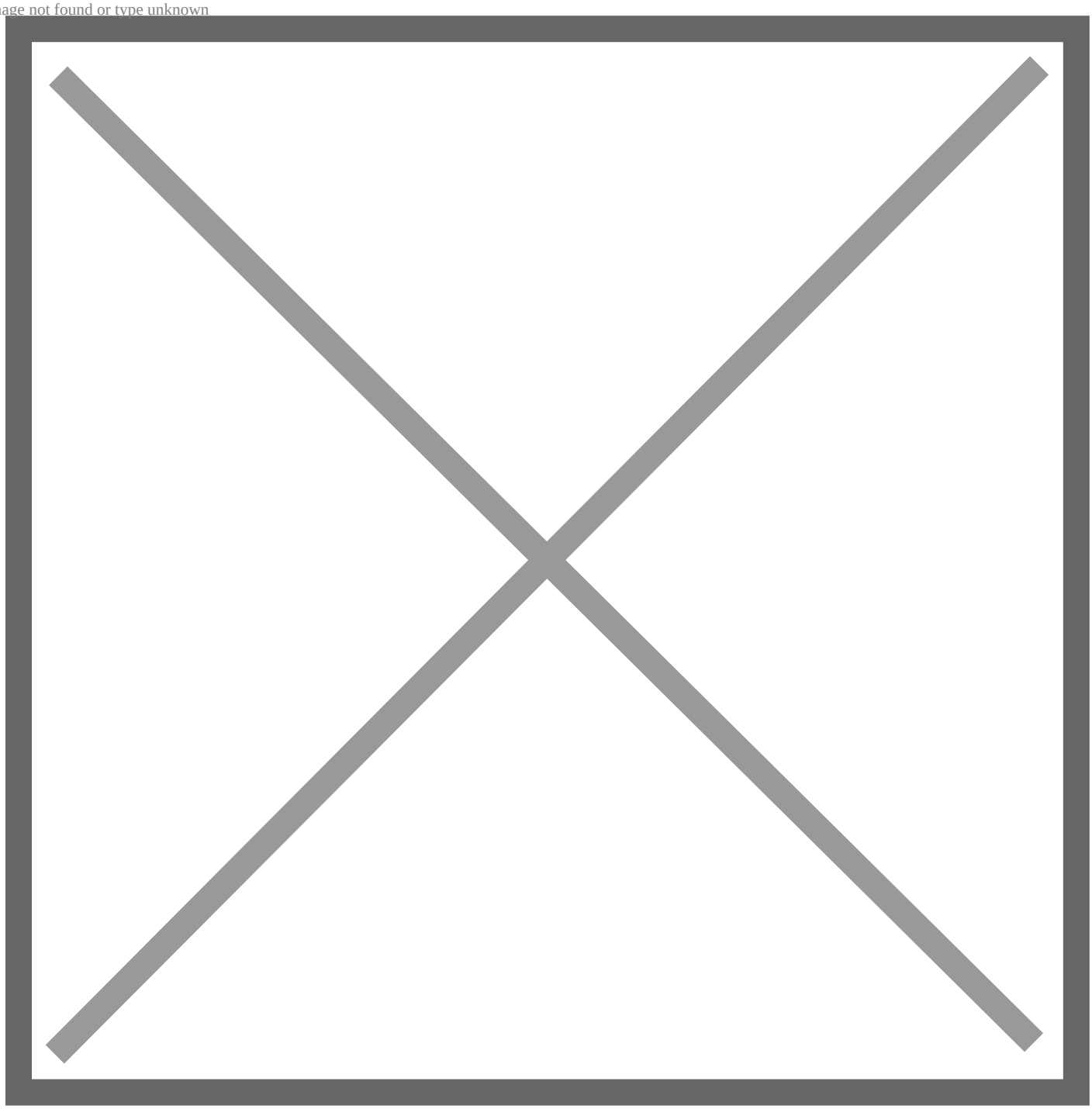
What’s New: 2024 Lexus RZ

December 19, 2023

Image not found or type unknown



PLANO, Texas (Dec. 19, 2023) — After ushering in a new era of Lexus Electrified in January 2023 as the first all-electric vehicle in the brand’s lineup, the Lexus RZ sees several updates in 2024, including an all-new option – the RZ 300e with FWD. The RZ 300e has a higher EPA-estimated range rating of up to 266 miles, allowing

customers more flexibility during their daily commute.

