Toyota’s Fourth Generation 2020 Highlander Redesigned from the Ground Up

December 18, 2019

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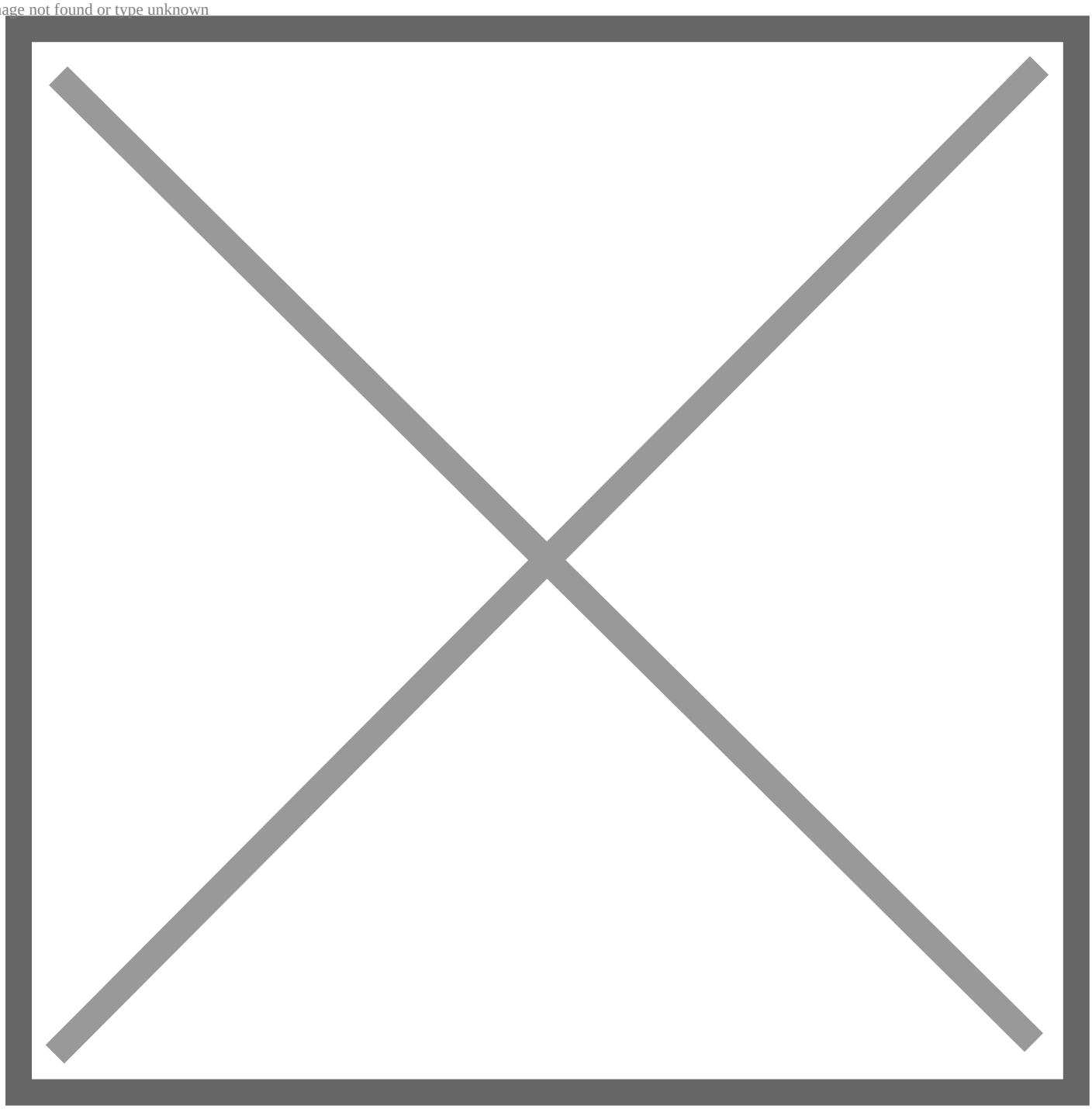

PLANO, Texas (December 18, 2019) – The fourth-generation Toyota Highlander brings a new level of bold, distinctive design to a foundation built on safety, comfort, quality, durability and reliability. The Highlander gas model will be available this month and the Highlander hybrid will make its way to customers in February 2020.

Just as the first RAV4 launched the compact crossover SUV segment 22 years ago, the original Highlander redefined the midsize family SUV when it arrived in 2001. At a time when most midsize SUVs were truck-based, the Highlander's unibody structure with four-wheel independent suspension quickly became the template for a new segment of more comfortable and family-friendly SUVs. After adding a third row, the Highlander not only grew in size, but is also now the best-selling retail model in the segment since 2016.

