

Faster, Sharper, Lower, Wider ? All-New Lexus RC F Performance Coupe Elevates the Driving Experience

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DETROIT (Jan. 14, 2014) – Want power, precision and passion? Lexus revealed its most powerful V8 engine in the all-new 2015 RC F performance coupe at the North American International Auto Show in Detroit. The F performance model, based on the RC coupe, gets its powerful roar from more than 450 horsepower and more than 383 lb.-ft. torque.

To get that amount of power efficiently to the ground the RC F will make use of a Torque Vectoring Differential (TVD) to ensure remarkable handling and performance. The power will transfer through a newly calibrated eight-speed Sports Direct Shift (SPDS) transmission with paddle shifters.

“I’ve built RC F to be enjoyed by all enthusiasts – no matter what their level of expertise,” said RC F chief engineer Yukihiko Yaguchi.

“There’s a misconception that racing cars are hard to drive. In fact, they’re easy in the right hands because they’ve been purpose-built for the skill level of their drivers. It’s the same with RC F.

“Electronics can be modified instantly on board to provide appropriate levels of performance and protection. But even at its basic setting, it’s a blast.”

Driving Dynamics with More Power and Usability

The RC F has an all-new 5.0-liter 32-valve V8 engine that will provide increased maximum power at higher engine rpm than previously possible. For the first time in a Lexus performance engine, the RC F uses the Atkinson cycle at cruising speeds for enhanced fuel economy and then switches to the Otto cycle at higher rpm to develop impressive performance levels.

Driver engagement has been made possible by purpose designed sound and power delivery. A uniquely tuned eight-speed Sports Direct Shift (SPDS) transmission improves linear throttle response.

It helps the driver control the torque and power precisely as it is applied.

The newly calibrated VDIM adds a vertical G-sensor to provide greater vehicle stability

Torque Vectoring Differential

The RC F uses a Torque Vectoring Differential (TVD), a first in a Lexus, to increase driving performance. It has three operating modes:

- Standard for a balance of nimble performance and stability;
- Slalom for emphasis on nimble steering response; and
- Track to help with consistent stability, ensuring the vehicle stays on the intended cornering line as the driver applies more throttle.

Handling

The foundation for the vehicle’s mechanical grip is the highly rigid body with large cross-section rocker panels and a very stiff front lower brace. Specialized Lexus manufacturing techniques are also used, including body adhesives, laser-screw welding, laser brazing and multi-spot welding. Grip is further enhanced through use of a wider tire and wheel assembly.

RC F has front and rear coil-spring independent suspension, with monotube gas-filled shock absorbers and ball-jointed stabilizer bars. Unsprung weight is reduced by the adoption of three new 19-inch diameter forged aluminum wheels which minimize tire/wheel assembly mass and maximize rigidity.

Exterior Design

Lexus RC F adds to the stylish body of the new RC coupe on which it is based. The RC F features its own version of the Lexus signature spindle grille which dominates the front of the vehicle from hood line to lower lip. The grille has a subtle F-mesh pattern on the lower half.

In profile view RC F has a unique front hood which raises the peak of the vehicle, creating a powerful side view.

The RC F takes design cues from the Lexus LFA supercar, especially in essential air cooling and aerodynamics. Its hood air vent, such as those on the LFA, combined with front cooling ducts contribute to engine cooling and overall vehicle stability.

As in the LFA, an active rear spoiler is incorporated into the trunk lid to provide down force at speeds of more than 50 mph. The active spoiler is a highlight of RC F's aerodynamic package which includes careful tuning of the underbody, the intakes in the grille and the front fender vents, and strategic placement of the aero stabilizing fins.

To the side, front fender ducts in the shape of an L also aid cooling performance while adding to the aggressive stance.

The RC F's available carbon fiber package offers a clear coated carbon fiber roof and active rear spoiler drawn from the LFA production experience.

Interior Design

Uniquely designed components, including combination meters, the steering wheel, seats, ornamentation and pedals, convey a sense of connection with the driver that only a Lexus F performance model can achieve.

RC F's all-new combination meters are further developed from LFA while also referencing aircraft cockpit instruments. The meters provide a wide range of easy to read information for the various drive modes.

The combination meters include a large centrally mounted tachometer that alters according to drive mode, digital and analog speedometer, differential torque vectoring monitor, G-Force meter, oil and water temperature gauges, mileage information and a stopwatch.

The driver's connection to the RC F is paramount. The RC F debuts a Lexus-first elliptical cross-section thick grip steering wheel for greater control during performance driving. The placement, shape and operation of paddle shifters make it easier to change gears on the track and in other performance circumstances.

The all-new high back seats have been designed for exceptional holding performance. An integrated foaming technique creates a highly supportive and taut fitting seat with trim material that stays fixed.

	2015 Lexus RC F
Horsepower	More than 450 hp
Torque	More than 383 lb.-ft.
Transmission	Eight-speed Sports Direct Shift (SPDS)

Seating Capacity	4
Overall Length	185.2 in.
Width	72.8 in.
Height	54.7 in.
Wheelbase	107.5 in.
Driven Wheels	Rear Wheel Drive
Curb Weight	Targets less than 3,968 lbs.
Brake Type	Four-wheel power assisted disc brakes (Brembo manufactured for Lexus) with Anti-lock Braking System (ABS) and Electronic Brake force Distribution (EBD) and Brake Assist (BA)
Wheel size (front and rear)	Fr 19" x 9" Rr 19" x 10"
Tires size	Fr 255/35/19 Rr 275/35/19
0 – 60 mph	Targets faster than IS F
Top speed	Estimated 168 mph (electronically limited)
MPG (City/Hwy/Comb.)	Targets better than IS F

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