood, elegant metal detailing and leather accents and the exceptionally fine degree of fit and finish throughout.

Although the overall height of the car is 5mm lower than the previous model, lower front and rear seat hip points (reduced by 10 and 5mm respectively) have increased headroom. A longer seat slide mechanism and extension of the wheelbase by 50mm give more legroom for taller passengers. Rear legroom is also improved as the rear seat hip points have been moved back 20mm.

The discreet quality of Lexus is evident as soon as you open the door and step inside with the new car's entry-sequenced illumination. This features interior and exterior door handle lighting, door courtesy lamps, scuff plate spot lamps, lamps in the front and rear footwells, map and reading lights and a steering wheel and gear lever spot lamp. All of these

automatically operate in sequence with the driver's movements as he or she approaches, enters and starts the car.

White LED lamps are used for map, reading, glove compartment and centre console box lights and also provide bright spot illumination of the seats, gear lever and steering wheel.

In line with the principles of L-finesse, structural elements, such as the instruments, centre console, air vents, handles and armrests, are neatly integrated and finished to the highest quality.

Front seats are eight-way electrically adjustable. On GS300 SE and SE-L and GS430 models, they also benefit from heating and integrated ventilation functions. This combines with snug lateral support, a broad shoulder section and a new back board-type head restraint design to provide excellent comfort and support.

The GS300 features smart black fabric upholstery, while other versions have full leather seats in a choice of black, grey and ivory shades.

Great care was taken in delivering ergonomic excellence, tactile quality and intuitive operation of the controls and switchgear and ensuring the clearest visibility of the instrumentation. A new damping system has been developed to maintain a consistent opening speed for the glove compartment, cup holder lids and ashtrays, regardless of ambient temperature. Even the sound quality of the glove compartment door operation has been enhanced.

Special attention has been paid to reducing external noise intrusion and the acoustic qualities of the cabin. Sound absorbent and insulating materials are widely used throughout the interior, including new high-rigidity foam-type sheets that have the added benefit of saving weight.

Painstaking detail work on external bodywork seals, weather strips and door and window frame mouldings contributes to greatly reduced wind noise. Rubberised underbody floor covers and sound absorbing rear wheel arch liners minimise noise intrusion from water and gravel splatter.

4 ON-BOARD TECHNOLOGY

- Optitron instrument display with world-first Electronic Chromatic Device (ECD) light-sensitive dials
- European first Lexus Parking Assist with rear monitor and steering-sensitive parking sensors
- DVD satellite navigation with Electronic Traffic Avoidance (ETA)
- Seven-inch touch screen display controlling audio, air conditioning, navigation and Bluetooth® mobile communications technology
- Voice activation of audio, air conditioning and navigation systems
- Dual-zone air conditioning with automatic upper and lower zone control

The interior of the new Lexus GS is equipped with a comprehensive range of technologically advanced equipment, designed to both simplify and enhance life on board. 'Seamless Anticipation', a central tenet of L-finesse, is at the heart of the Lexus ownership experience, founded on the principles of 'discreet hospitality' and carefully considered driver interaction.

This is exemplified in the new GS, from the moment you approach the vehicle, through the convenient Smart Keyless entry system and bespoke illumination that works in sequence as you enter or leave the vehicle. Push-button start-up replaces the conventional ignition key system and steering sensitive parking sensors make low-speed manoeuvres easier than ever before.

Smart keyless entry and easy door closing

The Smart Entry and Start System makes life much easier, as it requires only that the GS driver has the electronic key on his or her person in order for the doors to be unlocked and the engine started.

When the electronic key comes within one metre of a vehicle's door, it communicates with a transmitter built into the door handle. Identity codes are matched, allowing the door to be locked or unlocked by a touch of the handle.

Similarly, the Smart system identity is recognised inside the car, allowing the engine to be switched on simply by pressing a push-start button.

Crash-sensing door locks ensure all doors are automatically unlocked when acute vehicle deceleration is detected.

Optitron dials with electronic chromatic device

The new Lexus GS is equipped with a light-sensitive Optitron instrument binnacle, fitted with metal, analogue dials. It is the first in the world to use Electronic Chromatic Device (ECD) glass, which combats glare and enhances the legibility of the gauges in all light conditions.

Using a light sensor built into the high-mounted rear stop light, ECD automatically reduces the level of glass transparency under direct sunlight by up to 70 per cent. In normal or snowy conditions, ECD is inactive, increasing the glass transparency for greater dial brightness.

Electronic climate control

The new generation Lexus GS features a highly efficient air conditioning system that employs a newly developed variable compressor. The electronic climate control provides independent left and right temperature and ventilation controls, as well as automatic governing of the upper and lower cabin air zones, and automatic cool air bypass control.

The system operates according to a complex neural network that cleverly mimics the human nervous system in determining the appropriate cabin climate. A humidity detector further enhances the precise level of control and the high level of passenger comfort.

Extensive use of sound-absorbent materials and a sound-reflecting profile inside the ducting substantially reduce noise from the blower. Vents for defrosting the front side windows are now located at the base of the A pillars for greater efficiency. To make the system easier to use at night, the airflow control vents are illuminated.

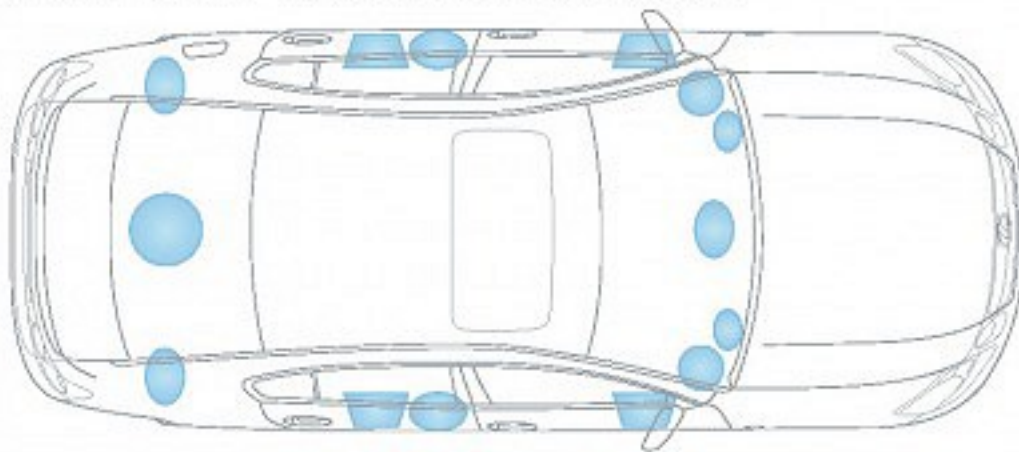
The dual-zone system also features an automatic recirculation mode that prevents exhaust gases entering the cabin, and a clean air filter with active charcoal to reduce airborne particles such as dust and pollen and block out unwelcome odours.

Premium hi-fi

In keeping with the superior standards already established by Lexus in the field of in-car hi-fi, the new GS has a sound system that incorporates a direct-load six-disc dashboard CD autochanger and audio controls mounted on the steering wheel.

The sound system has 10 individual speakers, including front and rear door-mounted tweeters, a large, 250mm subwoofer and a new front centre speaker that improves definition and clarity.

MARK LEVINSON® PREMIUM SURROUND SYSTEM



 SPEAKER LOCATION

The top-of-the-range equipment is a 350 watt, 14-speaker Mark Levinson® Premium Surround System. It adds additional squawkers and satellite speakers to the standard GS stereo arrangement for greater quality and a richer, more powerful and pure sound.

Satellite navigation and touch-screen multi-function control

The DVD-based Lexus satellite navigation system features an eight-inch, touch-sensitive centre console display that can be adapted to suit different user preferences, such as the colour of the menu screen background.

The system is intuitive and simple to operate and now combines the latest Global Positioning System (GPS) technology with Dynamic Route Guidance (DRG). DRG is a sophisticated traffic avoidance system which automatically recalculates journey guidance should it detect an accident or delay on a chosen route.

The Electronic Multi-Vision (EMV) display screen has been redesigned for better visibility and now incorporates touch-screen operation for the audio, air conditioning, navigation and telephone controls.

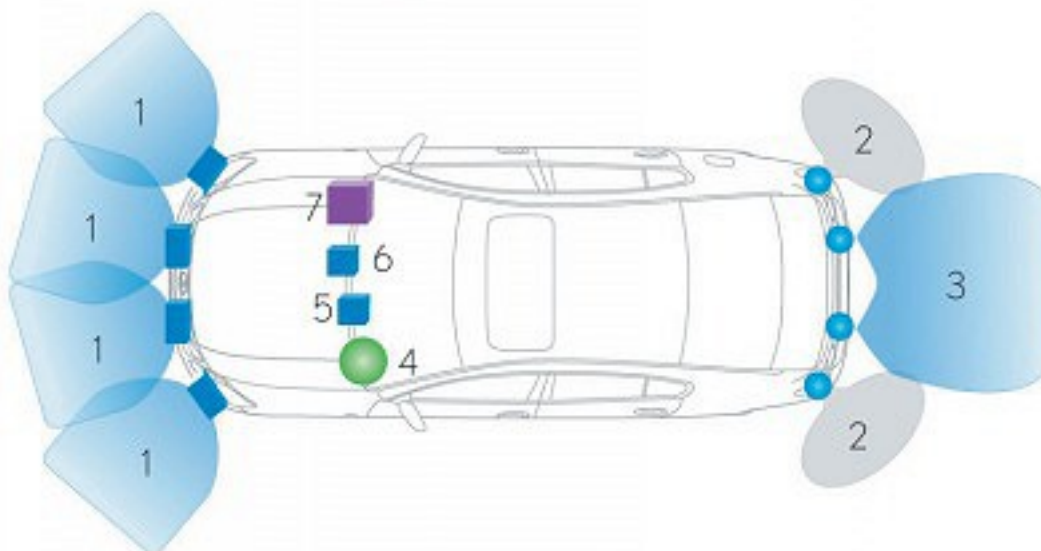
The system also uses the latest voice recognition technology and can respond to a multitude of spoken commands relating to the navigation, audio and air conditioning functions. Bluetooth® wireless technology permits hands-free operation and integration of compatible mobile phone equipment.