Now, the 2020 Highlander amplifies all qualities while taking on a dramatic new design direction that combines a powerful SUV presence with sophisticated detailing.

The new sophisticated SUV sits on a new vehicle platform called Toyota New Global Architecture (TNGA-K). This robust new foundation, shared with other Toyota models, enables even greater capability, comfort and safety than before.

The fourth-generation Highlander offers the choice between a powerful V6 or new-generation hybrid powertrain, with the gas version offering up to a manufacturer-estimated 24 MPG combined fuel economy and the Hybrid offering up to a manufacturer-estimated 36 combined MPG.

Whether they're young families or empty nesters exploring a new chapter in life, safety remains a top priority for Highlander customers. Toyota Safety Sense 2.0 comes standard in all models in the 2020 Highlander. This comprehensive active safety system includes:

- Pre-Collision System with Pedestrian Detection (PCS w/PD)
- Full-Speed Range Dynamic Radar Cruise Control (DRCC)
- Lane Departure Alert with Steering Assist (LDA w/SA)
- Automatic High Beam (AHB)
- (New) Lane Tracing Assist (LTA)
- (New) Road Sign Assist (RSA)

Pre-Collision System with Pedestrian Detection offers automatic braking capability under certain circumstances should the driver not react in time in a system-detected emergency situation. Blind Spot Monitor (BSM) with Rear Cross Traffic Alert (RCTA), Parking Support Braking and Intelligent Clearance Sonar (ICS) are available depending on the model grade.

The 2020 Highlander delivers renowned Toyota value in a choice of five grades, starting with a new L grade, then layering amenities and technology in LE, XLE, Limited and the top-of line Platinum. (The hybrid is offered on all but the L grade.)

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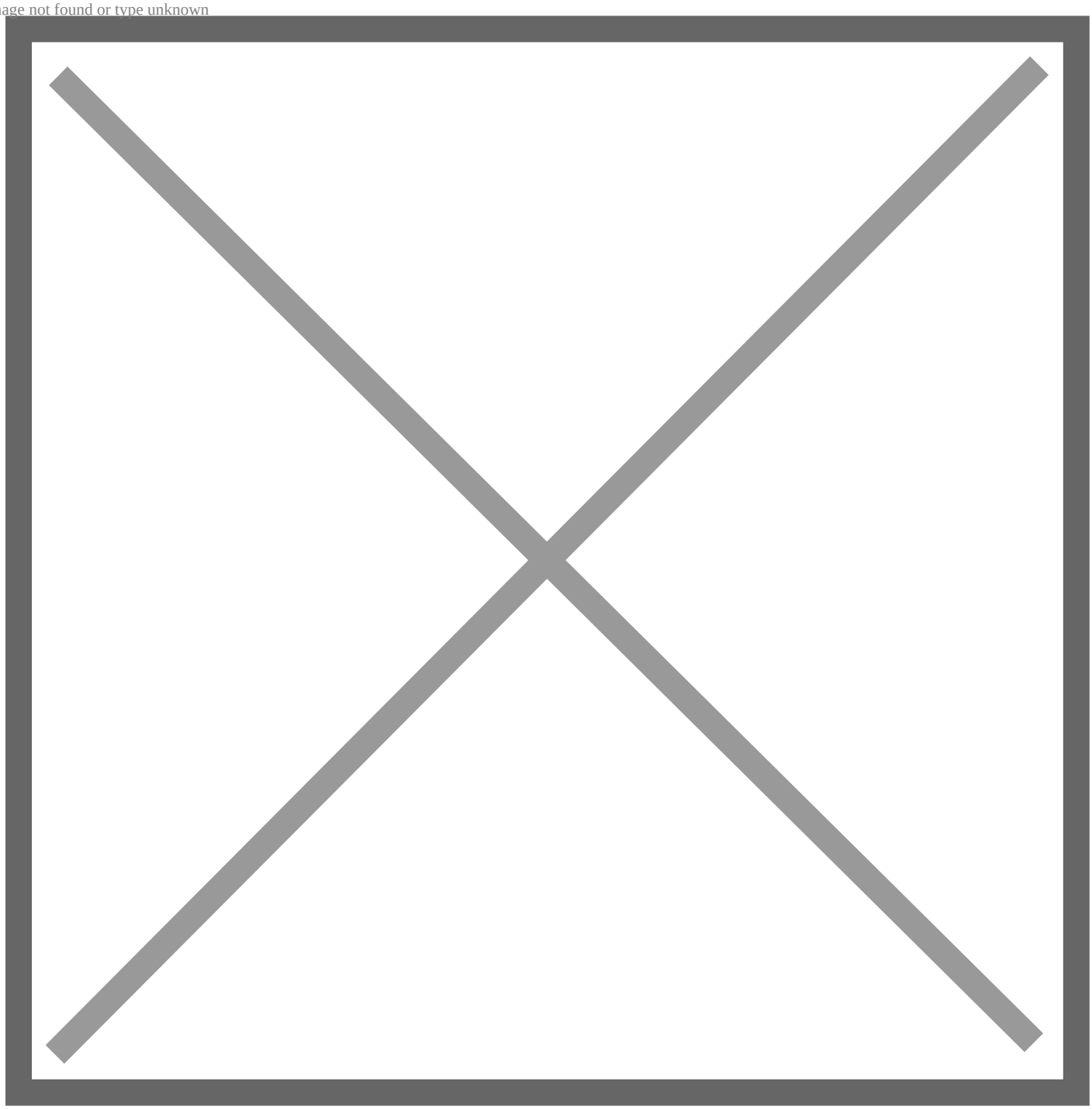


