Lexus GS Sedans Offer Sporty Elegance in RWD and AWD Models

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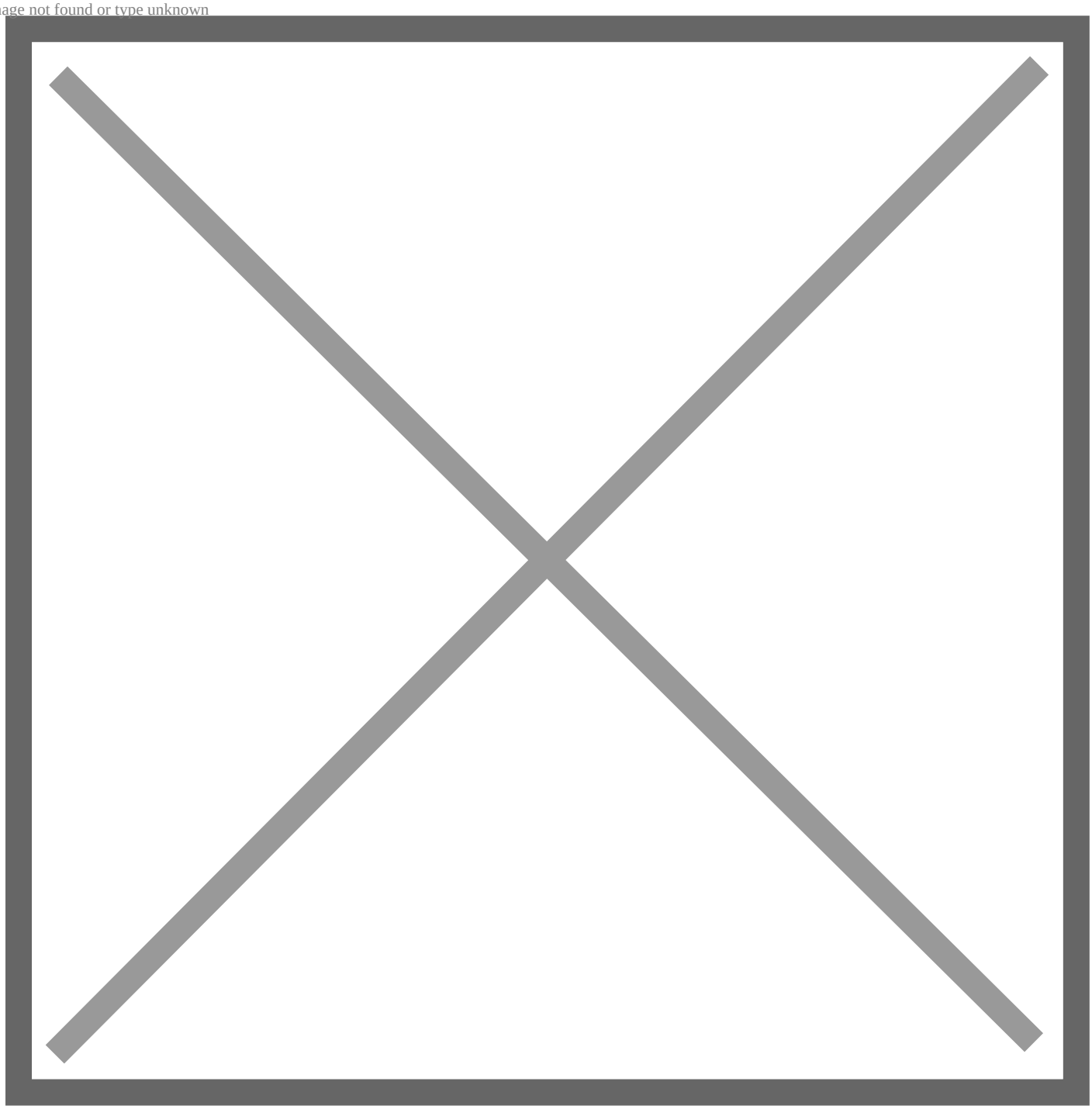