Also new in 2024, Copper Crest is added as an available exterior color option in mono- and bi-tone while a dual-voltage charging cable for 120V and 240 outlets becomes standard on all models.

A Choice of RZs to Suit Driving Needs

RZ 300e

Powered by a 72.8kWh Contemporary Amperex Technology Co. Limited (CATL) lithium-ion battery and offered only with FWD, the 2024 RZ 300e realizes a total system horsepower rating of 201. The RZ 300e has an EPA-estimated range rating of 266 miles when equipped with 18" wheels and an EPA-estimated MPGe rating of 137/112/125 (city/highway/combined). With 20" wheels, the EPA-estimated range rating is 224 miles and EPA-estimated MPGe rating is 114/96/105.

A subframe has been adopted for the FWD model, replacing the rear eAxle of AWD model. This subframe suppresses vibrations and noise, contributing to a smooth and quiet ride.

RZ450e

DIRECT4, an all-wheel drive system first introduced with the 2023 Lexus RX, is utilized in the RZ 450e and features a rear eAxle coupled with the engine and front motor. The DIRECT4 system utilizes two high-output, high-torque eAxle units that each drive a wheel set, one in the front (150-kW) and the other at the rear (80-kW). Three-point eAxle motor mounts, each using a lightweight aluminum bracket, are placed symmetrically on each side to counterbalance the eAxle's torque.

The DIRECT4 system works to optimize drive force, traction, and posture control (e.g., pitch and dive) in accordance with driving conditions and the load carried by each wheel. DIRECT4's front-to-rear torque distribution has a maximum range of 100:0 to 0:100, depending on the driving situation.

The RZ 450e's 71.4 kWh battery, developed by Prime Planet Energy & Solutions (PPES), delivers on performance with a total system horsepower rating of 308 and a 0-60 acceleration time of 5.0 seconds. It has an EPA-estimated range rating of 220 miles when equipped with 18" wheels and an EPA-estimated MPGe rating of 115/98/107 (city/highway/combined). When utilizing 20" wheels, the RZ 450e has an EPA-estimated MPGe rating of 102/87/95 with an EPA-estimated range rating of 196 miles.

Engaging Driving Performance

e-TNGA Platform

With its lightweight e-TNGA steel platform, the RZ possesses an optimal placement of mass and high body rigidity. RZ's body employs high-tensile steel panels and an aluminum hood to reduce weight and increase rigidity. Marrying body and platform is a bevy of innovative technologies, including Laser Screw Welding and Laser Peening, short pitch spot welds, and high rigidity expansion joints.

The lightweight platform also offers enhanced stability and ride comfort by mounting the 96-cell lithium-ion battery pack under the vehicle floor, creating a low center of gravity and inertia movement. A urethane sealant helps to keep dust and water out of the stack's reinforced structure, while efficient water-cooling and water-heating systems work to maintain an ideal battery temperature.

Driving Performance

Also lending to the RZ's drive performance is the front MacPherson strut type suspension and rear trailing arm multi-link configuration with both specifically tuned and located to enhance handling balance, roll posture, and ride comfort.

At the rear, Frequency Reactive Dampers (FRD) are outfitted to the RZ's suspension, altering the dampening force on the extension stroke in response to road surface frequency input. The FRD works to provide a high level of handling stability and helps to achieve a comfortable ride. With FRD and e-TNGA, key Lexus Driving Signature traits such as the precise control of sprung weight, along with natural posture changes, a tactile steering feel and the linear responses of steering, braking and acceleration operations are enabled.