The 2020 Highlander offers cutting-edge entertainment and connectivity for all ages through its intuitive and versatile multimedia system, including a new 12.3-inch touchscreen display on the Platinum grade and 8-inch on the other models. The available new JBL Premium Sound System delivers a whopping 1,200 watts of power to turn any music source into a mobile concert.

The midsize SUV segment has become fiercely competitive, and the 2020 Toyota Highlander is ready to take on all.

The Strong, Athletic Type

A sculpted new shape with chiseled lines gives the 2020 Highlander a more powerful stance, yet with a modern, sophisticated attitude. The 2020 Highlander remains a family-friendly SUV, now with capability for bigger family adventures.

Setting off the new design, the L, LE and XLE grades feature a black front grille with silver trim, while the Limited and Platinum grades are distinguished by a black grille with chrome trim and chrome-plated lower rear fascia, premium projector headlamps and the Highlander's first-ever 20-inch alloy wheels. The Platinum grade stands apart with silver painted front bumper and rear fascia and a unique 20-inch wheel.

Accentuating the 2020 Highlander's bold lines, the exterior color palette carries over three colors from 2019 (Blizzard Pearl ($425 option), Celestial Silver Metallic and Midnight Black Metallic) while adding five new ones: Magnetic Gray Metallic, Moon Dust (a striking blue premium paint), Ruby Flare Pearl (a daring red premium paint), Blueprint and Opulent Amber (a deep, luxurious brown).

While Highlander's new design will turn heads everywhere it goes, it's also highly functional. Greater aerodynamic efficiency reduces wind noise while enhancing vehicle stability, and even the taillights and side mirror designs lend a hand.

The fourth-generation Highlander is 2.36 inches (60mm) longer, all in the cargo area to add even greater cargo volume than before. The second row slides an extra 1.2 inches further up to increase distance between the second and third rows.

The TNGA-K platform, which makes extensive use of high-strength steel, gives the Highlander a stiffer unibody structure than the previous model. Its inherent strength allows tuning for the front strut and rear multi-link suspension that enhances agility and a smaller turning circle while also providing a smoother and quieter ride than before.

The presence of *takumi* is evident whenever the driver experiences the Highlander's premium touch and feel in everyday driving. Throughout vehicle development, these highly trained master craftsmen focused on the finest technical details to ensure a higher level of operating smoothness in all driving conditions,especially at everyday speeds.

Take It All with You

Looking sporty does not come at the expense of practicality in the 2020 Highlander. The L and LE grades come standard with a second-row bench for seating for eight, while the XLE and Limited grade come standard with a Captain's Chair second row with seating for seven and the option of a second-row bench for seating for eight. Finally, the Platinum grade will come standard with a Captain's Chair second row with seating for seven. Either way, the large rear doors provide easy access, while versatile seat folding features make it easy to enter the third row. And, passengers in the third row stay comfortable thanks to standard three-zone climate control that ensures ample flow of warmed or cooled air.