Lexus parking assist sensors (steering sensitive)

The new Lexus GS is offered with a parking assist system that combines information from both front and rear-mounted sonars and a steering angle sensor to warn the driver of how close the vehicle is to nearby objects during low-speed parking. This system is fitted as standard on GS300SE upwards.

The system comprises four dual sonars on the front bumper, two back and two corner sonars on the rear bumper, a clearance sonar ECU, a buzzer and a proximity diagram that is presented on the GS's multi-function display.

PARKING ASSIST SENSOR



- | | |
|--------------------|----------------------|
| 1. Dual sonars | 5. Display indicator |
| 2. Corner sonar | 6. Buzzer |
| 3. Back sonars | 7. ECU |
| 4. Steering sensor | |

Using obstacle position data related to the turning angle of the steering wheel, the system predicts the likelihood of contact, displaying the location of the object and vehicle's proximity to it on the screen. It also displays the suggested steering correction required to avoid hitting the obstacle.

Parking assist monitor

Also fitted as standard on GS300SE upwards is a rear monitor which feeds a colour image from the back of the car to the centre console screen whenever reverse gear is engaged. The system can also overlay the image with guidelines to help the driver with more precise and safer reverse parking manoeuvres.

5 ENGINES AND TRANSMISSION

- New 3.0-litre V6 petrol engine
 - 245bhp at 6,200rpm; 310Nm of torque at 3,500rpm; 0-62mph acceleration in 7.2 seconds
 - Stoichiometric direct injection for engine performance and fuel efficiency
 - Dual VVT-I (Variable Valve Timing – intelligent), providing variable timing on air-fuel intake and exhaust valves
- 4.3-litre V8 petrol engine
 - 279bhp at 5,600rpm; 417Nm of torque at 3,500rpm; 0-62mph acceleration in 6.1 seconds
 - VVT-i with drive-by-wire ETCS-I (Electronic Throttle System – Intelligent)
- Six-speed close ratio, electronically-controlled automatic transmission
 - Sequential shift mode for manual selection of shift range
 - Artificial Intelligence (AI) shift which adjusts shift programme according to road conditions and driving style

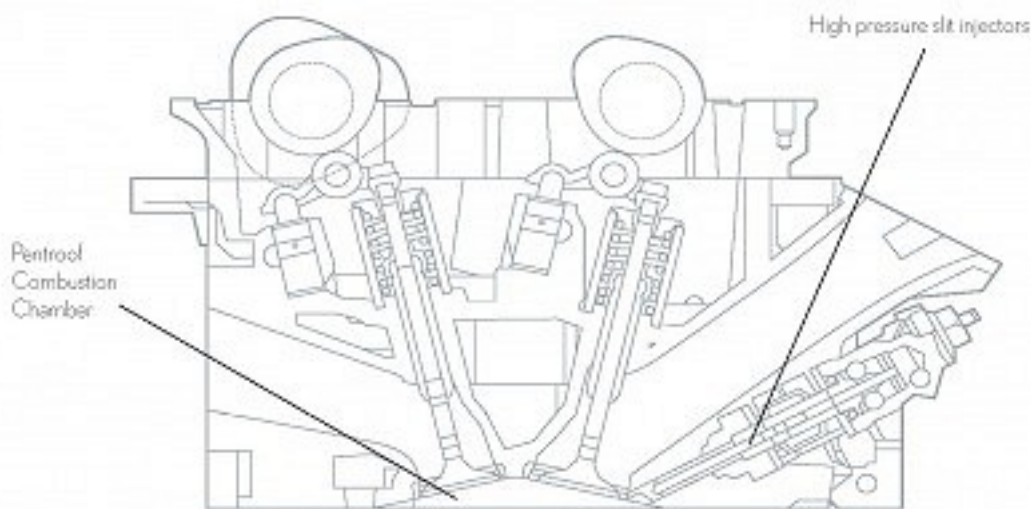
The new Lexus GS is offered with a choice of two powerful, state-of-the-art petrol engines: a 279bhp 4.3-litre V8 and a newly developed, direct injection 245bhp 3.0-litre V6. Both powerplants are matched to an electronically controlled, six-speed close ratio ECT automatic transmission with sequential shift mode.

3.0-litre V6

The new V6 is a chain-driven, double overhead camshaft 24-valve 2,995cc petrol engine that combines a stoichiometric direct injection system with Dual VVT-i (Variable Valve Timing – intelligent) to achieve a perfect balance of high performance with low fuel consumption and exhaust emissions.

It develops 245bhp at 6,200rpm and 310Nm of torque at 3,500rpm, yielding 0-62mph acceleration in 7.2 seconds and a top speed of 148mph. Combined cycle fuel consumption is a very respectable 28.8mpg.

The high, 11.5:1 compression ratio achieved thanks to the direct injection stoichiometry enhances both engine performance and fuel efficiency. The system uses an Acoustic Control Induction System (AVIS), Swirl Control Valves (SCV) to the intake manifold, high pressure slit injectors to optimise the fuel-air mixture, and pent roof combustion chambers for excellent combustion and anti-knock performance.



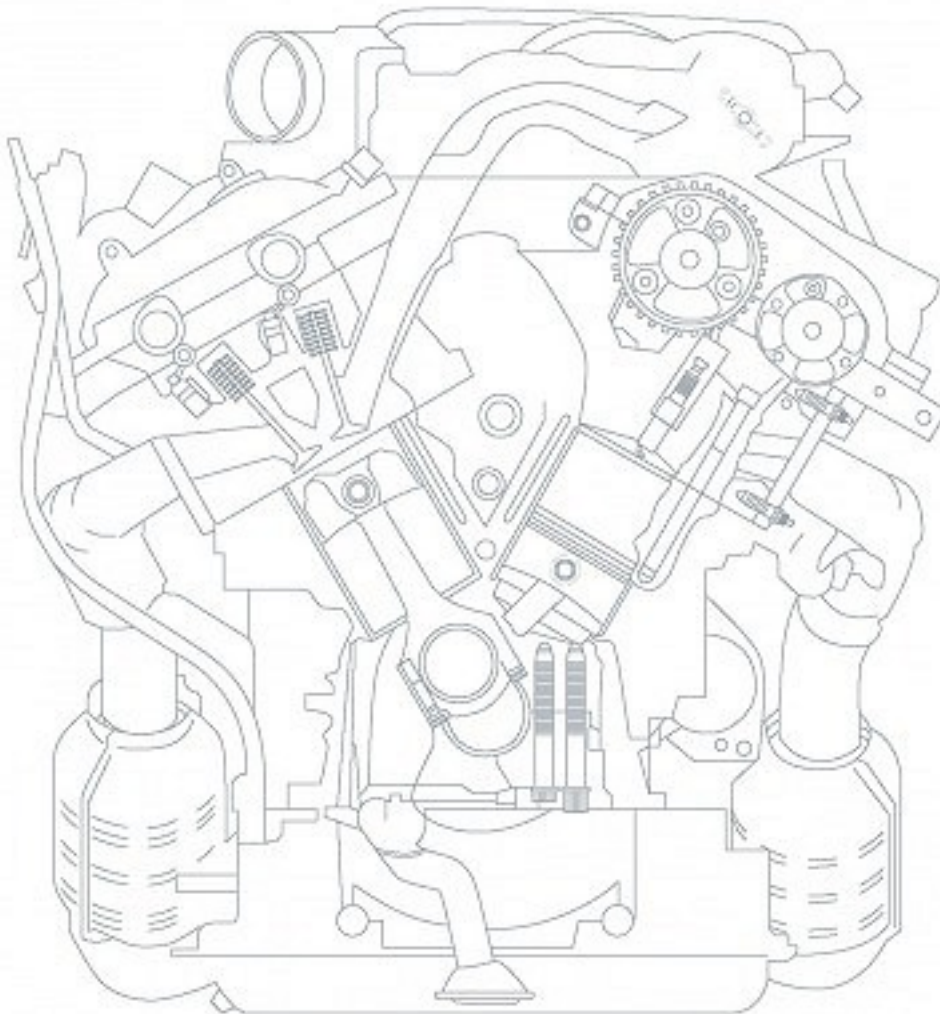
Using optimum intake port diameter and length, SCV stabilises combustion at a low fluid generation, allowing high torque to be generated at low engine rpm and improving fuel economy. In addition, compression stroke injection is applied during cold engine starts to expedite catalyst warm-up and minimise exhaust emissions.

The adoption of dual VVT-i on both intake and exhaust camshafts significantly improves engine performance. Roller rocker arms have been adopted for the chain-driven valve system, bringing a marked reduction in friction between the cam and sliding components

that helps improve fuel efficiency. In addition, a concave camshaft profile increases valve lift to boost output.

Particular attention has been paid to vibration and noise reduction. A very rigid, high-tensile forged crankshaft has an optimised balance weight to minimise noise and vibration. A cone-shaped, aluminium alloy front engine mount bracket is attached to the upper cylinder block, where the transmission of vibration is at its lowest. The sound-absorbent V-bank engine cover further promotes quiet running.

