

2018 Lexus LS 500 F SPORT Debuts in New York

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New York (April 11, 2017) — Having debuted its reinvented flagship sedan earlier this year—the all-new 2018 LS 500—Lexus is putting an exclamation point on this signature model with the new F SPORT model. The LS 500 F SPORT, unveiled today and on display this week at the New York International Auto Show, moves the

driving emotion needle even farther with handling enhancements and a performance-infused design outside and in.

The original luxury disruptor when it debuted to launch the brand, the Lexus LS has for nearly three decades set benchmarks for powertrain smoothness, ride quietness, craftsmanship, attention to detail, and long-term quality. The 2018 LS 500 will offer the most dynamic driving experience in the model's history; now it has the possibility of being enhanced further with the new F SPORT model.

Within the Lexus lineup, the F models, including GS F and RC F, are the track-tuned maximum performance machines. The F SPORT versions, meanwhile, imbue the standard models with a more engaging driving spirit through carefully applied chassis tuning and enhancements, while still emphasizing exceptional comfort. On the new LS, the F SPORT model will be available with gas and hybrid powertrains, and those choosing the RWD V6TT model will have the option of adding the F SPORT Handling Package to bring a level of liveliness never before seen on the flagship sedan.

F SPORT Look

Lexus designers didn't hold back when giving the LS 500 its coupe-like silhouette and dramatic rendition of the Lexus signature spindle grille that shows even greater intricacy in the design. Developing the F SPORT grille took computer-aided design (CAD) operators some five months to achieve the desired texture and interaction with light. Even then, they adjusted 7,100 individual surfaces to achieve the desired look and texture (compared to 5,000 for the standard model's grille). And when combined with the sporty enlarged side grille, it is functional as well, helping to maintain the vehicle's cooling performance.

The special F SPORT front grille, rocker panel, and trunk moldings accentuate the sedan's rakish profile, while F SPORT badging on fenders and exclusive 20-inch alloy wheels complete the exterior transformation. For those looking to really stand out, Ultra White is offered as an F SPORT-exclusive exterior color.

F SPORT Inside

As it did with the exterior, Lexus shifted the LS 500 cabin into F SPORT spec by applying trim and features exclusive to this version. A common thread through all LS models remains: Omotenashi, the concept of Japanese hospitality. Applied to the LS 500, it means taking care of the driver and passengers, anticipating their needs, attending to their comfort and helping to protect them from hazards. The F SPORT adds a performance attitude to the mix.

The F SPORT persona shines throughout the cabin, starting with the F SPORT-exclusive front seat, which provides enhanced support for dynamic driving. A perforated-grille pattern on seating surfaces and unique scored aluminum trim elements add additional sporty flair.

The driver faces a special F SPORT steering wheel as well as a speedometer and tachometer in a movable meter with a ring that slides to display information—a design adapted from the limited-production Lexus LFA supercar and a further expression of the car's dynamic intentions. Attention to detail shows in the aluminum accelerator, brake and footrest pedals, as well as the F SPORT perforated shift handle and footrest. Ultrasuede in the seats and headliner is the crowning touch. For those desiring the ultimate sporty look, a new Circuit Red interior is available exclusively on F SPORT models.

LS 500 Chassis Details

2018 LS F SPORT models feature the latest generation of the brand's advanced chassis control technology, Vehicle Dynamics Integrated Management (VDIM), which has been refined since its debut more than a decade ago.

In 2004, Lexus introduced the first integrated control system that combined the previously independent ABS, traction control, vehicle stability control, and EPS, as well as other functions, into a single system. In 2012, the brand adopted the four-wheel active steering integrated control system—known as Lexus Dynamic Handling, or LDH—from the GS for enhanced safety and driving performance that responds to the driver’s intention.

The new VDIM system implements cooperative control of all vehicle subsystems – braking, steering, powertrain, and suspension – to control basic longitudinal, lateral and vertical motion as well as yaw, roll and pitch. Optimal control of these motions helps to enable exceptional ride comfort, enhanced traction and safety and handling agility, and allows for enriched flat vehicle posture during cornering as well as a more comfortable and stable ride overall.