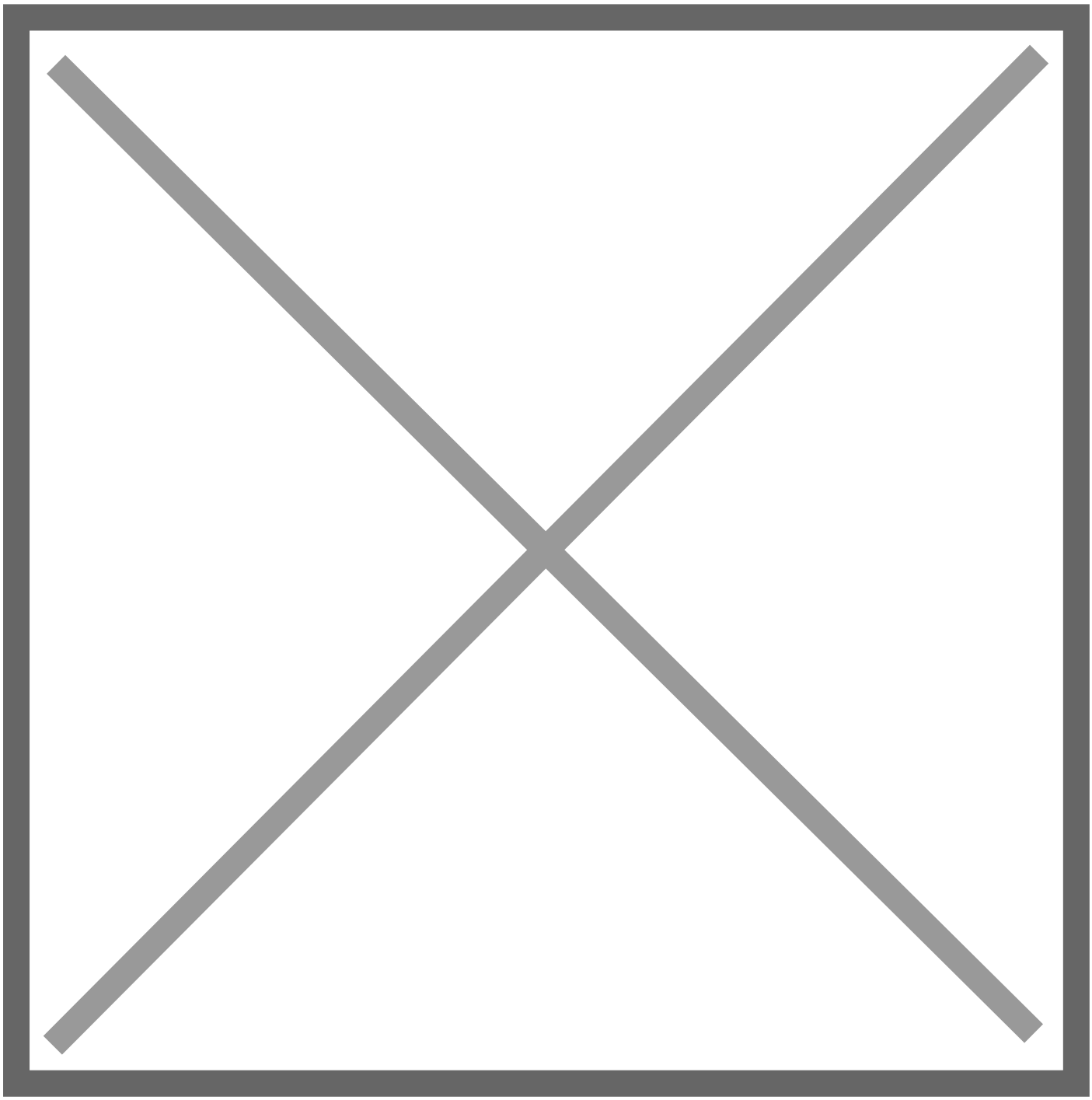
With all seat rows in use, Highlander offers 16.0 cu. ft. of carrying space behind the third row. Folding the 60/40 split fold-flat third-row seatbacks opens the space to 48.4 cu. ft., and then folding the second row raises that to 84.3 cu. ft. The versatile cargo area makes the most of its additional length with side surfaces and pockets shaped for maximum space usage.

Power, Performance and Panache … with Efficiency

Power and efficiency are a whole lot sexier when wrapped in Highlander’s striking design. The 2020 Highlander offers a choice between two advanced powertrains, a gas V6 or a new version of the Toyota Hybrid System.

The 295-horsepower 3.5-liter V6 is the epitome of smoothness. Its Toyota-innovated D-4S Injection system combines direct fuel injection with port fuel injectors to optimize efficiency, power and emissions in all conditions. Dual Variable Valve Timing with intelligence (Dual VVT-i) likewise ensures ideal response and efficiency at all engine speeds.

That translates into 295 horsepower and 263 lb.-ft. of torque, which further translates into exemplary everyday performance and generous towing capability. The Direct Shift 8-speed automatic transmission maximizes Highlander’s acceleration and highway merging capability while operating seamlessly and transparently.



On V6 models, the available towing package enables a 5,000-pound towing capacity. The package includes a heavy-duty radiator with engine oil cooler and improved fan performance. Trailer Sway Control (TSC) uses the Vehicle Stability Control to help control unwanted trailer movement.

Why use fuel when you don’t need to? The Highlander’s standard Stop and Start Engine System allows the engine to shut off when the vehicle comes to a complete stop, and then instantly restarts when the driver’s foot lifts from the brake pedal. This technology reduces fuel consumption and cuts emissions.

