

2015 Lexus GS 450h Revs Up Hybrid Driving Performance with New F SPORT Package

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Some Lexus drivers like their hybrids sporty, and the 2015 GS 450h delivers. Already a potent performer capable of zero to 60 mph in just 5.6 seconds, the GS 450h for 2015 grips the road more tenaciously and coddles passengers more luxuriously with the new F SPORT package for 2015.

With its Lexus Hybrid Drive system delivering 338 total system horsepower, scintillating performance is a given. In the GS 450h, electric motor assisted system torque at all speeds means the feeling of performance transcends even the power rating.

Remarkably, the GS 450h sips fuel like a compact, with EPA estimated 29 mpg city, 34 mpg highway and 31 mpg combined fuel economy ratings. Lexus was the first luxury brand to introduce a hybrid model more than a decade ago. With the upcoming NX 300h compact crossover, Lexus now offers six hybrids, the most of any luxury brand.

Lexus has also greatly expanded available connectivity with the new Lexus Enform Remote (subscription required), the latest addition to the Lexus Enform family of connected services. It allows the owner to remotely view and control certain vehicle features using a mobile app for iOS and Android devices. Key features include remote door lock/unlock; remote stop/start for the engine and climate control; vehicle finder, guest driver monitor and more. The Lexus Enform App Suite, meanwhile, upgrades to iHeartRadio™ 4.0 and adds Slacker for more music-listening choices.

New for 2015, the GS 450h moves to the forefront of multimedia with system featuring a 12.3-inch display screen.

F SPORT: Curvy Roads Wanted

The Lexus GS 450h makes 18-inch split five-spoke alloy wheels standard for 2015. The new-for-2015 F SPORT package replaces those with 19-inch staggered-width alloys (wider wheels in rear). But that's just one part of the comprehensive performance and luxury upgrade. An F SPORT tuned version of the standard Adaptive Variable Suspension (AVS) with Sport S+ mode lets the driver sharpen agility by using the Lexus Drive Mode selector. The F SPORT also includes the four-wheel steering control of the Lexus Dynamic Handling System (Variable Gear Ratio Steering plus Dynamic Rear Steering). Appropriate for the car's sporty mission, larger front brakes with hi-friction pads add extra assurance during performance driving.

You'll recognize the GS 450h F SPORT by its unique front bumper and rear lower valence, mesh front grille inserts and rear lip spoiler. Inside, the luxury of perforated leather trim and a 16-way power sport driver seat is accented by striated aluminum trim, aluminum pedals and door scuff plates and a black headliner.

The Genius of Lexus Hybrid Drive

Along with stunning V8-like performance and stellar fuel economy comes uncanny smoothness from the Lexus Hybrid Drive system. The hybrid powertrain combines the output of an Atkinson cycle 3.5-liter V6 engine with a water-cooled permanent magnet electric motor through a planetary-type continuously variable transmission. Independently or in parallel as needed, the gas engine and electric motor drive the rear wheels. The nickel-metal hydride battery pack uses a stacked design to optimize trunk space.

Tuning the GS 450h's ride and response is as easy as turning a dial with the Lexus Drive Mode selector featuring five modes. Normal mode offers a balance of efficiency and performance response that's ideal for everyday usage and yields the smoothest driving experience. ECO mode prioritizes energy conservation through settings to throttle mapping, seat heating and climate control systems. When driving in ECO mode, instrument meter lighting changes to blue. The EV mode allows the vehicle to be driven short distances, under certain conditions, using only the electric motor.

SPORT mode transforms the car's personality, with the powertrain control unit (PCU) boosting electric motor drive voltage to a maximum 650V versus a maximum of 500V in ECO mode under normal driving conditions. Sport mode also sharpens throttle response and mimics the stepped shifting of an eight-speed automatic transmission. Appropriately, instrument meter lighting changes to red when driving in SPORT S mode.

Selecting SPORT S+ mode also engages a sport setting for the Adaptive Variable Suspension (AVS), electric power steering system and Vehicle Dynamic Integrated Management (VDIM). The sporting edge does not sacrifice renowned Lexus smoothness and comfort.