Sporting Genes

The LS 500 is based on an extended version of the brand’s premium global architecture for luxury vehicles (GA–L) platform from the new Lexus LC 500 coupe. The stiffest platform that Lexus has ever developed, GA–L sets the stage for enhanced handling, ride smoothness and cabin quietness. The LS F SPORT capitalizes on the platform’s responsiveness and agility.

Equipping the LS 500 F SPORT with standard 20-inch wheels and 245/45RF20+ 275/40RF20 tires, (summer tires for RWD) along with larger front and rear brakes (6-piston calipers on front and 4 pistons on rear), unlocks more of the platform’s intrinsic performance capability. Opting for the available F SPORT Handling Package (RWD gas model) equips the LS 500 F SPORT with Lexus Dynamic Handling (Variable Gear Ratio Steering and Active Rear Steering), Active Stabilizer, and sport-tuned air suspension with rapid height function. The result is a full-size premium luxury sedan that responds more like a sports coupe through curves, helping to underline what F SPORT stands for.

415-Horsepower Heart with a 10-Speed Partner

Lexus designed an all-new 3.5-liter V6 engine specifically for the new 2018 LS 500, using twin turbochargers developed through the company’s F1 technology. This new twin-turbo V6 offers V8-level performance – 415 horsepower and 442 lb-ft of torque – paired with the first-ever 10-speed automatic transmission in luxury sedan.

The engine yields a broad torque curve and, perfectly in tune with the F SPORT spirit, the new engine and transmission deliver instant acceleration and a constant buildup of torque toward the vehicle’s redline. The LS 500 is undeniably quick, with a 0-60 time of 4.5 seconds (gas RWD). An electric wastegate is among the features that contribute to the engine’s rapid responses. The driver can tailor powertrain response and feel by choosing from Normal, Sport S or Sport S+ modes, and just enough of the exhaust note is heard to enhance the sporty feel.

F SPORT Performance, Hybrid Efficiency

The LS 500h F SPORT infuses high efficiency into the sporting formula. The new Multi Stage Hybrid System combines a naturally aspirated Atkinson-cycle 3.5-liter V6 gasoline engine with two electric motor/generators and uses a compact, lightweight lithium-ion battery. The V6 engine uses D-4S direct fuel injection, and lightweight valvetrain components, with Dual VVT-i ensuring ample torque across the engine speed range. Combined system output is 354 hp.

The new system adapts the planetary-type continuously variable transmission from Lexus Hybrid Drive and also adds a unique four-speed automatic transmission. Working in concert, the two gearsets alter output in four stages to utilize the V6 engine across the entire speed range.

In manual mode, the two gearsets act together to provide the effect of 10 ratios, giving the LS 500h F SPORT an

enhanced dynamic feel on the road and allowing the driver to shift through the ratios with paddle shifters. The Multi Stage Hybrid System allows for more electric assist at lower vehicle speeds. What's more, this system allows the RWD LS 500h to propel from 0-60 in 5.2 seconds – which is on par with the previous-generation V8-powered LS 460 and 3 /10th of a second faster than the AWD LS 600h.

2018 Lexus LS F SPORT Basic Specifications		
	LS 500	LS 500h
Vehicle type	Full-size premium luxury sedan	Full-size premium luxury hybrid sedan
Engine	3.5-liter V6, direct fuel injection, twin turbochargers	3.5-liter V6 hybrid engine
Valve mechanism	24-valve, DOHC, chain drive (with Dual VVT-i)	
Cylinders	6	
Layout	Front engine, RWD and AWD	Front engine, RWD and AWD
Transmission	10-speed automatic	Multi Stage Hybrid Transmission
Max engine output (hp)	415	295
Max engine torque (lb-ft)	442	258
Total System Output (hp)	•	354
Battery Type	•	Lithium-ion
Battery Voltage	•	310
Acceleration (0-60)	4.5 sec (RWD)	5.2 sec (RWD)
Wheelbase	123 in. (3,125 mm)	
Overall length	206.1 in. (5,235 mm)	
Height	57.1 in. (1,450 mm)	
Width	74.8 in. (1,900 mm)	
Wheels	20-inch (Fr: 245/45RF20, Rr:275/40RF20)	