Hybrid Aims Even Higher

Toyota made “hybrid” synonymous with high fuel efficiency more than 20 years ago. Later, Toyota introduced the first hybrid SUV in its class, the 2006 Highlander. Leave it to Toyota to again raise the bar for hybrid SUV functionality by making the 2020 model the most fuel-efficient Highlander Hybrid ever.

The new-generation Toyota Hybrid System in the 2020 Highlander Hybrid combines a high-efficiency 2.5-liter DOHC four-cylinder engine with two electric motors in a system that’s more compact, and more efficient than before. The gas engine employs Variable Valve Timing-intelligent system by Electric motor (VVT-iE) on the intake camshaft, and VVT-i on the exhaust camshaft. A variable cooling system (electric water pump, electric thermostat) and a fully variable oil pump further improve engine efficiency.

The bottom line is an eye opener for the efficiency-minded: 243 total system horsepower and up to a manufacturer-estimated 36 combined MPG. The latter is a 24-percent improvement over the previous-generation Highlander Hybrid’s 29 combined MPG. Yet, Highlander Hybrid still delivers the everyday acceleration, power and responsiveness that family buyers expect. In another Highlander first, the hybrid is now available in either 2WD or AWD, further expanding hybrid technology to a new group of buyers.

The transaxle mounts the electric motors (MG1 and MG2) coaxially rather than in-line, and the resulting smaller and lighter package reduces frictional losses. The gas engine and MG2 work in concert to deliver dynamic performance, while both MG1 and MG2 charge the hybrid battery.

To reduce the transaxle’s size and weight, the reduction gear is now a parallel shaft gear, rather than a planetary gear, and a new multi-function gear integrates the power-split planetary ring gear, parking gear, and counter-drive gear. New computer integration and a smaller, lighter power stack installed directly above the transaxle reduce energy transmission losses.

The battery pack is small enough to be installed under the rear seats, so it does not take up any cargo or passenger space.

Seamless Everyday Performance

The Highlander hybrid delivers its exemplary fuel economy and performance without calling attention to its high-tech powertrain operation. Quite the contrary, like all Toyota Hybrid vehicles, it simply goes about its business in a transparent way. For example, the new system optimizes the level of electric motor assistance and gas engine speed without the engine running at high revs. Engine speed is synchronized with vehicle speed, yielding effortless and quiet acceleration.

As on many modern vehicles, the Highlander hybrid offers selectable NORMAL, ECO and SPORT driving modes that let the driver choose the vehicle’s performance personality. The bonus is the EV mode, which allows electric-only driving at low speeds for short distances.

SPORT mode unlocks boost from the hybrid system for improved acceleration response. ECO mode gets maximum efficiency from the fuel and battery, while NORMAL mode is ideal for everyday driving.

Special, easy-to-use hybrid tech adds an element of control and fun. Using a sequential shifting feature, the driver can “downshift” to increase the regenerative braking in steps, which fosters greater control when driving in hilly areas, for example.

The 2020 Highlander hybrid can also coach the driver to drive as economically as possible. For example, an accelerator guide function suggests an acceleration level to the driver according to the driving conditions, and a

scoring function adds a measure of fun-to-eco driving.