The compact engine features extensive weight-reducing measures. It has an aluminium die-cast cylinder block and intake manifold and an intake chamber made of resin. The overall engine assembly has been made lighter and smaller by installing the water pump, oil filter and oil pump within the chain cover.



The adoption of a stainless steel dual front pipe exhaust system further contributes to the weight reduction and provides better resistance to corrosion. The exhaust manifolds have

integrated, ultra-thin-plate ceramic catalytic converters, which also help keep the weight down while improving vehicle performance and emissions levels.

Dual main silencers with a long-tail design cut the level of low frequency booming and reduce back pressure to assist engine output. Where appropriate, the exhaust system components are specifically shaped to aid the car's underfloor aerodynamics.

4.3-litre V8

The Lexus V8 petrol engine is renowned for its combination of power and ultra-smooth running. It develops 279bhp at 5,600rpm and 417Nm of torque at 3,500rpm. It is capable of accelerating the new GS from rest to 62mph in 6.1 seconds and achieving a top speed of 155mph. In spite of these performance figures, the engine returns 24.8mpg in combined cycle driving.

The engine uses the by-wire Electronic Throttle Control System – intelligent (ETCS-I), which governs the throttle not only through the position of the pedal but also by vehicle speed and engine rpm data. It operates in conjunction with the engine's VVT-I to optimise valve overlap at all engine speeds, maximising engine response in all driving conditions and ensuring unrivalled tractability and smoothness.

Great care has been taken to ensure the engine delivers the key Lexus attributes of near-silent running and ultra-low noise, vibration and harshness levels. Reducing friction in the engine's moving parts has made a significant contribution both to minimising NVH and achieving greater fuel efficiency. Inlet noise is further reduced by refinement of the air filter and resonator and front and rear engine mounts have been designed to reduce the level of vibration at idle and transmission noise.

Transmission

Both engines are coupled to a newly developed, electronically controlled six-speed close ratio ECT automatic transmission with sequential shift mode.

The new gearbox is quieter and assists both engine performance and fuel consumption. It features a new torque converter, lock-up control from third through to sixth gear and deceleration downshift control. It is also linked to the computerised engine management

system, which controls momentary reduction of torque to make gear changes even less discernible.

The gearbox has an artificial intelligence (AI-Shift) control that automatically changes the gear shift pattern according to road conditions and driving style. This delivers more comfortable yet responsive driving by avoiding any unnecessary upshifting when travelling uphill and automatically downshifting when going downhill to make the most of engine braking.

When 'Power' mode is engaged, sportier gear shifts are made during rapid acceleration and deceleration; gears are also automatically held if the accelerator pedal is released quickly, improving re-acceleration response. Moving the gear lever to the "S" position in the gate lets the driver select the shift range manually, simply by moving the lever forwards to move up a gear, and backwards to change down.

6 DRIVING DYNAMICS

- All-new, high-rigidity platform with longer wheelbase and wider track for improved driving dynamics
- New speed-sensitive Electric Power Steering (EPS)
- GS430 features Variable Gear Ratio Steering, linked to Adaptable Variable Suspension (AVS) and Vehicle Dynamics Integrated Management (VDIM)
- AVS system features two settings, Sport and Comfort
- Weight-saving aluminium bonnet and suspension members

The GS is built on an all-new platform that has exceptional torsional stiffness. It has a longer wheelbase, wider rear track and shorter front and rear overhangs than the previous model.

It integrates a new generation of powerful engines with a range of sophisticated technological innovations designed to deliver excellent driving dynamics in all conditions.

All versions of the GS feature front double wishbone and rear multilink suspension, with the GS 430 also benefiting from a new Adaptable Variable Suspension (AVS) system with

adjustable dampers with 'Sport' and 'Comfort' settings to suit the driver's ride and handling preference.

New speed-sensitive Electric Power Steering (EPS) is fitted as standard, with the GS430 equipped with Variable Gear Ratio Steering which changes the ratio according to vehicle speed. This means minimal effort is required when manoeuvring the car at low speed, while greater steering feel and feedback are delivered at higher speeds.

The VGRS system is linked to both the AVS and Lexus's unique Vehicle Dynamics Integrated Management system (VDIM), helping maintain vehicle stability and increase driving rewards up to the car's performance limit.

Body structure

The new Lexus GS has an all-new platform, which, although it is only 20mm longer overall than its predecessor, gives a 50mm increase in the wheelbase (to 2,850mm). This increase and a rear track wider by 30mm help deliver the car's ideal weight distribution.

The new generation GS has a highly rigid, continuous laser welded body structure with weight-saving aluminium used for the bonnet and front and rear suspension members. Torsional rigidity is increased thanks to thickened cross members and extensive bracing within the floor. This improves both the car's driving dynamics and its impact safety performance.

Front and rear crash boxes are installed behind the bumpers to help reduce body deformation in the event of a gentle impact. These boxes absorb energy in a collision and are screw-on units, allowing for simple removal and repair.

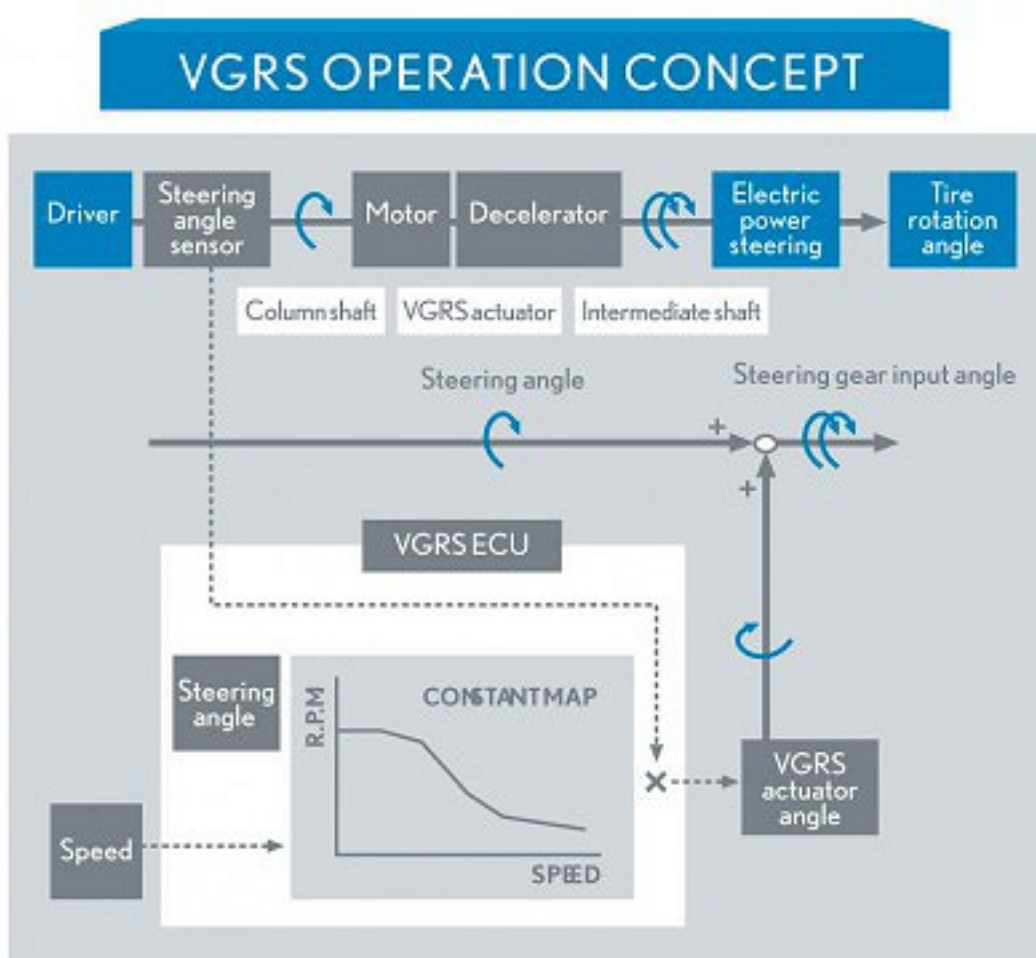
Anti-corrosion plates are located throughout the body and anti-corrosion wax and panel sealant are widely used to give the GS superb protection against rust. Resin mouldings for the bottom of the doors provide excellent resistance to chipping.

Electric Power Steering with Variable Gear Ratio Steering

The new Lexus GS is equipped with a speed-sensitive Electric Power Steering (EPS) system. The GS430 features, in addition, Variable Gear Ratio Steering (VGRS).

EPS is compact, lightweight and operates noiselessly, providing smooth, linear feedback to the driver. It is also environmentally-friendly in that it produces no oil waste and contributes to three per cent greater fuel efficiency.

VGRS uses an actuator attached to the intermediate steering column shaft. This alters the steering gear ratio according to vehicle speed. At very low speeds, the gear ratio is at its lowest to reduce both the steering input and the effort required in tight cornering and parking manoeuvres. At medium speeds, the ratio is adjusted to provide light, accurate vehicle response when cornering. At high speed the ratio moves to its highest level for a gentle response to driver input, helping maintain vehicle stability.



VGRS delivers excellent driver feedback with refined steering wheel operation at very low speeds; reduced understeer feel and better steering adjustment response when cornering; and minimal steering angle adjustment requirement when changing lanes.