Braking and Steering

Lexus Driving Signature is also reflected in the new Active Hydraulic Booster-G (AHB-G) braking system that works with RZ's regenerative motor capability to reduce vehicle speed while helping to improve vehicle posture. With a new Vehicle Stability Control actuator and on-demand pressurizing system using a high-performance pump motor, this braking system provides a natural and responsive brake pedal feel. The front-to-rear brake force distribution is controlled by independent pressure regulation, contributing to a comfortable drive and stable vehicle composure while braking. Furthermore, ergonomic brake pedal pads are used for easy pedal changes and pedal depression.

In addition, the Vehicle Braking Posture Control program adjusts front-to-rear brake force distribution according to a driver's braking input as well as the suspension's vertical inputs. This aims to improve handling and body posture while braking and turning.

A standard rack assist-type Electric Power Steering (EPS) system reduces the amount of steering input needed by utilizing a new motor and reduction gear setup that is installed parallel to the steering box. Moreover, a Motor Control Unit (MCU) with an integrated motor and motor current control ECU, reduces the EPS' size footprint and minimizes operational noise.

A Look to Reflect Performance

Lexus' identifiable spindle grille is replaced by the Lexus spindle body, as introduced with the 2023 Lexus RX, showcasing a distinctive roof spoiler to suppress aerodynamic force. The roof, trunk and undercover are shaped to reduce aerodynamic drag and allow air to flow smoothly across the vehicle.

From the side, the front fenders seemingly wrap around the wheels and tires, then flow rearward to express a forward-moving momentum. The strong three-dimensional shape over the rear fenders emphasizes the tires' width. In addition, the flowing contrast of the doors' sculpted shapes aims to achieve a captivating and scintillating surface.

Having no engine to cool results in a low hood design and minimal front grille opening. The grille uses a grille shutter to improve aerodynamic efficiency. When cooling air is not required, the grille shutter is closed to reduce air resistance. In the rear, the RZ features a clean and simple horizontal design matched to hips highlighting the wide stance; it is a look that accentuates the RZ's torque-filled performance identity.

An available illuminated front "L" emblem indicates charging status and discreetly incorporates a millimeter wave radar sensor. A spelled-out LEXUS logo (as seen on the NX, LX, and RX) resides on the horizontal rear combination lamps. The lowered center portion of the red lens accentuates the logo type and emphasizes a sharp look.

The RZ is offered in two grades, Premium and Luxury. The RZ Premium rides atop 18-inch wheels in a Dark Gray Metallic finish while the Luxury is outfitted with 20-inch wheels in a Black and Machined finish.

Copper Crest[1], first introduced to the North American market with the 2023 RX, is available as an exterior color in 2024 with other exterior color options including Caviar, Iridium[2], Cloudburst Gray[2], Eminent White Pearl[2] and Ether[2]. Copper Crest[4] is also available as a bi-tone paint option along with Ether[3] and Cloudburst Gray[3].

[1]Available for an additional $595 charge

[2]Available for an additional $500 charge

[3]Available for an additional $1,200 charge

[4] Available for an additional $1,295 charge

An Expansive and Minimalistic Interior Space

The RZ's cabin is a minimalist, yet airy and maximally appointed luxury environment. RZ's interior layout benefits from a compact powertrain with a low platform and thoughtful wheel placement. RZ's low hood allows for better front passenger forward visibility and the available panorama glass roof further lends a sense of wide openness and front-to-rear expansiveness. The goal of eliminating a roller shade function and adopting a smart-function low-e coating is to help the panorama glass roof suppress radiant heat. A dimming function, which instantly reduces the amount of light entering the cabin area, is available with the Dynamic Sky™ panorama glass roof option.