Features for More Efficiency

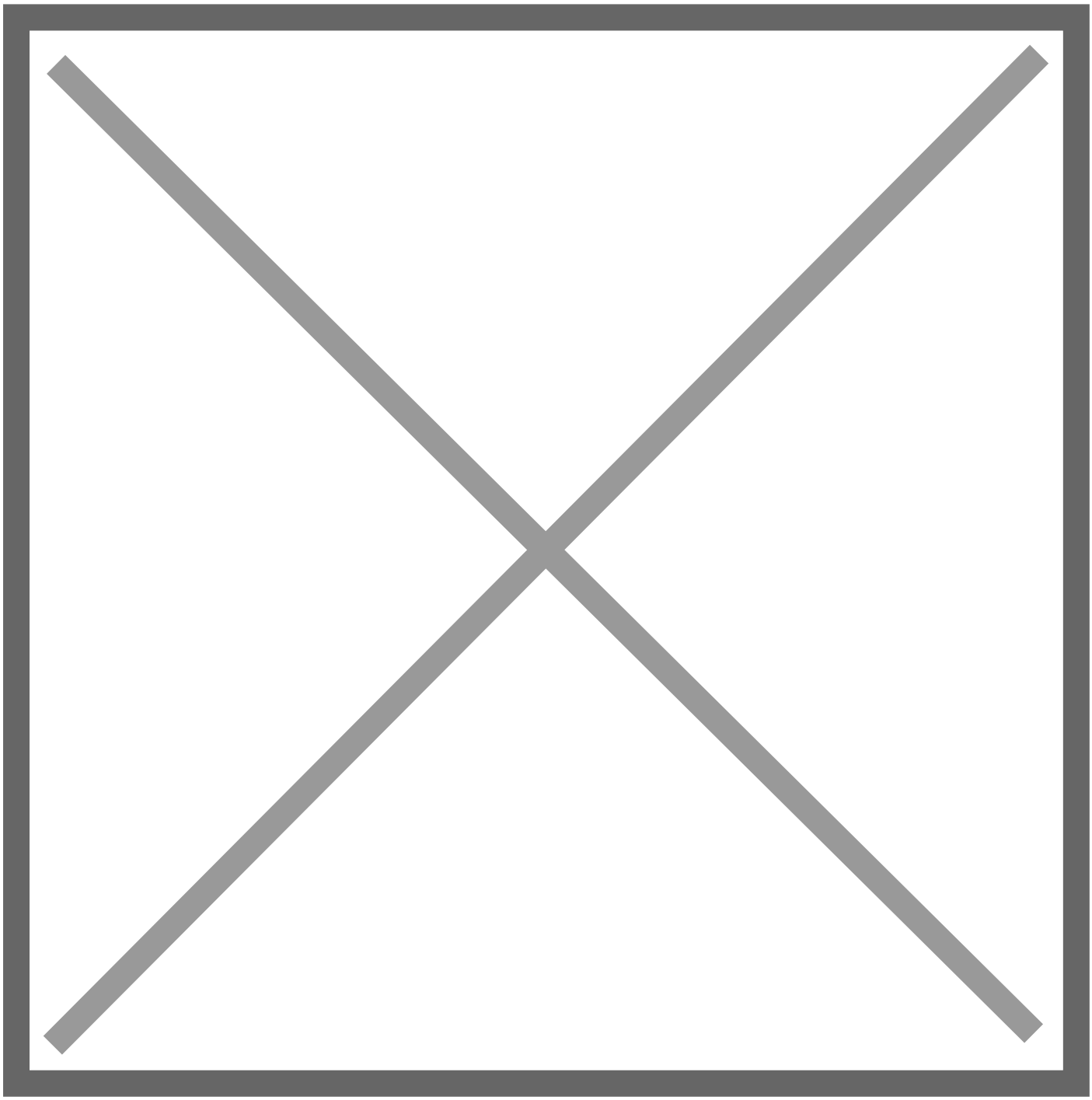
Highlander hybrid's Predictive Efficient Drive (PED) analyzes the driver's daily driving habits and upcoming road and traffic conditions to more efficiently charge and discharge the hybrid battery accordingly alongside actual driving.

The more the vehicle is driven, the more data is accumulated, contributing to practical fuel efficiency. Many actual roads chosen to represent common usage scenarios, such as in urban congestion or on mountain roads, were driven on and analyzed to create control that feels natural to the driver when operating to enable more efficient driving.

All-Wheel Drive Gets Smarter

The 2020 Highlander gets a grip on any road with a choice of front-wheel drive or three different available all-wheel drive systems — two for the V6 models and a unique AWD system for the Highlander Hybrid. For the Highlander Gas L, LE and XLE models, the optional AWD system can send up to 50 percent of available torque to the rear wheels to counter wheel slip when necessary.

Sounding like something from a high-end sports car, Dynamic Torque Vectoring AWD with Drive Mode Select and Driveline Disconnect is available for the Highlander Limited and Platinum for even greater agility and capability. In addition to governing torque distribution between the front and rear wheels, this advanced system uses special couplings to actively manage torque distribution between the left and right rear wheels.



Dynamic Torque Vectoring AWD doesn’t need wheel slippage before springing into action. Rather, a sophisticated AWD Integrated Management (AIM) system manages Electric Power Steering (EPS), throttle control, transmission shift control and drive torque distribution to continually optimize handling.

Using the Multi-Terrain Select control dial on the console, the driver can maximize traction when driving through inclement weather or road conditions. Mud & Sand mode works well for beach driving, while Rock & Dirt mode optimizes AWD traction for trails. The driver can monitor, in real time, torque allocation and slip control on the Multi-Information Display (MID).

In addition, Highlander models include the following features for optimal on-road and off-road performance and safety:

- Hill Start Assist Control (HAC)
- Trailer Sway Control (TSC)
- Downhill Assist Control (DAC)

All-wheel drive is a great traction partner, but it's not needed all the time, such as during steady highway cruising. In such situations, Rear Driveline Disconnect automatically disengages drive to the rear wheels and stops the propeller shaft's rotation. As one might guess, that reduces the energy needed to propel the vehicle and therefore reduces fuel consumption. When AWD is needed, the system instantly re-engages, without the driver even noticing.