The VGRS actuator is also linked to the GS's Vehicle Dynamics Integrated Management (VDIM) control system. At the GS approaches its performance limits, VDIM constantly

evaluates the steering gear ratio to optimise the front wheel steering angle and so maintain stability with minimum input from the driver.

Advanced suspension systems

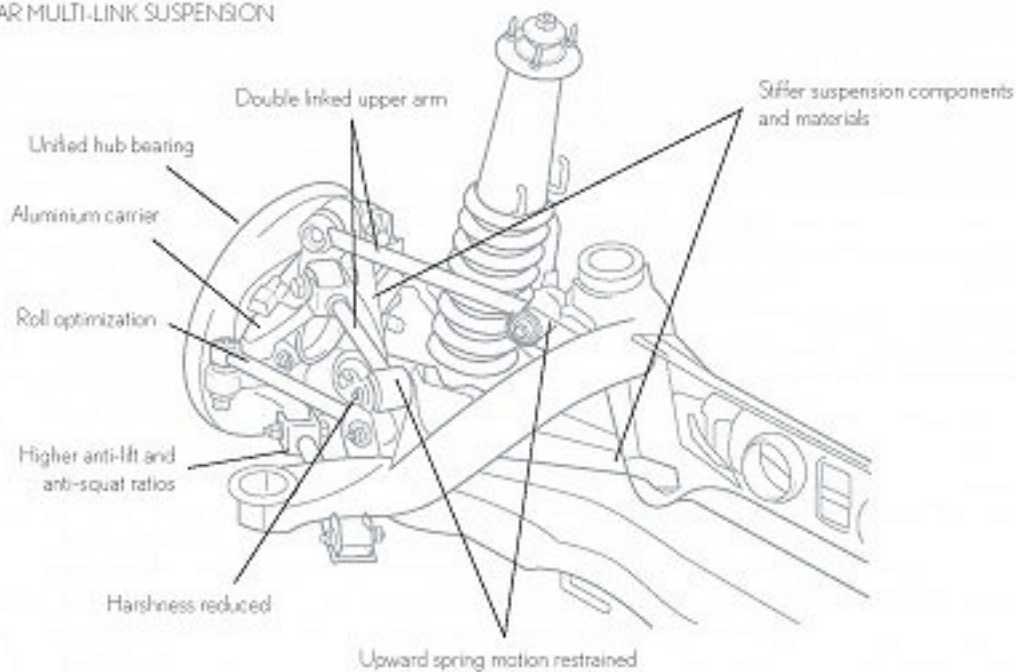
The new Lexus GS is equipped with double wishbone front and multilink rear suspension to provide the ride comfort and excellent handling and dynamic abilities expected of a luxury sports saloon.

The front, high-mounted double wishbone arrangement combines a lightweight, forged aluminium knuckle with a high tensile steel upper arm and forward-mounted power steering gear to promote linear yaw response, precise steering control and excellent straight line, high speed stability. Ride comfort, steering feel, roadholding and body control are all improved by an increase in wheel travel, a greater tyre steering angle and the adoption of new high performance monotube shock absorbers with increased piston diameter.

Any transmission of vibration is further reduced by large diameter, liquid-filled bushings to the lower suspension arm.

The rear multi-link suspension features toe control bars and an aluminium rear axle carrier. Stiffer component materials and a reduction in unsprung mass increase the level of ride comfort and provide exceptional cornering stability. Using a double-linked upper arm and integrated bearings and hub achieves high rigidity and lower weight. Aligning the shock absorbers along the same, lower axis as the coil springs permits a wider loadspace in the boot.

REAR MULTI-LINK SUSPENSION



Adaptive Variable Suspension (AVS) system

A new Adaptive Variable Suspension system is available on the GS430. This allows the driver to fine tune the GS's ride using two damper settings, activated by a switch next to the gear lever. 'Normal' mode is for everyday driving comfort; 'Sport' mode improves body control and gives precise response to steering inputs in cornering.

AVS automatically adjusts suspension performance independently at all four wheels, monitoring data from sensors for the engine rpm, front wheel speed, steering and stop lamp and from three vertical acceleration G-force sensors. The data is analysed by a control computer which activates the appropriate actuator in each shock absorber.

Selecting the AVS system's 'Sport' mode increases the difference between inner and outer shock absorber damping through corners to further reduce vehicle roll. At the same time, VGRS automatically reduces the steering gear ratio and EPS increases the level of steering assist torque. Together these measures minimise body roll, sharpen handling and produce greater steering feel for the driver.

7 SAFETY

- Awarded a best-in-class five star rating in the latest Euro NCAP crash tests for adult occupant protection with 35 points and best-in-class score for pedestrian protection of 18 points

- First time in Europe for unique Vehicle Dynamics Integrated Management (VDIM) system with active steering control
- Most advanced Pre-Crash Safety System (PCS) on the market, first in segment
- Up to 12 airbags, including first-in-segment driver and front passenger knee airbags
- Adaptive Front Lighting (AFS) and Tyre Pressure Warning System fitted as standard
- Front bumper, bonnet and cowl designed for improved pedestrian accident protection
- Adaptive Cruise Control (ACC)

In the latest Euro NCAP crash tests, the new Lexus GS has been awarded a best-in-class five star rating with 35 points, a maximum score for side impact and a top-in-class result for the frontal impact test with a score of 15 points out of a possible 16.

Pedestrian protection was also rated best-in-class with a total of 18 points, while 41 points (four stars) were awarded for child protection, making the new Lexus GS the safest car in the executive class for adult and pedestrian protection.

The new Lexus GS is equipped with the most technologically advanced active and passive safety systems available.

These include a new Pre-Crash Safety (PCS) system that automatically prepares front seatbelt and emergency braking to help reduce collision damage and injury. PCS works in conjunction with Adaptive Cruise Control (ACC), which automatically controls the GS's speed in relation to that of the vehicle ahead.

The GS430 adopts the latest generation of Lexus's Vehicle Dynamics Integrated Management (VDIM). This integrates ABS, Electronic Brakeforce Distribution (EBD), Traction Control (TRC) and Vehicle Stability Control (VSC) active safety systems with the Electric Power Steering (EPS) and Variable Gear Ratio Steering (VGRS) to give better performance, traction control and stability.

The GS is equipped with up to 12 airbags. Rear seatbelt pretensioners are fitted as standard, as is Adaptive Front Lighting (AFS), which improves visibility through bends. The car's front bumper, cowl and bonnet have been designed to offer better protection against pedestrian injuries in a collision.

Pre-Crash Safety and Adaptive Cruise Control

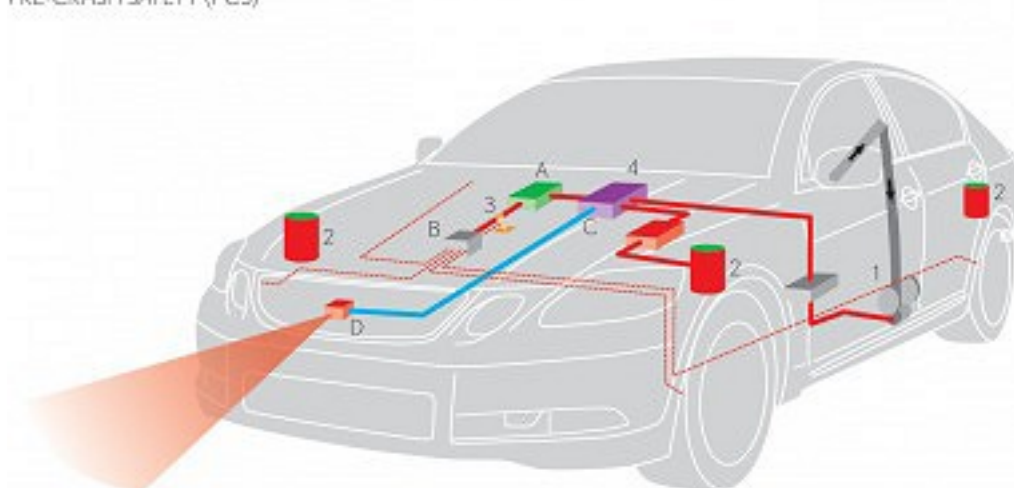
The Pre-Crash Safety (PCS) system offered on the new Lexus GS is the most sophisticated of its kind on the market.

PCS uses a millimetre-wave radar that detects obstacles in front of the car. This links to a computer that also monitors vehicle speed, steering angle and yaw rate to determine if a collision is unavoidable. In that eventuality, it retracts the front seatbelts to hold the occupants more secure and engages the emergency Brake Assist system to deliver maximum braking force when the driver depresses the brake pedal.

Braking efficiency is superb, thanks to 432mm ventilated discs at front and 310mm ventilated discs at the rear with high grip coefficient pads. PCS works in conjunction with the Adaptive Variable Suspension (AVS) on the GS430 to automatically regulate shock absorber rates to minimise the degree of vehicle nose dive under emergency braking.

PCS works in tandem with an Adaptive Cruise Control (ACC) system. This works in two modes: constant speed control and vehicle to vehicle distance control.