The cockpit is based on the concept of *tazuna*, or a horse's rein. It features a driver-focused interior layout inspired by the communicative relationship between horse and rider. Key *tazuna* elements include steering wheel-mounted switches, an optimally positioned instrument panel for improved field of view and an available 10-inch head-up display (HUD). Controls for the navigation functions, audio system, and driving mode selection are within reach.

RZ introduces the intuitive shift-by-wire technology which includes a dial-type shift knob on the center console to select drive modes by turning it in a clockwise and counterclockwise motion. With no mechanical connections, the compact setup improves driver convenience while keeping in line with the minimalistic cabin space.

The concept of *oto-kukan*, Japanese for "sound space", lends to the RZ's peaceful interior as it aims to eliminate unwanted exterior sounds from entering the passenger cabin. Features helping the vehicle achieve a serene environment include: a slimmer A-pillar cross-section (to better manage passing airflow); a continuous hood seal rubber that reduces wind entry and turbulence; sound-dampening carpets, glass, and foam; and Active Sound Control (ASC). ASC directs EV system sound frequencies into the cabin to cancel out unwanted penetrating noise, giving the driver clearer vehicle feedback.

Radiant Heating

For those seeking a cozy in-cabin experience, available radiant heaters placed at the bottom of the front console quickly and directly heat front passengers' legs and feet.

Cargo Capacity

With radiant heaters in place of a traditional glovebox, front passengers can stow their belongings underneath the center console, within the two-way opening console box, in the front tray, or in doors' storage pockets. Cargo capacity at the rear easily accommodates three golf bags, or a combination of one large (31" x 21.5"x 13") and one medium (29" x 20.5" x 12.5") suitcase. Below the cargo hold's deck, additional space is available to stow smaller items as well as the provided dual-voltage charging cable for 120V and 240V outlets.

Available Interior Combinations

The RZ has three interior colors options: Thunderstorm and Macadamia, Palomino, and Dapple Gray. Available ambient Illumination, a gentle, indirect cabin illumination, compliments the interior with a thematic multi-color option standard on the Luxury grade that gives users a choice of 50 colors and 14 themes. An all-new and standard Shadow Illumination creates a decorative pattern on the door trim.

Premium grade interiors have NuLuxe® trim, while Ultrasuede® trim, an upholstery material made from bio-based sustainable materials, is standard on Luxury grade. In addition, Luxury grade also has available all-new Tsuyasumi film, which brings a shiny charcoal effect to the center console. The film overlays layers of individual veins and a natural cinder-like black color to create the final highly textured, modern expression.

Technology and Convenience Features

Five USB Ports
Ready to handle all device charging needs, the RZ is equipped with five USB ports in the cabin. Up front, three USB Type-C ports are located on the lower instrument panel with a wireless charger just beneath. For second-row passengers, two Type-C USB ports are located at the bottom rear of the center console.

Lexus Interface with 14-inch touchscreen
A standard 14-inch high-definition touchscreen provides easy-to-use controls and clear information to the driver and front-seat passengers. The glass screens utilize a high-adhesion, anti-reflective coating to realize a vivid display. Menu operations are similar to those found on smartphones and tablets. For additional ease of use by driver and passenger, a center knob located at the screen's bottom edge controls power on/off and volume.

Cloud Navigation*
With a Drive Connect trial or subscription, this 100% cloud-capable system integrates with Google points of interest (POI) data to provide faster and more up-to-date search results, more accurate directions and alternate routes based on current traffic conditions. Offline mode is designed to detect a potential loss of signal and download applicable maps and services in advance.

Intelligent Assistant*
With an active Drive Connect trial or subscription, Intelligent Assistant offers extra convenience for customers. Designed with dual microphones, enhanced noise cancellation and seat detection capabilities for greater voice-recognition accuracy, by simply saying "Hey Lexus," available voice commands can operate certain interior amenities, such as navigation, multimedia and climate control.

Digital Key*
With an active Remote Connect trial or subscription, customers can utilize their compatible smartphone as a vehicle key through the Lexus app. Digital Key can allow for the control of door locks and enables additional usability when car sharing, during valet parking or home delivery of packages to the RZ's cargo area.