Hybrid AWD

As with the AWD system in the previous Highlander Hybrid, the 2020 model's AWD employs a separate rear-mounted electric motor to power the rear wheels when needed. Like the hybrid powertrain itself, the AWD works seamlessly and transparently.

The rear electric motor operates independently, with no mechanical connection between the transmission and the rear wheels. Preemptively distributing more driving force to the rear wheels, such as when accelerating, helps suppress front wheel slip during off-the-line starts. The system also enhances cornering agility by helping to reduce understeer. And, when venturing onto a trail, the increased rear-wheel torque helps move the Highlander hybrid confidently over rough or slippery surfaces.

A New Level of Comfort

From the L grade to the top-of-line Platinum, the 2020 Highlander offers its plushest accommodations ever. Designers took inspiration from luxury crafted interiors to create a more premium ambience. Details include softer padded surfaces and a more tailored look with stitching that continues from the door trim to the instrument panel. The dash integrates the multimedia and HVAC controls in an elegant and functional way.

The 2020 Highlander cabin offers improved functionality throughout, from a center console that offers available Qi wireless charging to plenty of storage spaces and USB charging ports. On Limited and Platinum grades, new ambient LED lighting sets a relaxing mood. Inset steering wheel controls are a modern luxury touch on all grades.

Highlanders have long been renowned for a quiet ride, and with the high-strength TNGA platform, Toyota pushes the bar even higher. Sound-damping and soundproofing materials have been optimized throughout the vehicle, with the *takumi* approach focusing particularly on minimizing noise in the frequencies that interfere with conversation. As an example, Limited and Platinum grades have adopted laminated front side window glass to further isolate the driver from outside noise.

The seating color palette enhances the sense of luxury permeating the 2020 Highlander. The L and LE grades offer comfortable woven cloth in Graphite or Black; the XLE offers embossed Softex® artificial leather-trim in Harvest Beige, Graphite or Black, while the Limited offers those colors in perforated leather-trim. The top-of-line Platinum grade, the most luxurious Highlander ever offered, exclusively features embossed, perforated leather-trim in those three colors plus a luxuriously delicious brown called Glazed Caramel.

Multitalented Multimedia

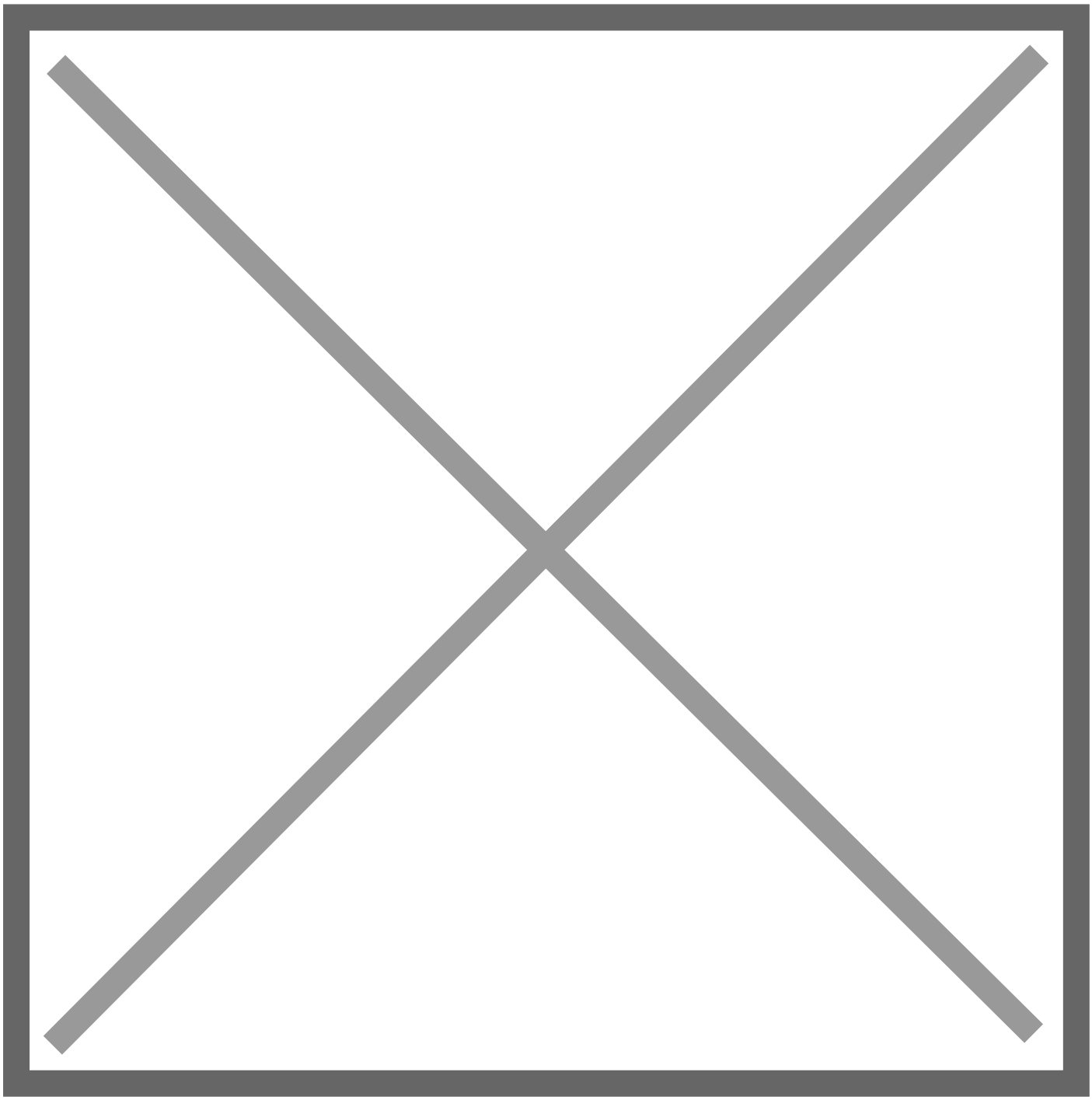
However passengers listen to music and connect with their worlds, the 2020 Highlander is ready with the latest

