



# The Market Revolution: The Lexus RX, The World's First Luxury Crossover

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Popular tastes ebb and flow in all things. For everything from music and fashions to food and holiday destinations, interest and desirability will wane over time as people seek new ideas and experiences.

Just the same trends affect the motor industry, and in the early 1990s the love affair between motorists and large-scale SUVs was showing signs of coming to an end. Sales figures for the premium market showed people moving back to more conventional choices such as saloons and wagons.

Lexus had already made its mark as a disruptor in the auto business when it arrived on the scene in 1989. Now it saw another opportunity to challenge the status quo and bring something completely new to the market.

The foundations were laid for the RX, a Lexus model that has consistently delivered success and innovation. Not only did the RX create a new market segment, it also went on to become the first luxury market vehicle to feature a self-charging hybrid electric powertrain.

## Creating a new kind of car – the luxury crossover

Just as much as traditional SUVs had qualities that strongly appealed to motorists, they also had their downsides, which meant vehicle owners had to make compromises.

People liked the high driving position, the great all-round visibility, the perceived strength and stability, and the cool, rugged image of SUVs. The negatives were that they were awkward to drive around town, difficult to get in and out of, offered meagre fuel economy and handled poorly on the road.

Focusing on the positives and addressing the shortcomings, Lexus came up with a radical new concept – what came to be known as the luxury crossover.

## Enter the first generation RX

The thinking behind the RX's development was distilled into a simple concept: it should be as comfortable and powerful as a passenger car, and it should be capable of off-road driving like an SUV.

Chief Engineer Tsuneo Uchimoto explained: "Many car makers would simply have built a smaller version of (their large SUV) or perhaps adapted an existing truck or SUV platform.

“We were able to throw away the usual constraints and think of this new product not in traditional terms of pick-up, SUV, MPV or luxury saloon. Instead we could incorporate the most desirable attributes of all those vehicles.”

### **Designed for purpose**

Lexus shunned the traditional SUV format of a body attached to a separate frame. Instead, it used a single, monocoque construction like that for a car. In fact, it built the RX on the same platform as its ES 300 mid-size saloon – at the time its best-selling model in North America. The result was a lightweight but highly rigid vehicle that handled smoothly and stably, without the body roll associated with many taller SUVs. It also looked less like a workhorse, with more rounded and aerodynamically efficient styling.

Its dynamic prowess was supported by MacPherson strut suspension with anti-roll bars front and rear, while the use of active engine mounts reduced vibration for a more comfortable ride. Thanks to reduced ground clearance, getting in and out of the RX was an easier one-step action, compared to taller SUVs.

The engine was also shared with the ES, a 3.0-litre V6 petrol unit, mounted transversely and matched to a four-speed automatic transmission. With 220bhp, it could move the car from rest to 62mph in 8.5 seconds. Key boxes were ticked: styling, acceleration, handling and quietness were all of luxury car quality.

### **Off-road engineering**

RX customers were given the choice of front or all-wheel drive to suit their driving needs and lifestyle. The AWD had genuine SUV ability, fitted with a viscous coupling in the centre differential that allowed a 50:50 split in drive torque between the front and rear axles. For even stronger performance off-road or in low-grip conditions, a Torsen limited-slip differential was also available.

### **A warm welcome**

The RX was destined first for the American market and it made its world debut at the 1997 Chicago Auto Show, branded an “SLV” – Sport Luxury Vehicle” (it was some years before the term “crossover” would be coined). The public reception was warm, as was the response of the first journalists who drove the car at the end of the year. Initial sales were strong, both in the USA (42,000 units in the first year) and in Europe, where the RX was introduced in a refreshed version in 2000.

### **The luxury market game-changer**

The RX may have been well received, but no one could then have imagined just how quickly it would spark a transformation in the luxury car business. Within just a few years, every major premium car maker had come up with its own take on the RX, making the crossover segment the most popular in the luxury market.

Once again, Lexus had disrupted the market and set standards its rivals had to follow. But the RX story still had another radical chapter to come.

### **The world’s first hybrid luxury vehicle**

The second generation RX debuted in 2003 sporting a more eye-catching design that was also more aerodynamic. Once again, there was a V6 engine under the bonnet, but the five-speed automatic

transmission was new. This was a larger vehicle, too, with a longer wheelbase and more room inside. At the same time as the new model was revealed, Lexus announced it would also be building a hybrid version – what would be the first hybrid luxury model in the world.

The RX 400h appeared the following year, equipped with a 208bhp 3.3-litre V6 engine and a 165hp electric motor, giving a full system output of 268bhp – comparable to the power of a 4.0-litre V8. As a full hybrid, the RX could be driven in petrol or electric modes alone, or in a combination of both. Lexus Hybrid Drive automatically sourced power from the engine or electric motor to achieve the best possible efficiency, reflected in the RX 400h's 34mpg fuel economy.

### **The technology pioneer**

Using hybrid didn't deprive the RX of all-wheel drive capability. Lexus's new E-four system used an independent electric motor on the rear axle to give 4x4 performance when required, without the weight and fuel consumption penalties associated with mechanical AWD systems.

Once again, the RX broke new ground and established Lexus as an industry-leading technology pioneer. The RX 400h was just the start of a comprehensive hybrid programme that has seen the technology constantly improved and introduced to all parts of the Lexus range. By mid-2019, more than 1.45 million Lexus hybrids had been sold worldwide.

### **The RX today**

The RX's global success has helped inspire the development of a family of Lexus crossover SUVs, including the mid-size NX, launched in 2014, and the compact UX, which arrived in 2019.

The latest generation RX 450h exemplifies many of the qualities that distinguish Lexus in today's luxury car market, displaying brave design, *takumi* craftsmanship in its luxury appointments and the application of advanced technologies for ever higher levels of safety, performance and on-board comfort and entertainment.

### **Space for seven**

More spacious than ever before, the RX has also evolved into a seven-seat model, the RX L. True to Lexus's reputation for quality, this has not been a matter of simply squeezing two extra seats into the cabin. Instead, the company effectively created a new model, with body length extended by 110mm and the back window set at a steeper angle to ensure those sitting in the rearmost seats are as comfortably accommodated as other passengers.

ENDS