Connectivity*
RZ features Bluetooth® phone connectivity, with support for standard wireless Apple CarPlay® and Android Auto™ compatibility. With further connectivity, RZ offers available Wi-Fi Connect with 4G connectivity for up to five devices. Adding to the already robust offering of audio playback ability with HD Radio®, USB data and a SiriusXM® Platinum Plan 3-month trial subscription, Wi-Fi Connect also enables the Integrated Streaming feature, providing customers the ability to link their separate Apple Music® and Amazon Music subscriptions to the vehicle for onboard control.

Remote Connect and Charging*
With an active Remote Connect trial or subscription, the Lexus app can be used to remotely lock or unlock the doors, start the vehicle and adjust the climate control, check vehicle health and more. Remote charging capabilities are also included with Remote Connect on the RZ, which includes the ability to check charging status, start/stop charging with a vehicle that is already plugged in and even edit charging schedules, allowing for enhanced controls of the RZ's charging. The Lexus App also provides an easy-to-use map to find charging station locations.

Safety Connect*
Customers can use the Lexus Safety Connect trial for access to exceptional service in case of emergency/vehicle theft.

Service Connect*
Available via the Lexus app, the Service Connect trial can connect a compatible Lexus and dealer to provide detailed maintenance reminders and Vehicle Health Reports.

Head-Up Display (Available)
Essential information such as a speedometer and shift position, and other information including navigational directions and the information displayed during the use of Dynamic Radar Cruise Control, Lane Tracing Assist and Road Sign Assist, can be safely displayed in front of the driver's field of vision. The display's positioning can be linked to a driver's seat position memory function.

Mark Levinson® Surround Sound (Available)
RZ has an available Mark Levinson® Surround Sound system with 13-speakers tuned for the RZ's cabin, delivering high-quality audio.

Advanced Park (Available)
The intuitive driver's aid system can help in various maneuvers, such as when perpendicular parking/exiting and parallel parking/exiting. Four Parallel View Monitor (PVM) cameras and 12 ultrasonic sensors provide visual data to support the automatic control of steering, accelerator, brake, and shift operations.

Digital Latch with Safe Exit Assist
When exiting the luxury crossover, standard Digital Latch and Safe Exit Assist can detect a vehicle or bicycle approaching from the rear and help prevent the occupant from opening the door if it senses danger.

Traffic Jam Assist (Available)*
With an active Drive Connect trial or subscription, this available technology can monitor surrounding traffic in condensed, low-speed driving situations on limited access highways and automatically move forward and brake as needed to keep a set following distance behind the preceding vehicle. In addition to providing hands-free steering assistance, this system can automatically bring the vehicle to a complete stop, then resume its path of travel as forward traffic begins to move.

*Available by subscription. 4G network dependent. See lexus.com/interface for details.

Lexus Safety System+ 3.0

Pre-Collision System (PCS) with Pedestrian Detection
Pre-Collision System (PCS) with Pedestrian Detection is designed to help detect a vehicle, pedestrian, bicyclist or motorcyclist and provide an audio/visual forward collision warning under certain circumstances. If the driver does not react, the system is designed to provide automatic emergency braking at speeds between approximately 7-110 mph. PCS uses a camera and millimeter-wave radar for enhanced performance and reliability. New features for LSS+ 3.0 include:

- **Risk Avoidance Emergency Steer Assist** – designed to provide additional steering torque during an emergency maneuver initiated by the driver, enhancing vehicle stability and helping prevent lane departure. This steering support function is designed to operate when the Pre-Collision System is turned ON, the turn signal is not being operated, the speed of the vehicle is between 25-50 mph and the relative speed to the detected object is between 25-50 mph.

- **Left Turn Oncoming Vehicle Detection/Braking** – designed to provide a warning and automatic braking if the system determines a driver is turning left in front of an oncoming vehicle in certain daytime conditions.

