

2009 LX 570 Luxury Utility Vehicle Offers New Luxury Package

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Lexus introduced the all-new, more powerful, more capable and more luxurious LX 570 premium luxury utility vehicle for 2008. A new optional Luxury Package and other enhancements for 2009 help keep this luxurious eight-passenger model at the top of its segment.

New semi-aniline leather-trimmed seating and Bubinga wood trim give the LX 570 an even more luxurious look and feel inside. A new cool box for beverages adds convenience, and a new SmartCard key enhances vehicle security. Elegant exterior design is accented for 2009 with new liquid graphite finish for the standard 20-inch wheels and a new exterior color, Costa Azul Mica.

Engine/Transmission/Drivetrain/Performance

The LX 570's 5.7-liter V8 delivers the punch and towing power demanded in this segment. The new, high-tech powerplant produces 383 horsepower at 5,600 rpm and peak torque of 403 lb.-ft at 3,600 rpm. Crucial to LX customers who tow with their vehicles, 90 percent of peak torque is available at just 2,200 RPM.

The V8's advanced Dual Variable Valve Timing with intelligence (VVT-i) system controls valve timing and overlap on both the intake and exhaust valves, which helps to optimize power, fuel efficiency and emissions. The Acoustic Control Induction System (ACIS) switches the length of the intake tract in two stages, based on RPM and throttle angle, to improve torque across the engine speed range. Tubular stainless steel headers flow into a full stainless steel exhaust system.

The LX 570's six-speed automatic transmission is designed to handle high torque while performing with Lexus quietness and smoothness. The electronically-controlled transmission's control unit estimates road conditions and predicts the driver's intention to select the appropriate gear ratio for the vehicle's speed and the driving conditions. A sequential shift mode allows the driver to select gears manually.

Even at very low speeds, such as trail driving, the transmission operates smoothly and imperceptibly.

The LX 570's transfer case provides full-time four-wheel drive that is equally adept at handling the rigors of slippery winter weather or deep mud or snow. A 2.618:1 low-range ratio is available for challenging driving surfaces. The system uses a TORSEN® limited-slip locking center differential to distribute power 40:60 front-to-rear, directing more power to the wheels with the best grip should slippage occur. Four-wheel Active Traction Control (A-TRAC) employs both brake and throttle intervention to help control wheel spin. Vehicle Stability Control (VSC) helps maintain directional control during cornering and can be disengaged via the "Trac off" switch.

The Crawl Control feature provides improved throttle modulation when maneuvering over rough, uneven or difficult surfaces. When the transmission is shifted into low range, Crawl Control regulates engine speed and output, along with braking force, to propel the vehicle forward or in reverse at one of three low-speed settings. Crawl Control also actuates a set of virtual locking differentials to help reduce tire slippage and optimize chassis behavior.

Without canceling Crawl Control mode, the driver can reduce vehicle speed by braking or adjust the crawling speed with a selector switch. Hill-start Assist Control (HAC) provides additional control for off-road driving by helping to keep the vehicle from rolling back while starting on a steep incline or slippery surface.

Chassis/Body/Suspension/Tires/Brakes

The LX 570's highly capable chassis is equipped with an advanced suspension system. Body-on-frame construction provides ruggedness and durability in extreme driving conditions, plus impressive towing capability and ride isolation characteristics. Towing capacity is 8,500 pounds. An electro-hydraulic system with four-wheel Active Height Control (AHC) and Adaptive Variable Suspension (AVS) reacts more quickly and allows for a

greater range of adjustment than the system used in the previous LX model.

Applying advanced computer aided engineering and lightweight components, engineers developed an all-new frame structure that uses lightweight, high-strength steel. Deeper, wider frame longitudinal members help to provide enhanced safety. The new frame was tested over some of the worst roads in Australia, plus desert areas of the U.S. and other parts of the world in conditions where other SUVs could not go. The body utilizes welded high-strength sheet steel, especially in the A-, B-, C- and D-pillars and in the rocker area to reduce weight and increase rigidity.

The high-mount, independent double-wishbone front suspension allows for nine inches of total front wheel travel – four on the jounce stroke and five on rebound – for outstanding articulation over rough roads and obstacles. The power-assisted rack-and-pinion steering uses a variable gear ratio that requires just 2.4 turns to go from lock-to-lock.

The four-link trailing-arm rear suspension retains the solid-axle configuration for strength and durability. Suspension geometry helps promote stability, and spring and damper rates are optimized for ride smoothness. The new-generation Lexus LX 570 introduced a vehicle “posture control” system with Lexus advanced technology, including Four-Wheel AHC + AVS (Active Height Control + Adaptive Variable Suspension). The LX 570 suspension system helps improve on-road handling by reducing body sway by more than 30 percent and by suppressing dive and squat during cornering, braking or acceleration. The compression chambers of the shock absorbers are diagonally linked (front-left shock linked to rear right, and front right linked to rear left) by a center-control valve. Passing small body motions from front-to-rear increases overall vertical suspension damping. A spring-rate switch control in the front shock absorbers stiffens or loosens the air spring rate in two steps. When cruising on the highway, for example, the spring rate is loosened for better ride comfort.

The Active Height Control (AHC) system lowers the chassis by about two inches for easy entry and exit and returns automatically to its normal height when the vehicle begins to accelerate. Vehicle height automatically lowers within two seconds of switching off the ignition when the vehicle is stopped. An Easy Access mode allows the driver to also lower the vehicle while it is parked. For improved aerodynamics, the AHC system lowers the vehicle by nearly one inch in front and by a little more than a half inch in the rear at highway speeds. When the transfer case is shifted into low range, AHC raises the vehicle by approximately three inches to provide additional ride height in driving situations where chassis clearance is at a premium.