2011 Lexus GS 460 001

• Available with V6 or V8 Performance
• 10-Way Power Front Seats Contoured for Comfort
• Standard New Smart Stop Technology

Quick and smooth acceleration combined with the luxurious amenities bestowed upon the Lexus GS 350 and GS 460 make the mid-size luxury sport sedans synonymous with refinement. After receiving several technology enhancements in 2010, the GS 350 and GS 460 receive standard Smart Stop Technology for 2011 as an additional measure of consumer confidence. The braking system enhancement will automatically reduce engine power when the brake pedal and the accelerator pedal are applied simultaneously under certain driving conditions.

Engine/Transmission/Drivetrain/Performance
The GS gas luxury sport sedan comes in three models – GS 350 rear-wheel drive (RWD), GS 350 all-wheel drive (AWD) and GS 460 RWD. Optimized for low internal friction, the GS 350's 3.5-liter V6 engine produces 303 horsepower at 6,200 rpm and 274 lb.-ft. of peak torque at 3,600 rpm. A direct fuel-injection system provides much finer fuel-mixture control to improve both power and fuel efficiency. Dual Variable Valve Timing with intelligence (VVT-i) acts on both intake and exhaust valves to further enhance performance through a wide rpm range. A smooth-shifting six-speed transmission allows sequential shifting when desired.

The GS 460's V8 produces 342 horsepower at 6,400 rpm and 339 lb.-ft. of peak torque at 4,100 rpm. The GS 460, like the GS 350, meets the EPA's Ultra Low Emission Vehicle (ULEV-II) certification. Lexus has been setting standards for powertrain smoothness since its inception, and the GS 460's V8 and eight-speed automatic transmission continue that tradition. The transmission, like the six-speed automatic in the GS 350 models, allows manual shifting for a more engaging driving experience, and helps to maximize performance in certain driving situations. The GS 460 can accelerate from zero to 60 mph in 5.4 seconds, the GS 350 in 5.7 (5.8 for AWD).

Chassis/Body/Suspension/Tires/Brakes
The Lexus GS combines proven chassis systems with advanced dynamic handling technology to provide both agile handling and the Lexus trademark smooth ride. The double-wishbone front suspension and multilink rear suspension virtually eliminate unwanted wheel-angle changes during suspension movement. The result is a natural, confident feel that's also spirited. A 34.1-ft. turning circle (35.4 ft. for GS 350 AWD) is comparable to that of smaller cars and helps make the GS highly maneuverable.

In all GS models, Brake Assist (BA), Electronic Brake-force Distribution (EBD) and the Anti-lock Braking System (ABS) help form a powerful safety front. EBD optimizes brake pressure at each wheel to help reduce body dive or sway during hard braking and cornering. BA is designed to determine if the driver is attempting emergency braking, and, if the driver has not stepped firmly enough on the brake pedal to activate the ABS, it will apply increased braking force until pedal pressure is released.

Aluminum-alloy 18-inch wheels are standard on the GS 460 and available for the GS 350 RWD, which features standard 17-inch wheels. For maximum handling capability, the GS 350 comes standard with 225/50R17 W-rated summer tires. The all-season 17-inch run-flat tires that are standard on the GS 350 AWD model are available on the GS 350 RWD. The GS 460 is equipped with 245/40R18 Z-rated summer tires or available all-season run-flats.

The GS 350's available all-wheel-drive system helps to enhance handling in diverse driving conditions. A planetary-gear center differential and a wet-type multi-disc clutch control front-to-rear power distribution. The

system normally sends 70 percent of available power to the rear wheels to provide the traditional performance advantages of a rear-drive car and will vary the torque-split ratio from 30:70 to 50:50 in response to driving conditions and driver input. The AWD system's electronic-control strategy takes inputs such as steering and throttle angle from driver activity combined with vehicle signals from wheel speed and yaw rate sensors.