PRE-CRASH SAFETY (PCS)



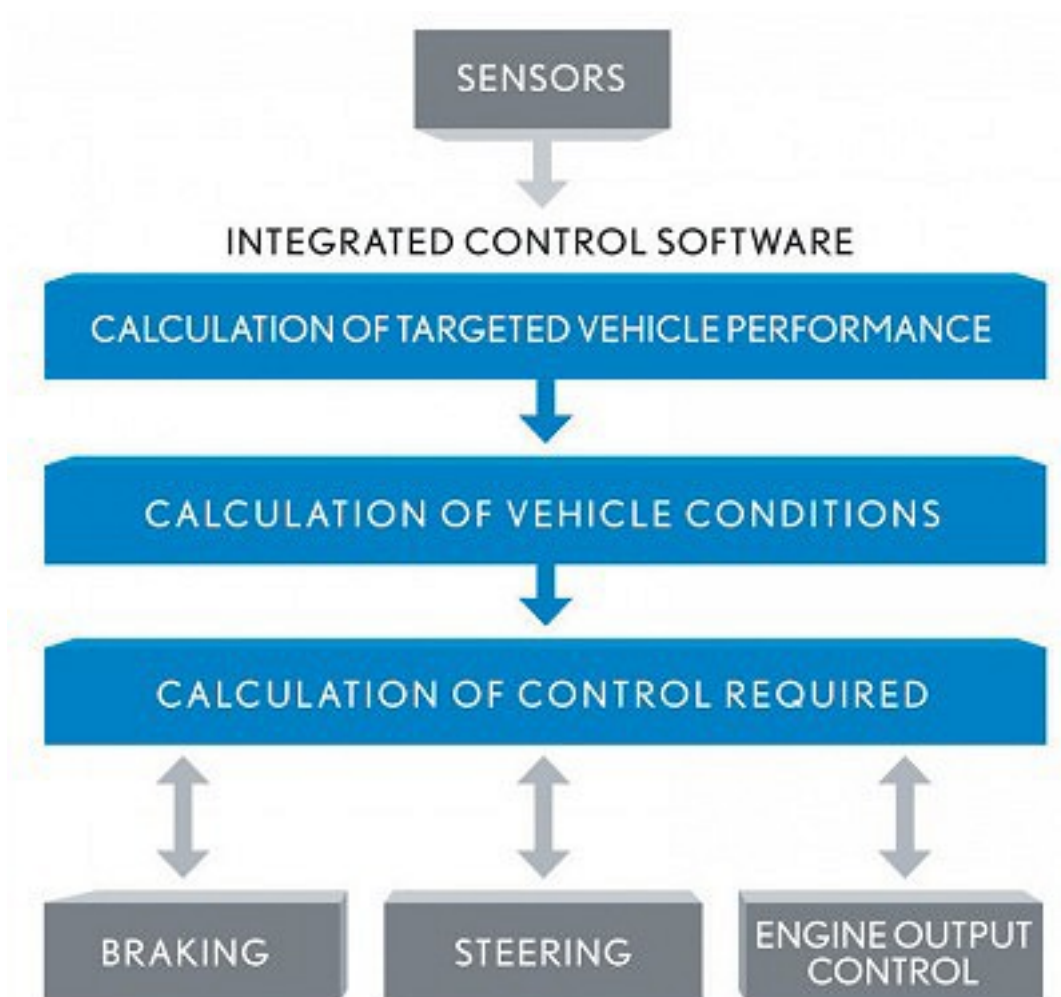
- | | | |
|---|------------------------|--|
| 1 | PRE-CRASH SEAT BELT | |
| 2 | SUSPENSION CONTROL | |
| 3 | PRE-CRASH BRAKE ASSIST | A. BRAKE CONTROL COMPUTER
B. BRAKE ACTUATOR |
| 4 | PRE-CRASH SENSOR | C. PRE-CRASH SAFETY COMPUTER
D. MILLIMETER WAVE RADAR |

The constant speed control operates in the same way as a conventional cruise control system. The vehicle-to-vehicle distance control system uses the PCS's millimetre-wave radar, allied to constant speed, decelerator, follow-up and accelerator controls to

automatically slow the GS to match the speed of the vehicle in front and, once the road is clear, accelerate to the previously selected speed. It can differentiate between vehicles directly ahead and those in adjacent lanes and the driver can select long, middle or short vehicle-to-vehicle distances by means of a control on the steering wheel. The settings selected are shown on the multi-function display on the dashboard.

Vehicle Dynamics Integrated Management (VDIM)

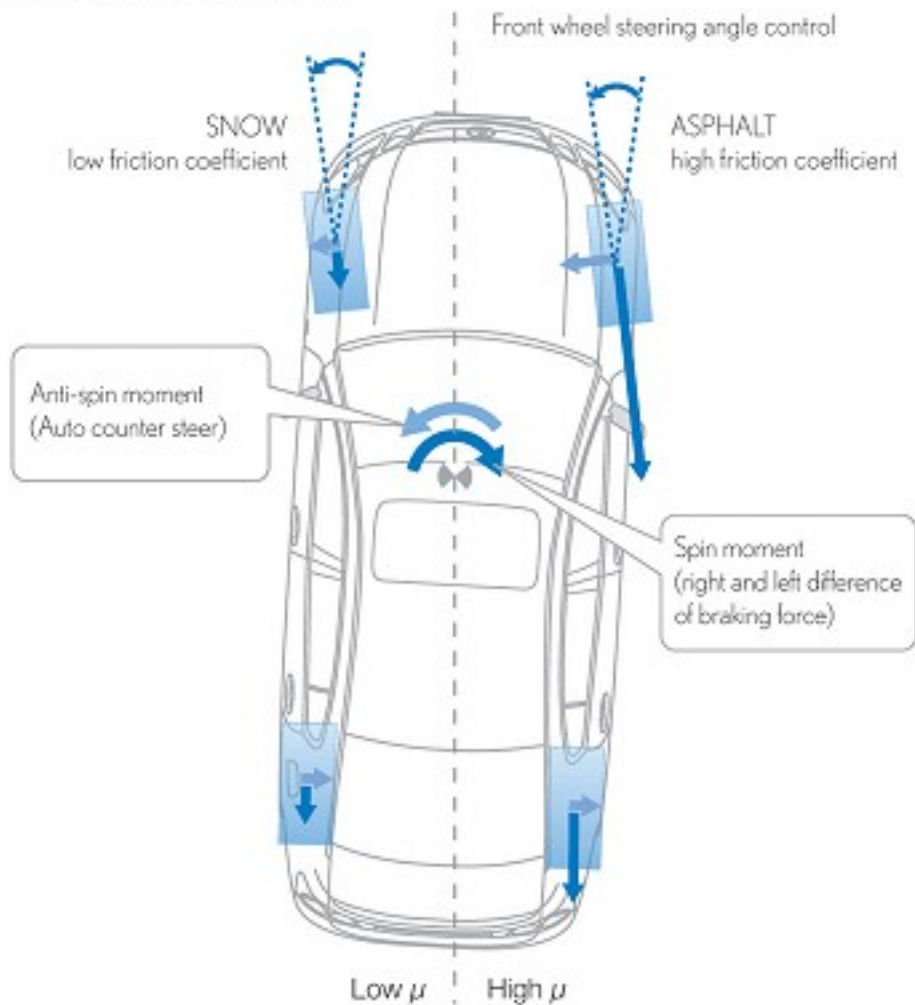
The latest generation of Lexus's Vehicle Dynamics Integrated Management (VDIM) improves performance, traction control and vehicle stability, working from status data gathered from sensors throughout the car. It integrates the functions of the Electronically Controlled Brake (ECB), ABS, Electronic Brakeforce Distribution (EBD), Traction Control (TRC) and Vehicle Stability Control (VSC) active safety systems with the Electric Power Steering (EPS) and Variable Gear Ratio Steering (VGRS) systems.



VDIM's integrated control of all the elements related to vehicle movement, including motor torque, brakes and steering not only optimises the activation of the braking, stability and

traction control systems, but also further improves the vehicle's overall dynamic performance.