The Adaptive Variable Suspension (AVS) system responds to the different inputs and spring rates, and it adjusts the shock absorber damping force to provide optimal handling and comfort for on-road or trail driving. AVS provides three modes to control the spring rate and shock absorber damping force.

Comfort mode provides a softer response on extremely bumpy roads, while the Normal and Sport modes help provide increasingly greater levels of control for driving a heavily loaded vehicle, driving at higher speeds on paved roads, or driving on unpaved roads.

The standard ten-spoke, 20-inch alloy wheels wear 285/50R20 tires. A direct tire pressure monitor system notifies the driver of a critical drop in air-pressure in any of the tires, including the full-size spare tire. The LX 570’s brake system utilizes 13.4-inch ventilated discs and four-piston calipers up front and 13.6-inch ventilated discs at the rear. The multi-terrain ABS system determines road-surface conditions and automatically optimizes lock-up control, selecting the suitable ABS profile for on- and off-road driving surfaces. Electronic Brake-force Distribution (EBD) employs the ABS to properly balance braking forces between the front and rear wheels, while Brake Assist (BA) provides auxiliary force to assist the driver during emergency braking.

Safety/Security Features

The front of the LX 570 frame integrates a three-stage crush structure to help reduce frame damage to other areas of the vehicle in a frontal impact. The patented design can disperse collision force from the main side members to floor frame members, helping to minimize deformation in the passenger compartment.

The new LX 570 is equipped with 10 standard airbags, including driver- and front-passenger knee airbags, front and second-row seat-mounted side airbags in the outboard seating positions, and side curtain airbags for all three rows. All eight seating positions feature three-point seatbelts. The second-row seatbelts integrate pre-tensioners for the outboard seats and an ELR (Emergency Locking Retractor) seatbelt for the center seat.

The LX 570 is the first vehicle in its segment to use Active Front Headrests which move up and forward almost instantly in the event of certain rear-end collisions when the force of the occupant's body is applied to the seat back. The standard dual-swivel Adaptive Front lighting System (AFS) helps to illuminate a turn or curve as the driver steers into it.

The LX 570 offers a first-in-its-class Pre-Collision System with Dynamic Radar Cruise Control. In addition, LX 570 is the first Lexus to offer a new Wide-view Front & Side Monitor feature designed for use in tight settings, such as parking garages. With cameras located within the grille and under the passenger side-view mirror, the driver can check hard-to-view areas by simply pressing a button on the dashboard and viewing the camera images on the standard navigation system screen. The Wide-view Front & Side Monitor functions up to a vehicle speed of about 7.5 mph and displays the front and side views simultaneously in split-screen mode.

Luxury/Comfort/Convenience

The standard power rear door, Smart Access keyless entry system with push-button start, headlamp washers and a front windshield wiper de-icer provide all-weather convenience. The full array of standard luxury amenities includes leather-trimmed upholstery, four-zone independent climate control, a voice-activated Hard Disc Drive (HDD) navigation system with Bluetooth® capability, a nine-speaker Lexus Premium Audio system, front-seat power-seat cushion extenders, and much more including a rear back-up camera. Standard XM® Satellite Radio capability (requires subscription) includes XM NavTraffic, a real-time traffic information service designed to provide driver alerts for accidents, road closings and traffic jams.

With 28 total air vents, the climate control system is designed to bathe occupants in comfortable air, even during extreme heat, rather than simply project streams of cool air at them. For colder weather, the LX 570 is equipped with an auxiliary Positive Temperature Coefficient (PTC) heater. The PTC heater warms air by passing it over an electrically heated ceramic element.

Luxury Options

In addition to the new Luxury Package, the LX 570's option list includes climate-controlled front seats and heated second-row seats, and entertainment systems. The available rear-seat entertainment system plays DVDs and uses a nine-inch wide-format screen. The available 19-speaker Mark Levinson® Reference Surround Sound audio system is capable of storing up to 2,000 digital songs on a portion of the navigation system's HDD (hard disk drive).

Exterior Design

The LX 570 luxury utility vehicle adopts characteristics of the brand's L-finesse design theme. A wide stance and muscular cabin proportions are accented with subtle character lines and luxury touches such as chrome-plated door handles and moldings. The wide grille, with its "arrowhead" corner treatment, character lines integrated into the bumper, and large projector headlights convey a distinctly purposeful look. Pronounced wheel arches add an element of ruggedness to the elegant profile. Standard running boards fit closely to the body for an integrated appearance.

Wide rear combination lights emphasize the large size of the sculpted rear door. They employ high-intensity LEDs and a specially designed diffusion pattern to project "radiance" and to give drivers following behind ample visibility of the LX 570. Tasteful chrome accents set off the lights and the license plate surround.

Interior Design

The new-generation LX 570, while occupying the same footprint as the previous LX 470 model, provides best-in-class front seat legroom. The result is an even more inviting and comfortable space for up to eight passengers and their cargo. Optitron® instrument gauges are a traditional and functional Lexus design feature. The first-in-class standard power-sliding second-row seat slides forward and aft 4.1 inches for passenger comfort and cargo storage versatility. The second-row seatbacks provide a convenient 40/20/40 split. The second row seat is specially engineered to make tumbling it forward easy for anyone – with Lexus fluid smoothness. A power retractable third-row seat is standard. The split rear tailgate features a power upper door, while the bottom

section raises and lowers with minimal effort.

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.