An Adaptive Variable Suspension (AVS) system, standard on the GS 460 and available on the GS 350, provides two settings, Normal and "Sport" for tighter, more precise control. AVS can automatically select appropriate suspension damping for driving conditions. The GS 460 also offers the advanced Active Power Stabilizer system that helps reduce body sway and enhances vehicle control during cornering. An Electronic Control Unit (ECU) calculates the force needed to counter excess body sway, which is then applied to the stabilizer bars by the front and rear actuators. The GS 350 models are equipped with Vehicle Stability Control (VSC) with traction control. The system can be disengaged with the "TRAC Off" switch when the situation warrants doing so.

In the GS 460, the Lexus Vehicle Dynamics Integrated Management (VDIM) system integrates and manages a host of handling technologies, including VSC. Combining input from a variety of sensors, VDIM is designed to anticipate the onset of a vehicle skid or slide and then help correct the situation with a combination of braking, throttle, and steering control. VDIM integration helps to provide precise management for the Electronically Controlled Brakes (ECB), Variable Gear Ratio Steering (VGRS), Electric Power Steering (EPS), VSC, ABS, BA, EBD, and engine torque via the electronically controlled throttle.

EPS in the GS 460 provides precise electric power assist using a DC motor built into the steering gear housing. Also in the GS 460, VGRS can vary the steering from 2.7 turns lock-to-lock for low-speed maneuverability to a slower 3.2 turns lock-to-lock for highway-speed control. VGRS also provides differential steering control, which helps correct for a delay in steering response, something that occurs in all vehicles, to help enhance driving feel during lane changes and other transitional maneuvers.

The GS 460's ECB is a brake-by-wire system. ECB translates brake pedal pressure into electric signals that, via computer control, help provide precise and optimized braking. Electronic control provides quick brake response when needed, helping the GS 460's VDIM system to anticipate and help correct skids before they occur. The ECB system is backed by conventional hydraulic brake control in the unlikely event of electronic failure.

Safety/Security Features

The Adaptive Front-lighting System (AFS), standard on the GS 460 and optional for the GS 350, helps illuminate a curve as the driver steers into it. A tire pressure monitor system can detect a critical loss in pressure in one or more tires and alert the driver. The available Intuitive Park Assist (IPA) system uses ultrasonic sensors to detect objects close to the car's front and rear bumpers and alerts the driver accordingly. A steering-input sensor helps to better judge changes in distance to objects.

The Supplemental Restraint System (SRS) in the GS sedans includes variable-force front airbags for both the driver and front passenger. The GS features standard seat-mounted side airbags for the front seats, knee airbags for the driver and front passenger, and front and rear side-curtain airbags. In addition, the GS has active front headrests to help enhance driver and front passenger safety.

The rear back-up camera, included with the optional navigation system, automatically projects an image of what its lens can detect behind the vehicle onto the navigation screen when the vehicle is in reverse gear.

The optional Pre-Collision System (PCS) in the GS models can help mitigate the effects of an accident. A millimeter-wave radar sensor helps detect obstacles in front of the car, while vehicle speed, steering angle and yaw-rate inputs help to determine whether a collision is unavoidable. On models equipped with AVS, PCS switches the suspension setting to sport mode to help provide appropriate chassis response, preemptively retracts

front seat belts, and pre-initializes BA so that increased braking will be applied the instant the driver depresses the pedal.

Luxury/Comfort/Convenience
The standard Regency leather-trimmed, heated, 10-way power front seats (perforated leather trim on GS 460) are comfortably contoured for support on long trips. Ventilated front seats are standard for the GS 460 and available for the GS 350. A power-tilt and telescopic steering wheel helps ensure a comfortable driving position. The standard dual-zone climate-control system filters the air. An optional rear power sunshade may add to passenger comfort on warm days.

All four windows offer one-touch up-and-down operation designed to stop closing during auto-close operation if they sense an object blocking their path. Both electrochromic auto-dimming side mirrors are power-retractable and feature automatic tilt-down to aid in parking when reverse gear is selected. A power trunk closer provides an added convenience on this extremely well-equipped car. The SmartAccess keyless entry and push-to-start ignition allow the driver to keep the access fob in a pocket or purse.

