



# Lexus LC Coupe Delivers Even Sharper and More Refined Performance

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- Lexus raises the dynamic performance in the first evolution of its flagship coupe
- Focus on strengthening the connection between driver and car
- Detailed changes to suspension reduce weight and improve ride smoothness and stability
- LC 500h hybrid battery control system revised for more power and torque at low speeds
- LC 500 10-speed Direct Shift automatic transmission reprogrammed for greater driver rewards
- Braking and steering system adjustments yield better feel and response

Lexus's flagship coupe has always aimed to provide "even sharper, more refined" performance, ever since its original concept was designed. Changes introduced for the 2021 model year deliver greater responsiveness, handling stability and agility, strengthening the driver's feeling of being directly connected to the car and delivering an exhilarating driving experience.

To achieve its goals, Lexus has made changes to the LC's suspension system, saving weight and improving ride and handling quality. Detailed adjustments have also been made to LC 500h's Multi Stage Hybrid system and the LC 500's 10-speed Direct Shift automatic transmission. The coupe's steering has also been revised and the brakes have been tuned to communicate a better feel to the driver.

## **SUSPENSION: LESS WEIGHT, SMOOTHER PERFORMANCE**

Changes to the LC's front and rear suspension have reduced the car's unsprung weight by around 10kg, thanks to the use of forged aluminium for the lower arms; thinner, hollow anti-roll bars; and a new high-strength material for the coil springs. The springs themselves have been made stronger (increasing in pressure from 1,200 to 1,300MPa).

The weight reduction contributes to the coupe's dynamic performance, while further updates to the suspension to give a softer, smoother stroke add to the stronger feel the driver has of the car being firmly planted on the road. In the front suspension, the electronic shock absorbers have been reprogrammed for a longer stroke, while the rigidity of the bound stoppers (front and rear) has been optimised, giving overall smoother performance with less disturbance from fluctuations in the road surface.

By adjusting the roll rigidity of the anti-roll bars, Lexus has also improved the LC's turn-in manoeuvrability, giving more linear response and again promoting a sense of unity between car

and driver.

### **Transmission tuned for a more rewarding drive**

Lexus has used big data to improve the drive force characteristics of the LC 500's 10-speed Direct Shift automatic transmission, to achieve even more faithful responses to the driver's intentions. With more drive force generated as engine speed increases, the driver feels a real sense of powerful torque and continuous acceleration.

The focus was the "active zone" - the 50 to 70 per cent throttle range that accounts for most driving - with the transmission allowing revs to rise higher before shifting into the next gear. The effect is enhanced by the rising note of the V8 engine.

The technical adjustments also yield smoother acceleration and allow for an automatic downshift to second gear (instead of third) when braking to take a corner. Similarly, shift performance has been improved for acceleration out of a corner.

### **Improved hybrid battery performance**

The revised LC 500h benefits from a new control in the high-voltage lithium-ion hybrid battery that increases its operating range and allows more torque to be developed by the electric motor. This helps provide more powerful acceleration, both when negotiating urban streets, or driving on winding roads. For example, even with moderate (30 per cent) pressure on the accelerator pedal, there is 90Nm more torque output and battery output rises to 17 kW, while vehicle speed increases by an extra 2.5mph/4km/h after 4.5 seconds acceleration.

### **Braking and steering**

Lexus has adopted larger brake pads with a higher friction coefficient for the LC Coupe to gain more effective braking performance and stability at high temperatures and speeds. The system continues to use front and rear ventilated discs with opposed six-piston aluminium monobloc callipers at the front and four-piston units at the rear. The black callipers are decorated with the Lexus logo in white.

In a detailed touch, even the surface of the brake pedal has been revised to provide a larger contact area, giving a more natural feel for the driver.

Extra reinforcements and bracing have increased the steering support rigidity, helping achieve better handling stability. The measures include reinforcement of the instrument panel and a higher-rigidity surface for the upper and lower steering support joints, plus changes to the bracing for the driver's seat and cowl. Software updates for the Variable Gear Ratio Steering, Dynamic Rear Steering and the electric power steering have further sharpened responsiveness.

### **V8 sound quality**

The sound generated by the LC 500's V8 powertrain is all part of the quality of the driving experience and Lexus has changed the location of the valve that determines the route of the exhaust gases in the main silencer to achieve the ideal note. This makes its presence felt at start-up and at high engine revs (from around 4,000rpm), while performance is quiet when cruising.

### **UK orders open**

Lexus centres are accepting orders for the 2021 LC Coupe now with first deliveries expected during summer 2020. The model range and prices are shown below.

<b>MODEL</b>	<b>OTR PRICE</b>
LC 500	£80,100
LC 500 Sport Pack	£85,300
LC 500 Sport Pack & Manhattan Orange trim	£86,700
LC 500 Sport Plus Pack	£90,950
LC 500h	£80,100
LC 500h Sport Pack	£85,300
LC 500h Sport Pack & Manhattan Orange trim	£86,700
LC 500h Sport Plus Pack	£90,950

Additional high-resolution pictures, including technical images, are available in an image gallery [here](#).

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