VDIM - BRAKING CONTROL

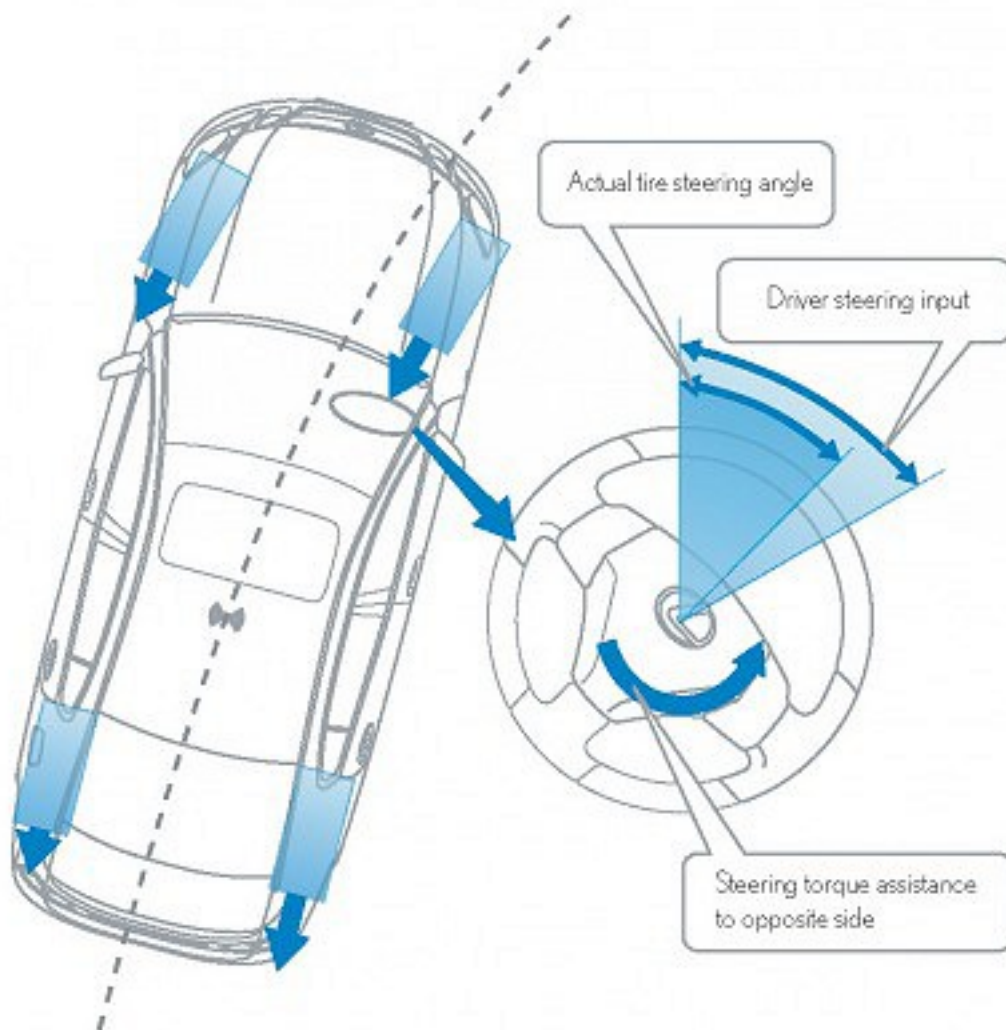


Moreover, whereas conventional safety systems are only activated immediately after the vehicle reaches the limit of its performance, VDIM engages control before that limit is reached. As a result, the new GS has an expanded performance threshold and behaves more smoothly at that threshold thanks to less obtrusive intervention of the control systems.

use of brake and steering control reduces the deceleration inherent in traditional braking systems, producing a smoother and more sporting driving experience.

In moderate understeer conditions, engine output and braking control are combined to automatically stabilise the vehicle. In the case of excessive understeer, however, an increase in the steering gear ratio by the VGRS and steering torque assistance from the EPS, curbs excessive turning of the front wheels. This happens in conjunction with the VDIM's engine output and brake controls to help retain vehicle stability.

VDIM - FRONT WHEEL UNDERSTEER CONTROL



The new GS's sophisticated ECB system features a hill start assist control that detects any vehicle slip during hill starts and automatically increases brake pressure to all four wheels to give the driver ample time to move from the brake to the accelerator pedal, without the car moving backwards.

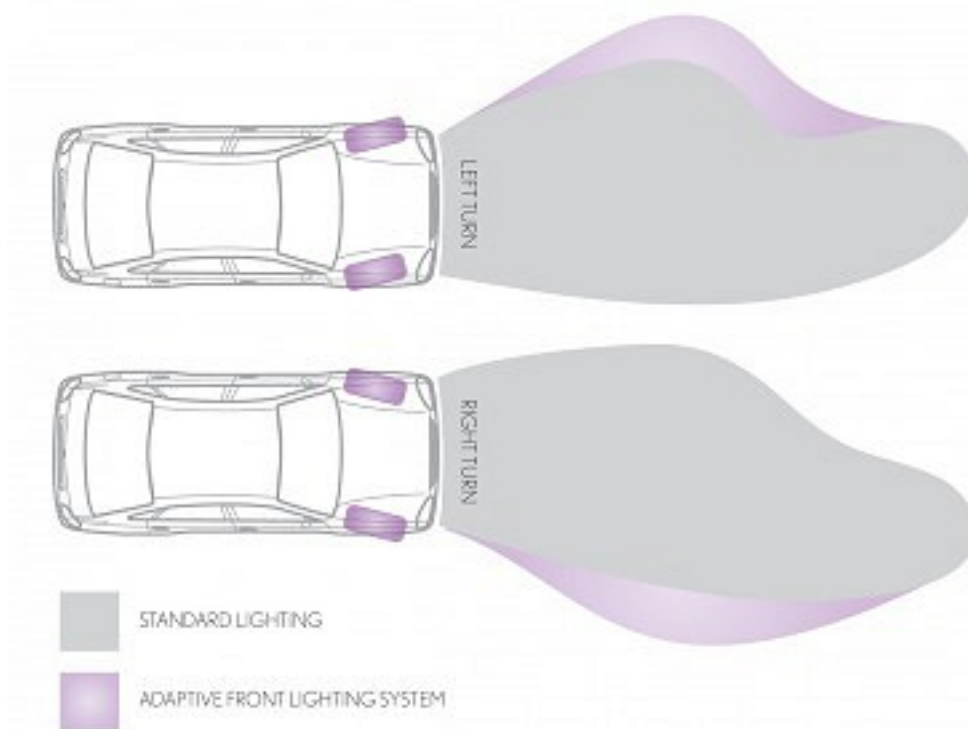
Airbags

The new Lexus GS is equipped with up to 12 airbags. Driver and front passenger two-stage front airbags, side and knee airbags and front and rear curtain airbags are standard on all versions. Rear passenger side airbags are fitted to the GS300 SE and SE-L and GS430 models.

Intelligent Adaptive Front-lighting and Tyre Pressure Warning Systems

The Adaptive Front-lighting System (AFS) is fitted to all new GS models as standard. This swivels the High Intensity Discharge (HID) headlamps through up to 15 degrees as the driver negotiates a bend, improving forward illumination through the curve, in line with the vehicle's steering angle.

I-APS (INTELLIGENT ADAPTIVE FRONT LIGHTING SYSTEM)



The Tyre Pressure Warning System (TPWS), also standard on all models, detects any loss of pressure in one or more tyres, alerting the driver by means of a warning light on the dashboard.

8 THE NEW LEXUS GS AND THE UK MARKET

The new third generation Lexus GS is superbly equipped to make a big impact in the British premium E segment for luxury sports saloons.

The GS's superb design, superior specification and refined, sporting performance, combined with the enduring, peerless levels of customer care that are a hallmark of the Lexus ownership experience, will build on this success to strengthen Lexus's position as Britain's best-respected motoring brand among the people who really count – motorists.

In terms of specification, the new GS moves well ahead of its direct market rivals, while performance is stronger than ever before with the introduction of a new 3.0-litre V6 petrol and 4.3-litre V8 unit that powers the GS430.

UK sales targets

The original GS model went on sale in the UK in 1994 and sales volumes peaked in 1998 when the second generation model made its debut. The new GS is expected to achieve even stronger results: 1,750 sales are predicted for the remainder of 2005, with 2,500 sales targeted for 2006.

UK sales will commence on 15 April. Four GS models will be offered: GS300, GS300 SE and GS300 SE-L with the 3.0-litre V6 engine, and the flagship GS430 equipped with the 4.3-litre V8. On-the-road prices are provided in the table below.

MODEL	PRICE
GS300	£30,400
GS300 SE	£35,900
GS300 SE-L	£38,000
GS430	£46,755

Insurance groups

The new Lexus GS proves highly competitive in terms of UK insurance groups. These start at 16E for the GS300 and rise to 18E for the GS430.

The E classification indicates that the cars' security provisions exceed the requirements of the insurance industry. That compares to the A (for adequate) ratings for the V8-powered Audi A6 and BMW 5 Series and the D designation that denotes the Mercedes-Benz E-Class does not meet the ABI standards.

MODEL	INSURANCE GROUP
GS300	16E
GS300 SE	16E
GS300 SE-L	17E

Unmatched value

Compared to its principle market rivals, the new Lexus GS proves unbeatable value for money.

Although in some cases the on-the-road price may be higher, the superb specification means that the Lexus actually costs less, once the price of optional equipment is taken into account. And in some cases, the Lexus is equipped with features that other brands simply do not offer.

For example, the Mercedes-Benz E320 Elegance has an on-the-road price of £35,115, compared to £38,000 for the Lexus GS300 SE-L. But the price of the Mercedes soon begins to soar when you factor in the extra cost of items such as alloy wheels, adaptive headlights, CD autochanger, DVD-based satellite navigation, leather upholstery and a smart key entry and start-up system. Specifying the E320 Elegance to match the Lexus (and that's without the Rear Park Assist monitor and bootlid spoiler that Mercedes cannot supply) adds up to £49,650 – 30.7 per cent more than the cost of the GS300 SE-L. Further to that, company car drivers would have to pay more than £144 in tax each month compared to the Lexus owner, or an additional £1,736 a year.

There's a similar picture where the Jaguar S-Type 3.0i V6 SE and BMW 530i SE are concerned, with specification-adjusted prices greater by 3.4 and 14.4 per cent respectively.

The flagship GS430 enjoys a similar advantage among its V8-powered premium segment rivals. The Jaguar S-Type 4.2 V8 SE works out 1.4 per cent cheaper to buy, taking extra options into account. But Jaguar owners would be hard pressed to claim a bargain, as they have to make do without adaptive headlights, an automatic soft-close boot lock, smart key system, tyre pressure warning system, ventilated front seats, Parking Assist Monitor, rear side airbags and advanced handling and safety systems such as electronically-controlled braking, adaptive variable suspension and the Pre-Crash Safety system – all of which come as standard on the Lexus.

There are shortcomings in the equipment list for the Mercedes-Benz E500 Elegance and the BMW 545i SE, too, even though their adjusted price tags are respectively 28.7 and 18.6 per cent higher than the GS430. Full details of the competitor comparisons are given in the tables below.