The Hybrid With Elegant Subtlety

Even with its sweeping, coupe-like profile, the Lexus GS 450h provides ample headroom for rear-seat passengers. The GS 450h conveys its hybrid identity with elegant subtlety. In front, an available three-lamp design combines high and low beam LED lamps and turn signals in a single horizontal row. At the rear, the GS 450h shares the gas model's L-shaped LED tail lamps and stabilizing fins in the bumper's lower section but conceals the tailpipes. Understated blue hybrid badging completes this high-tech, high-efficiency model's distinguishing features.

Lexus Luxury, Of Course

After high performance and high efficiency, sumptuous luxury makes it a trifecta for the GS 450h. Soft perforated leather trims the seats, which are 10-way power-adjustable for the driver and front passenger. The GS 450h features matte bamboo trim and comes standard with heated and ventilated front seats, a heated steering wheel, power rear sunshade and a high-intensity interior heater. Deeply scalloped rear seats provide excellent support and generous legroom.

"Climate control" gets new meaning in the GS 450h. A first-in-class technology, the energy-saving S-Flow automatic climate control system detects if there is a front passenger and directs airflow only to the occupied front seat or seats. The Climate Concierge, meanwhile, enables personalized climate settings. The system automatically monitors the temperature of three separate climate zones and adjusts not only the fans, but also the temperature of the seats and steering wheel according to preset preferences. Each zone will achieve its pre-set level of comfort as quickly as possible.

A unique touch in all GS models, and certainly a reflection of Lexus luxury values, the analog clock is carved from a single ingot of aluminum for a smooth consistent look and uses LED indicators.

Touch. Speak. Connect.

The Lexus GS 450h's new multimedia system provides a multitude of capabilities and also offers the Navigation upgrade. The Remote Touch controller with one-push confirmation is standard and enables smooth, intuitive control of climate, audio, phone, optional navigation and more. A standard rear back-up camera adds security and convenience.

The new standard Display Audio includes HD Radio™, Bluetooth® audio, automatic phone book transfer, a vehicle information display and complimentary traffic and weather data provided via HD Radio. If a favorite song comes on the radio while you're busy with something else, like waiting at a bank drive-through, use the cache radio feature to pause it for up to 20-minutes and then listen later.

In addition, the Navigation system can help guide you to your destination more efficiently with up to date and predictive traffic information, including detour preview, ETA calculation and low-fuel coordination with

available fuel stations. Navigation also includes the Lexus Enform App Suite and features 3D and bird's eye map views, plus 3D building views.

Siri[®] Eyes Free Mode, which the GS 450h gained for 2014, is compatible with the iPhone[®] 4S and iPhone 5 models forward and puts select Apple's Siri technology at your service. Siri lets you call contacts, select and play music from iTunes[®], get turn-by-turn navigation through Siri and Apple maps, and much more.

Lexus Enform Help Keeps You Connected

Your smartphone gets a whole lot more capable when you step into the Lexus GS 450h. The available Lexus Enform Destination Services (Destination Assist, eDestination) and subscription-free App Suite come with the available Navigation System. Voice-enabled apps let you search the Internet through Bing[™], make restaurant reservations using OpenTable[®], get movie tickets via MovieTickets.com[™], listen to Internet radio, (including Pandora[®], iHeartRadio[™] and Slacker), search business reviews on Yelp[®] and check in on Facebook Places[™].

Lexus Enform Safety Connect, Lexus Enform Remote, and Lexus Enform Destination Services come with one-year trial subscriptions. Lexus Enform Safety Connect is standard on all vehicles, while Lexus Enform Destination Services is on all vehicles equipped with the optional Navigation system. The Lexus Enform response centers operate 24 hours a day, every day.

What's New for 2015

- New F SPORT package
- New multimedia system
- Lexus Enform App Suite upgraded
- Lexus Enform Remote
- 18-inch wheels standard

Vehicle Details

Engine/Transmission/Drivetrain/Performance

- Certified as a Super-Ultra Low Emissions Vehicle (SULEV), which has lower emissions than clean diesels.
- The system's regenerative braking operation range has been expanded, contributing to further fuel efficiency improvements over the previous generation.
- Low fuel consumption is achieved through a high compression ratio of 13:1, a mid-port intake tumble generator and the use of D-4S fuel injection technology. With one injector installed in the combustion chamber and a second mounted in the intake port, D-4S combines the strengths of both direct and port injection for maximum efficiency and lowest emissions.
- The PCU boosts motor drive voltage to a maximum 650V in Sport mode and limits it to a maximum of 500V in ECO mode under normal driving conditions.