All-speed Dynamic Radar Cruise Control (DRCC)
An adaptive cruise control system intended for highway use that uses radar and camera technology to help keep the vehicle at a preset speed and distance from vehicles ahead, even in stop-and-go traffic. If the system detects the vehicle getting closer than the preset distance, it automatically slows the vehicle — even to a complete stop. At highway speeds, when the road ahead clears, the vehicle returns to its preset speed. For LSS+ 3.0, the new Curve Speed Management feature is added, which will aid to manage speed in curves when cruise control is engaged and may lower vehicle speed if needed.

Lane Tracing Assist (LTA)
When Full-Speed Range Dynamic Radar Cruise Control (DRCC) is enabled and lane markers are detected, Lane Tracing Assist (LTA) uses the lines on the road and/or preceding vehicles to provide active driving assistance and help keep the vehicle centered in its lane.

Lane Departure Alert with Steering Assist (LDA w/SA) – When white/yellow lane markings or certain road edge boundary lines are detected at speeds above 30 mph, Lane Departure Alert with Steering Assist (LDA w/ SA) is designed to issue an audio/visual lane departure warning if an inadvertent lane departure is detected. If the driver does not take corrective action, the system is also designed to provide gentle corrective steering for lane keeping assistance.

Road Sign Assist (RSA) – Using an intelligent camera, Road Sign Assist (RSA) is designed to detect speed limit signs, stop signs, Do Not Enter signs, yield signs and certain warning signs, and display an icon of the sign on the Multi-Information Display (MID).

Proactive Driving Assist (PDA) – When system operating conditions are met, using the vehicle's camera and radar, Proactive Driving Assist (PDA) provides gentle braking into curves or gentle braking and/or steering to help support driving tasks such as distance control between the vehicle and a preceding vehicle, pedestrian or bicyclist.

Charging at Home or on the Go
For 2024, the RZ comes equipped with a new dual-voltage charging cable for 120V and 240V outlets. All models are also equipped with a CCS1 (Combined Charging System (CCS)) socket for at-home and public charging. Under ideal conditions, the RZ can charge from low battery light to full charge in approximately 9.5 hours with a Level 2 charger and from low battery light to 80% charge in approximately 30-35 minutes with a DC fast charger[4].

Further supporting at-home charging, participating Lexus dealers offer an option to purchase a ChargePoint® Home Flex Level 2 charger at the dealership or directly from ChargePoint online. ChargePoint Home Flex is ENERGY STAR® certified and Wi-Fi enabled, can be installed indoors or outdoors, and comes with a 23-foot charging cable to support different parking configurations. With the ChargePoint® Home Flex connected charger, under ideal conditions, electric vehicles can be charged up to nine times faster than with a standard 120V outlet. The home charger can charge up to 25 miles of range per hour and fully charge the battery when plugged in overnight.