LEXUS GS300 SE-L COMPETITOR COMPARISON

Figures correct at

March 2005. ✓ = standard; ✕ = not available

	LEXUS GS300 SE-L	JAGUAR S-TYPE 3.0 V6 SE	MERCEDES-BENZ E320 ELEGANCE	BMW 530i SE
On-the-road price	£38,000	£32,300	£35,115	£31,730
Automatic transmission	✓	✓	✓	£1,350
Adaptive Front Lighting	✓	✕	£310	£270
8" touch screen display	✓	✓	No touch control	No touch control
Alloy wheels	18"	£500	£1,810	£1,110
Bluetooth® connectivity	✓	£350	✕	£505
6-disc CD autochanger	✓	£355	£350	£280
Soft-close bootlid mechanism	✓	✕	✕	✕
Electrically adjustable steering wheel	✓	✓	£200	£300
High Intensity Discharge headlamps	✓	£700	£560	£650
Leather gearknob & steering wheel trim	✓	✓	✓	✓
Rain-sensing wipers	✓	£125	✓	✓
Smart key system	✓	✕	£860	✓
Speed-sensitive power steering	✓	✓	✓	£160
Tyre pressure warning system	✓	✕	£470	✓
Advanced climate control	✓	✕	£550	£490
Wood trim inserts	✓	£150	✓	£320
DVD satellite navigation	✓	£2,000	£1,950	£1,665
Electric rear sunshade	✓	£230	£365	£205
Electric front seats	✓	✓	£650	£745
Heated front seats	✓	£330	✓	✓
Ventilated front seats	✓	✕	£800	£775
Seats/mirrors/wheel memory function	✓	✓	£650	✓
Leather upholstery	✓	✓	£1,250	£1,250
Park assist monitor	✓	✕	✕	✕
Front and rear parking sensors	✓	£610	£590	✓
Rear side airbags	✓	✕	£310	£220
Electric tilt/slide sunroof	✓	£995	£1,200	£780
Premium hi-fi system	✓	£640	£1,660	£845
Rear lip spoiler	✓	✕	✕	£135
Specification adjusted price	£38,000	£39,289	£49,650	£43,485
Absolute specification adjustment	-	£1,289	£11,650	£5,485
Price position vs Lexus GS300 SE-L	-	3.4%	30.7%	14.4%
Taxable P11D rate 2005/6	33%	35%	34%	35%
Specification adjusted monthly tax charge	£418.00	£458.37	£562.70	£507.33
Monthly tax burden variance vs GS300 SE-L	-	£40.37	£144.70	£89.33

LEXUS GS430 COMPETITOR COMPARISON
correct at March 2005. ✓ = standard; * = not available

Figures

	LEXUS GS430	JAGUAR S-TYPE 4.2 V8 SE	MERCEDES E500 ELEGANCE	BMW 545i SE
On-the-road price	£46,755	£37,495	£44,510	£42,350
Automatic transmission	✓	✓	✓	£1,350
Adaptive Front-lighting	✓	*	£310	£270
8" touch screen display	✓	✓	No touch control	No touch control
Alloy wheels	18"	£500	£1,810	£945
Bluetooth® connectivity	✓	£350	*	£385
6-disc CD autochanger	✓	£355	£350	£280
Soft-close bootlid mechanism	✓	*	*	*
Electrically adjustable steering wheel	✓	✓	£200	£300
High Intensity Discharge headlamps	✓	£700	£560	£650
Rain-sensing wipers	✓	£125	✓	✓
Smart key system	✓	*	£860	✓
Tyre pressure warning system	✓	*	£470	✓
Wood trim inserts	✓	£150	✓	£320
DVD satellite navigation	✓	£2,000	£1,950	£1,665
Electric rear sunshade	✓	£230	£365	£205
Electric front seats	✓	✓	£650	£745
Heated front seats	✓	£330	✓	✓
Ventilated front seats	✓	*	£800	£775
Seats/mirrors/wheel memory function	✓	✓	£650	✓
Leather upholstery	✓	✓	£1,250	✓
Park assist monitor	✓	*	*	*
Front and rear parking sensors	✓	£610	£590	✓
Rear side airbags	✓	*	£310	£220
Electric tilt/slide sunroof	✓	£995	£1,200	£780
Premium hi-fi system	✓	£640	£1,660	£845
Rear lip spoiler	✓	*	*	£135
Adaptive cruise control	✓	£1,300	£1,280	£1,180
Pre-Crash Safety system	✓	*	*	*
Variable Gear Ratio Steering	✓	*	*	£810
Electronically controlled braking	✓	*	*	*
Adaptive Variable Suspension	✓	*	*	*
Vehicle Dynamics Integrated Management	✓	*	*	£1,550
Wood steering wheel and gearshift finish	✓	£320	£400	*
Specification adjusted price	£46,755	£46,100	£60,175	£55,460
Absolute specification adjustment vs Lexus	-	-£650	£13,425	£8,710
Price position vs Lexus	-	-1.4%	28.7%	18.6%
Taxable P11D rate	35%	35%	35%	35%
Adjusted monthly tax charge 2005/6	£545.48	£537.83	£702.04	£647.03
Monthly tax burden vs Lexus		-£7.58	£156.63	£101.62

Low cost of ownership – built-in

It is a characteristic of all new Lexus models that they not only represent excellent value to buy, but that they are also economic to run. That is both in terms of routine maintenance and the likely costs incurred should repairs need to be made for typical low-speed accidents.

The new Lexus GS is true to these principles and has been designed to require less time in the service centre with more maintenance-free items and extended maintenance periods on some of the key components.

For example, the timing chain and valve clearances on the new 3.0-litre V6 engine need no maintenance. The same goes for the GS's fuel filters and the transmission oil, which do not have to be replaced on either engine. The life span of the air filter has been increased from 30,000 to 40,000 miles and the engine coolant should only need replacing after 100,000 miles, compared to 30,000 on the previous generation model. Further savings in time and money are provided by spark plugs that perform for 60,000 miles and the fact the GS runs perfectly on mineral grade oil, rather than the more expensive synthetic type.

Durability is another important factor and components such as tyres and brakes have been selected to match performance with excellent lasting power.

Servicing schedule that saves time and money

The new GS is protected by a three-year/60,000-mile manufacturer warranty with a scheduled 'health and safety' inspection every one year or 10,000 miles with oil and filter check, followed by full servicing every two years or 20,000 miles.

There is a big impact on standard labour time over the three-year/60,000-mile period: on the GS300 the cumulative time has been reduced from 9.7 hours to 4.9 hours, and on the GS430 from 9.1 hours to 6.2 hours, compared to the previous generation models.

Keen parts pricing

The cost of standard maintenance parts has been kept low: taking the combined recommended retail price of a basket of items including oil and air filters, front and rear brake pads and a set of spark plugs, the total cost for the new Lexus GS300 is cheaper than its key rivals. For example, the same items for the Audi A6 3.2 FSI costs 24.7 per cent more: £254.68 compared to £191.68 for the Lexus.

It is a similar case with the GS430, where, for example the same parts package for the Mercedes-Benz E320 Avantgarde works out 42.2 per cent more – almost £300 compared to just over £173 for the Lexus.

Parts Basket	GS300	Audi A6 3.2 FSi Auto 4dr	BMW 530i SE Auto 4dr	Jaguar S-Type 3.0 SE Auto 4dr	Mercedes- Benz E320 Avantgarde Auto 4dr
	RRP £	RRP £	RRP £	RRP £	RRP £
Maintenance Parts					
Oil Filter	7.62	£ 9.82	£ 6.60	£ 5.00	£ 9.04
Air Filter	16.37	£ 12.28	£ 11.32	£ 12.00	£ 15.50
Front Brake Pads	52.22	£ 123.34	£ 76.60	£ 70.00	£ 62.58
Rear Brake Pads / Shoes	30.91	£ 51.40	£ 59.58	£ 70.00	£ 38.82
Spark Plug (each)	14.31	£ 9.64	£ 6.46	£ 11.84	£ 12.79

Spark Plug (set)	85.86	£ 57.84	£ 38.76	£ 71.04	£ 76.74
Total Maintenance	£ 191.68	£ 254.68	£ 192.86	£ 228.04	£ 202.68
% Difference vs		+ 24.7%	+ 0.6%	+ 15.9%	+ 5.4%

Parts Basket	GS430	Audi A6 4.2 V8 Quattro SE	BMW 545i SE Auto 4dr	Jaguar S-Type 4.2 V8 SE Auto	Mercedes-Benz E500 Avantgarde 4dr
	RRP £	RRP £	RRP £	RRP £	RRP £
Maintenance Parts					
Oil Filter	9.72	£ 10.23	£ 5.96	£ 10.11	£ 10.33
Air Filter	20.21	£ 12.10	£ 11.32	£ 12.00	£ 17.46
Front Brake Pads	52.22	£ 54.52	£ 64.68	£ 70.00	£ 164.00
Rear Brake Pads / Shoes	30.32	£ 49.59	£ 64.68	£ 70.00	£ 50.00
Spark Plug (each)	9.07	£ 9.45	£ 6.46	£ 11.84	£ 7.25
Spark Plug (set)	72.56	£ 75.60	£ 51.68	£ 94.72	£ 58.00
Total Maintenance	£ 173.26	£ 202.04	£ 198.32	£ 256.83	£ 299.79
% Difference vs		+ 14.2%	+ 12.6%	+ 32.5%	+ 42.2%

Accident repairs

In designing the new GS, Lexus engineers took measures to help guard against unnecessarily costly repairs in the event of a common low-speed impact.

For example, the front line of the bonnet has been moved further back to help avoid damage, while inside the engine bay, the air conditioning condenser and the radiator have been integrated and moved rearwards. Repair brackets for the headlights have been made available as a service part to make replacement easier and quicker and bolt-on construction methods have been used for front-end components, again making replacement more time and cost-efficient.