The standard Lexus Premium Audio System features a six-disc, in-dash CD changer, iPod/USB connectivity, Bluetooth® hands free phone and music streaming, and integrated XM Radio receiver (complimentary 90-day trial subscription). The system plays through 10 premium speakers while an Automatic Sound Levelizer (ASL) maintains consistent sound levels at varying vehicle speeds. When connected to the USB port, the iPod can be controlled through the audio system or steering wheel controls, while information such as names for the artist, track and album is displayed.

Luxury Options
Within the ultra-quiet Lexus GS interior, all styles of music come to life with the optional Mark Levinson® Premium Sound system. Featuring 11 channels of amplification with a total of 330 watts playing through 14 speakers, the system allows users to play both CDs and DVDs. DVD movies can be viewed on the color seven-inch touch screen when the parking brake is engaged.

The available Hard Disc Drive (HDD) Lexus Navigation System eliminates the need for DVD map discs and offers enhanced Bluetooth® with phonebook download and Voice command, a casual-language—based voice recognition feature. This technology allows the driver to give more flexible, conversational commands for easier access to audio, climate, and navigation system functions. Voice command helps users avoid having to speak commands in a specific order?making tasks easier to accomplish, in fewer steps, and helping to allow drivers to focus more on the road ahead.

The Lexus GS also offers a telematics system, Lexus Enform® with Safety Connect®, available by subscription. Complimentary one-year trial subscriptions are included on all purchases of new Lexus vehicles equipped with these features. Safety Connect is standard on all vehicles, while Lexus Enform with Safety Connect is on vehicles equipped with the optional Navigation system. The Lexus Enform and the Safety Connect response centers operate 24 hours a day, 7 days a week—every day of the year.

Lexus Enform vehicles are factory ready for subscriptions to a variety of innovative XM services including XM NavTraffic®, XM NavWeather™ and XM Sports and Stocks services. XM services require separate XM subscriptions. The XM Sports and Stocks service is included with an XM radio subscription. All XM services offer complimentary 90-day trial subscriptions.

Exterior Design
The current generation GS sedans introduced the brand's L-finesse design language. A 112.2-inch wheelbase, long hood, pulled-back cabin and short rear deck create a confident, powerful stance for the GS. A sloped,

vertical grille surrounded by four independent headlamps visually connects the current GS sedans with the previous-generation models while signaling the brand's design progression. The lower valance features integrated fog lamps, and a low 0.27 coefficient of drag (Cd) helps to minimize wind noise and maximize highway fuel efficiency.

Interior Design
Ultra-premium wood, polished-metal accents and leather trim endow the GS interior with a lavish yet high-precision feel. Touch points convey quality and controls that respond fluidly. The customer can choose from among three interior leather color combinations: Light Gray leather with Dark Gray Bird's-eye maple wood trim, Parchment leather with Golden Bird's-eye Maple wood trim, or Black leather with Red Walnut wood trim. Each combination includes a matching wood and leather-trim steering wheel and shift knob that is standard on GS 460 and optional on GS 350.

Lexus designers strive to keep controls simple and intuitive, avoiding needless complexity. Audio and climate-control systems are easy to understand and operate. The unique instrument panel lighting system relies on variable-transparency glass to minimize reflections from the gauge faces and to help optimize visibility in various lighting conditions.

F Sport Performance Accessories Available for GS
The available F Sport Performance Accessories for GS 350 and GS 460 include performance enhancing parts such as 19-inch forged alloy wheels, special brake features, suspension systems, air intake, exhaust systems and more. F Sport Performance Accessories by Lexus U.S.A. are engineered by Toyota Racing Development (TRD). When installed by an authorized dealer, the accessories are fully warranted for 12 months or for the balance of the new car warranty, whichever is greater.

Warranty
All new Lexus vehicles come with a 48-month/50,000-mile basic limited warranty with roadside assistance for 48-months/unlimited miles. Powertrain and restraint system coverage is provided for 72 months/70,000 miles. Corrosion perforation protection is covered for 72 months, regardless of mileage.

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