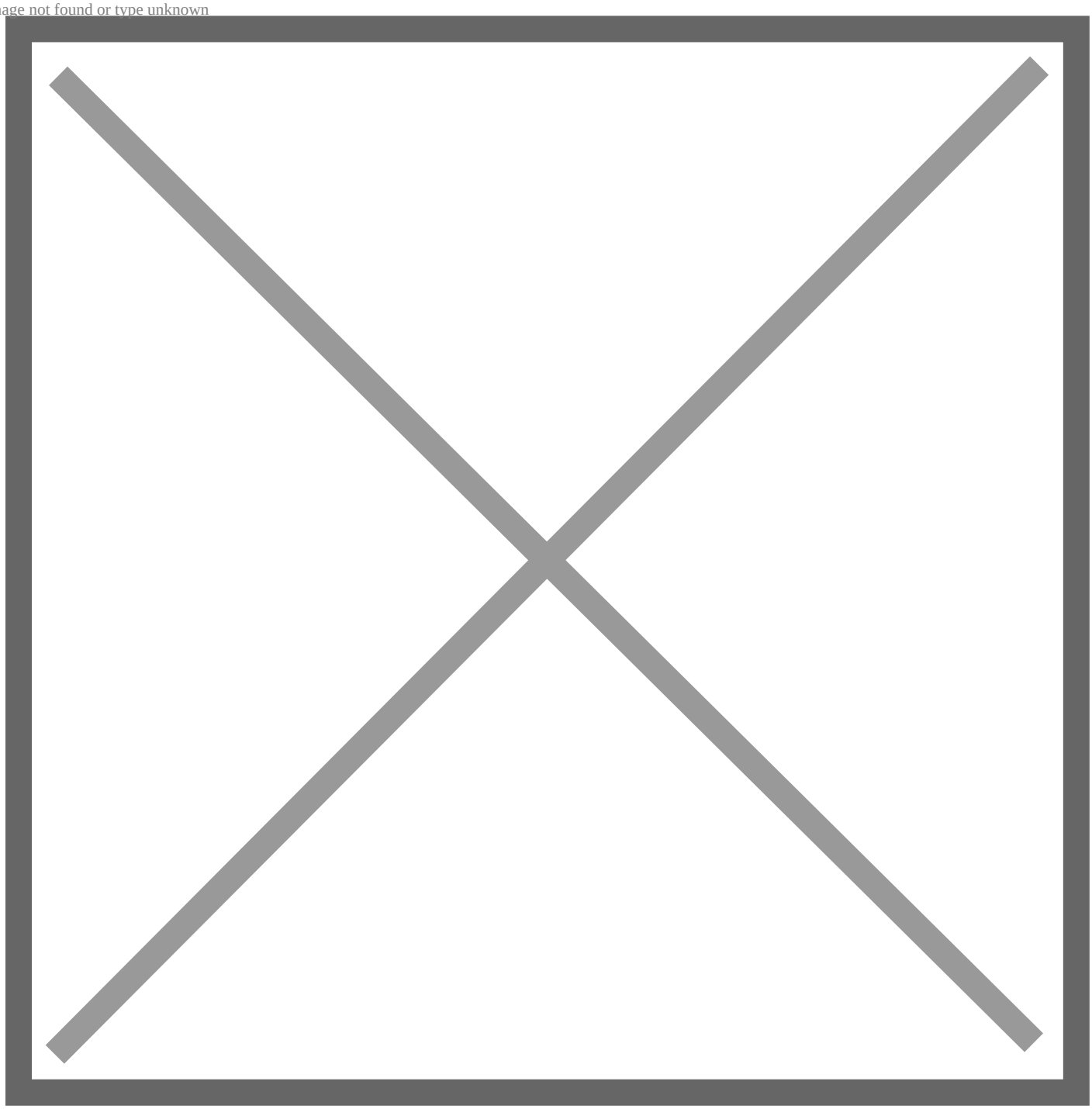
To learn about installation options for the ChargePoint Home Flex, network providers such as Qmerit can help guide RZ customers through the process. The end-to-end services offered by Qmerit include locating a certified electrician to install the EV charger, providing an initial free quote, and additional services. Customers will be provided information on Qmerit during their purchase checkout process at participating dealers.

Lexus Owner Benefits
RZ owners and lessees have access to a concierge guest experience with a dedicated team available via phone to answer BEV questions. The Lexus Reserve program will continue to provide RZ customers with an exclusive complimentary rental service to anyone who purchases/leases a 2023 or 2024 RZ. The dealer-based Lexus Reserve program gives customers 30 complimentary reserve days to be used over the course of three years from the date of purchase/lease.

The RZ is built at the Motomachi Plant in Toyota City, Japan, and goes on sale in December.

[4]DC Charging time will vary significantly depending on a number of different factors, including weather. As temperatures drop below freezing, this increase can be significant. Accessory use, battery level and condition, charger specifications and charging multiple times per day also can negatively affect charging experience.

Image not found or type unknown



Updated Nov. 12, 2024.