In terms of repair parts prices, the new Lexus GS again performs strongly compared to its competitor models. A basket of typical front crash replacement items has a combined recommended retail price of £1,443 on the GS300. Owners of the BMW 530i SE, Jaguar S-Type 3.0 SE and Mercedes-Benz E320 Avantgarde face a bill up to 37.6 per cent higher. The situation is repeated where rear-collision parts are concerned, too, with rivals working out up to 31.2 per cent more costly. Similar cost benefits are enjoyed by GS430 owners as well.

Parts Basket	GS300	Audi A6 3.2 FSi Auto 4dr	BMW 530i SE Auto 4dr	Jaguar S-Type 3.0 SE Auto 4dr	Mercedes-Benz E320 Avantgarde Auto 4dr
	RRP £	RRP £	RRP £	RRP £	RRP £
Front Crash Parts					
Bonnet	292.00	£ 399.88	£ 548.94	£ 316.73	£ 472.92
Radiator Grille	91.81	£ 58.78	£ 46.81	£ 100.07	£ 113.99
Front Bumper Cover	138.01	£ 172.22	£ 314.90	£ 271.89	£ 359.16
Front Wing (RH)	113.92	£ 118.72	£ 164.20	£ 166.85	£ 160.00
Headlamp (excl. bulb) (RH)	223.37	£ 189.21	£ 244.26	£ 193.28	£ 406.74
Front Indicator (RH)		n/a	n/a	£ 9.76	n/a
Radiator	207.29	£ 139.94	£ 154.90	£ 146.63	£ 475.05
A/C Condenser	205.06	£ 206.49	£ 211.07	£ 305.25	£ 213.20
Front Panel	171.55	£ 116.14	£ 23.49	n/a	£ 113.10
Total Front	£ 1,443.01	£ 1,401.38	£ 1,708.57	£ 1,510.46	£ 2,314.16
% Difference vs		(3.0%)	+ 15.5%	+ 4.5%	+ 37.6%

Rear Crash Parts					
Rear Bumper Cover	172.00	£ 185.15	£ 300.43	£ 299.77	£ 246.66
Bootlid	184.33	£ 339.57	£ 316.60	£ 293.31	£ 281.44
Rear Quarter Panel (LH)	251.00	£ 260.47	£ 258.73	£ 615.82	£ 259.23
Rear Combi Light (excl. bulb) (LH)	89.62	£ 83.89	£ 99.58	£ 133.64	£ 91.82
Rear Panel	141.68	£ 71.05	£ 141.28	£ 159.87	£ 121.79
Total Rear	£ 838.63	£ 940.13	£ 1,116.62	£ 1,502.41	£ 1,000.94
% Difference vs		+ 10.8%	+ 24.9%	+ 44.2%	+ 16.2%
Body Total	£ 2,281.64	£ 2,341.51	£ 2,825.19	£ 3,012.87	£ 3,315.10
% Difference vs		+ 2.6%	+ 19.2%	+ 24.3%	+ 31.2%

9 LEXUS GS TECHNICAL SPECIFICATIONS

ENGINE	GS300	GS430
Engine code	3GR-FSE	3UZ-FE
Type	V6	V8
Valve mechanism	24-valve DOHC with Dual VVT-i	32-valve DOHC with VVT-i
Bore x stroke (mm)	87.5 x 83.0	91 x 82.5
Displacement (cc)	2,995	4,293
Compression ratio (:1)	11.5	10.5
Fuel system	EFI D-4	EFI
Fuel type	95 Octane or higher	
Max. power (bhp @ rpm)	245 @ 6,200	279 @ 5,600
Max. torque (Nm @ rpm)	310 @ 3,500	417 @ 3,500
PERFORMANCE		
0-62mph (sec)	7.2	6.1
Maximum speed (mph)	148	155
FUEL ECONOMY/EMISSIONS		
Urban (mpg)	19.6	17.3
Extra urban (mpg)	39.2	32.8
Combined (mpg)	28.8	24.8
CO ₂ emissions (g/km)	232	269
VED band	F	F
DIMENSIONS		
Overall length (mm)	4,825	
Overall width (mm)	1,820	
Overall height (mm)	1,430	
Wheelbase (mm)	2,850	
Track – front (mm)	1,535	
Track – rear (mm)	1,540	
Overhang – front (mm)	855	
Overhang – rear (mm)	1,120	
Fuel tank capacity (l)	71	
Luggage compartment capacity (l)	430	
WEIGHTS		
Kerb weight (kg)	1,620	1,695
Gross vehicle weight (kg)	2,125	2,160

TRANSMISSION			
Code		A690E	A761E
Type		Six-speed automatic	Six-speed automatic
Gear ratios	1 st	3.538	3.296
	2 nd	2.060	1.958
	3 rd	1.404	1.348
	4 th	1.000	1.000
	5 th	0.713	0.725
	6 th	0.582	0.582
	Reverse	3.168	2.951
Differential gear ratio		3.727	3.615
SUSPENSION			
Front		Double wishbone	
Rear		Multilink	
BRAKES			
Front		432mm Ventilated discs	
Rear		310mm Ventilated discs	
STEERING			
Steering gear type		Rack and pinion	
Ratio (GS430 with VGRS)		14.6	12.4-17.2
Turns lock-to-lock		3.2	2.7-3.2
Minimum turning radius – tyre (m)		5.2	
WHEELS AND TYRES			
Wheels		17x7 JJ 18x8 JJ (SE-L)	18x8 JJ
Tyres		225/50R17 245/40R18 (SE-L)	245/40R18

10 LEXUS GS EQUIPMENT

SAFETY	GS300	GS300 SE	GS300 SE-L	GS430
Driver and front passenger airbags	✓	✓	✓	✓
Driver and front passenger side airbags	✓	✓	✓	✓
Driver and front passenger knee airbags	✓	✓	✓	✓
Rear passenger side airbags	✗	✓	✓	✓
Front and rear curtain shield airbags	✓	✓	✓	✓
Passenger airbag detection function	✓	✓	✓	✓
ABS with Electronic Brakeforce Distribution and Brake Assist	✓	✓	✓	✓
Electronically Controlled Braking	✓	✓	✓	✓

Vehicle Stability Control	✓	✓	✓	✘
Traction Control	✓	✓	✓	✓
Vehicle Dynamics Integrated Management (VDIM)	✘	✘	✘	✓
Tyre Pressure Warning system	✓	✓	✓	✓
Front seatbelt pretensioners with force limiters	✓	✓	✓	✓
Outside rear seatbelt pretensioners with force limiters	✓	✓	✓	✓
Seat integrated front seatbelt anchorage and support	✓	✓	✓	✓
Seatbelt warning system	✓	✓	✓	✓
Rain-sensitive windscreen wipers	✓	✓	✓	✓
Photochromic anti-glare rear view mirror	✓	✓	✓	✓
INSTRUMENTS & CONTROLS				
8-inch LCD touch-screen display	✓	✓	✓	✓
Lexus DVD-based navigation system with voice recognition and ETA	✘	✓	✓	✓
Rear view monitor	✘	✓	✓	✓
Bluetooth® connectivity	✓	✓	✓	✓
Electric headlamp levelling	✓	✓	✓	✓
AUDIO				
10-speaker audio system	✓	✓	✘	✘
Mark Levinson® 14-speaker system	✘	✘	✓	✓
In-dash six-disc CD autochanger	✓	✓	✓	✓
COMFORT & CONVENIENCE				
Smart key entry system	✓	✓	✓	✓
Push-button start	✓	✓	✓	✓
Speed-sensitive Electric Power Steering	✓	✓	✓	✓
Cruise control	✓	✓	✓	✓
Adaptive Cruise Control and Pre-Crash Safety system	✘	✘	Opt	✓
Electrically tilt and telescopic-adjustable steering wheel	✓	✓	✓	✓
LED entry and footwell lighting	✓	✓	✓	✓
Leather-trimmed multi-function steering wheel	✓	✓	✓	✘
Wood and leather- trimmed	✘	✘	✘	✓

multi-function steering wheel				
Electric, heated and folding door mirrors	✓	✓	✓	✓
One-touch electric front and rear windows	✓	✓	✓	✓
Memory function for front seats and door mirrors	✗	✓	✓	✓
Electric headlamp washers	✓	✓	✓	✓
Electric rear sunshade	✗	✓	✓	✓
Soft-close bootlid	✓	✓	✓	✓
VENTILATION				
Automatic climate control with clean air filter	✓	✓	✓	✓
Electric tilt/slide glass sunroof	✗	Opt	✓	✓
SEATING UPHOLSTERY & TRIM				
Eight-way electrically adjustable front seats	✓	✗	✗	✗
Eight-way electrically adjustable front seats with lumbar support	✗	✓	✓	✓
Heated and ventilated front seats	✗	✓	✓	✓
Fabric seat trim	✓	✗	✗	✗
Leather seat trim	✗	✓	✓	✓
Wood trim detailing	✓	✓	✓	✓
BODY EXTERIOR				
High Intensity Discharge headlamps	✓	✓	✓	✓
Adaptive Front-lighting System (AFS)	✓	✓	✓	✓
LED tail lights and rear brake lights	✓	✓	✓	✓
Front and rear fog lamps	✓	✓	✓	✓
Rear lip spoiler	✗	✗	✓	✓
17-inch 10-spoke alloy wheels	✓	✓	✗	✗
18-inch five-spoke alloy wheels	✗	✗	✓	✓

The mpg figures quoted in this document are sourced from official EU-regulated test results. These are provided for comparison purposes and may not reflect an individual's actual driving experience.