Chassis/Body/Suspension/Tires/Brakes

- Front and rear aluminum control arms reduce unsprung weight and help endow the GS 450h with enhanced agility, sway damping, ride comfort, body control and steering precision.
- Ventilated disc brakes feature four-piston aluminum front calipers.
- Electronically Controlled Braking system characteristics modified to provide greater responsiveness.
- Standard 18-inch alloy wheels.

- Standard Vehicle Dynamics Integrated Management (VDIM) anticipates loss of vehicle control and governs all of the vehicle's dynamic handling systems – the Anti-lock Braking System, Brake Assist (BA), Vehicle Stability Control (VSC) and Traction Control (TRAC) — with the electronic throttle control system. VDIM employs these systems collectively and seamlessly to help make corrections while allowing higher dynamic capability. The system also provides a limited slip differential effect.
- The F SPORT package includes the Lexus Dynamic Handling (LDH) system with Dynamic Rear Steering (DRS), which integrates DRS, Electric Power Steering and Variable Gear Ratio Steering (VGRS). Monitoring vehicle speed, steering direction and driver inputs, the system calculates the optimum angles for all four wheels. Using VGRS in the front and DRS in the rear, the system can independently manage front and rear wheel steering angles to help enhance turn-in response, rear grip, vehicle control and overall agility when cornering.

Safety/Security Features

- The GS 450h comes standard with 10 airbags, including a knee airbag for both driver and front passenger, seat-mounted side airbags for outboard rear seats, and side curtain airbags for all four outboard occupant seating positions.
- Whiplash Injury Lessening front seats reduce the space between the occupant's head and headrest, to help limit excessive head movement, and help decrease the severity of whiplash-type injuries in certain types of rear end collisions.
- Available options to help further enhance occupant safety include a Pre-Collision System (PCS), which uses the Dynamic Radar Cruise Control System to provide early warning of upcoming objects that might result in a frontal collision. The system uses an infrared camera with new scanning technology to monitor the direction the driver's eyes are facing. In the event that the driver does not appear to be looking forward when a frontal collision appears imminent, the system will initiate the warning at an earlier threshold. If the driver still does not respond and make the appropriate maneuver, the system will initiate braking intervention up to 1.2 seconds prior to impact, designed to help lessen the severity of the collision. With available Lexus Dynamic Handling, PCS will help further mitigate the occurrence of a collision.

Luxury/Comfort/Convenience

- Standard connectivity advancements include enhanced Bluetooth capability with automatic phonebook download and streaming audio.
- Standard DVD audio and video compatibility, MP3 sound enhancement, 5.1 simulated surround-sound from normal two channel sources such as MP3 files and CDs, and a high-resolution central control display centrally located high up in the instrument panel.
- HD Radio with iTunes tagging and a three-month trial subscription to SiriusXM[®] Satellite Radio are standard.

Luxury Options

- The available 17-speaker Mark Levinson premium surround sound audio system has 7.1 channel surround-sound through 10 channels using a new class D Digital amplifier with a clean 835-watts from 20-20,000 hz at only 0.01 percent total harmonic distortion.
- The new Clari-Fi technology on the available Mark Levinson system automatically analyzes compression in the signal of digital tracks (CD, iPod, etc.) and determines how much amplification is needed, and where, to correct it.
- Other optional equipment includes a Heads Up Display, a Blind Spot Monitor that helps detect vehicles in rear/side blind spots and Lane Keep Assist (LKA) with Lane Departure Warning (LDW).

Warranty

- 48-month/50,000-mile basic limited warranty with roadside assistance for 48 months/unlimited miles.
- 72 months/70,000 miles powertrain and restraint system coverage.
- 72 months corrosion perforation protection, regardless of mileage.
- Eight years/100,000 miles hybrid-related components, including the HV battery, battery-control module, hybrid control module and inverter with converter.

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