multimedia systems. All grades come standard with Apple Car Play®, Android Auto, Alexa In-Car compatibility, Waze, SiriusXM®, and Wi-Fi connectivity.

All Highlander models come equipped with Toyota Safety Connect with a one-year trial subscription.

LE and above grades offer Service and Remote Connectivity. A move up to XLE or Limited grade offers available Dynamic Navigation. A move up to Platinum grade offers standard Dynamic Navigation and the 12.3-inch screen.

The JBL® Premium Audio System is standard for Limited and Platinum grades and rocks music of all genres with 1,200 watts of power playing through 11 speakers in nine locations. Clari-Fi® technology breathes new life into compressed digital music formats, with the result like a mobile concert. The system will not, however, settle arguments over which music to play.



Exceptional Toyota Value, Naturally

Toyota's typical outstanding value is clearly evident in the Highlander L grade, where the standard equipment list includes features that one might expect in an upgraded model:

L:

- Toyota Safety Sense 2.0
- 18-in. alloy wheels

- 3-zone automatic climate control
- 2-in. Multi-information Display (MID) in instrument panel
- 8-way power driver's seat
- Auto up/down for all power windows
- Multimedia with 8-inch touchscreen display
- Front seat reading lights and cargo area light.
- LED headlamps and taillamps
- Privacy glass on rear side, quarter and liftgate windows
- Smart Key entry on front doors and back door
- Auto LED headlamps with Auto High Beam

LE adds over L:

- Power liftgate
- Blind Spot Monitor
- Additional multimedia capability
- LED fog lamps
- Leather-trimmed steering wheel and shift knob

XLE adds over LE:

- 10-way power driver's seat
- 2nd-row sun shades
- 4-way power front passenger seat
- 7-in. Multi-information display
- Auto dimming rear-view mirror with garage door opener
- Plated interior door handle
- Heated front seats
- LED fog lamps
- Machined-face alloy wheels
- Captain's Chairs second row (standard)
- Power tilt and slide moon roof
- Roof rails
- SofTex®-trimmed seats and door trim

Limited adds over XLE:

- 120V 2nd-row power outlet
- 20-in. Limited style alloy wheels
- Ambient interior lighting
- Cargo area cover
- Driver's seat memory
- Hand's-free power liftgate
- Heated and ventilated front seats
- "Highlander" projector puddle lamps
- Perforated leather trimmed seats in Beige, Gray or Black
- Metal door scuff plates
- Projector beam headlamp with chrome bezels and separate, stylized DRLs
- Wood interior trim
- JBL® Audio System as standard

- Embedded navigation system
- Laminated front side window glass
- Premium Projector style headlamp

Platinum adds over Limited:

- Segment-leading 12.3-in. Multimedia head unit
- 20-in Platinum style wheels
- Adaptive, self-leveling headlamps
- Additional leather seating color choice: Glazed Caramel
- Digital display rear view mirror
- Embossed, perforated leather trimmed seats
- Head-up display
- Heated 2nd-row seats
- Illuminated door scuff plates
- Panoramic moonroof
- Rain-sensing windshield wipers
- Birds eye camera

Safety at Its Core

The new TNGA-K platform forms the foundation for exemplary collision protection in the 2020 Toyota Highlander, while a suite of standard driver-assist technologies is designed to help prevent collisions, or to mitigate their impacts.

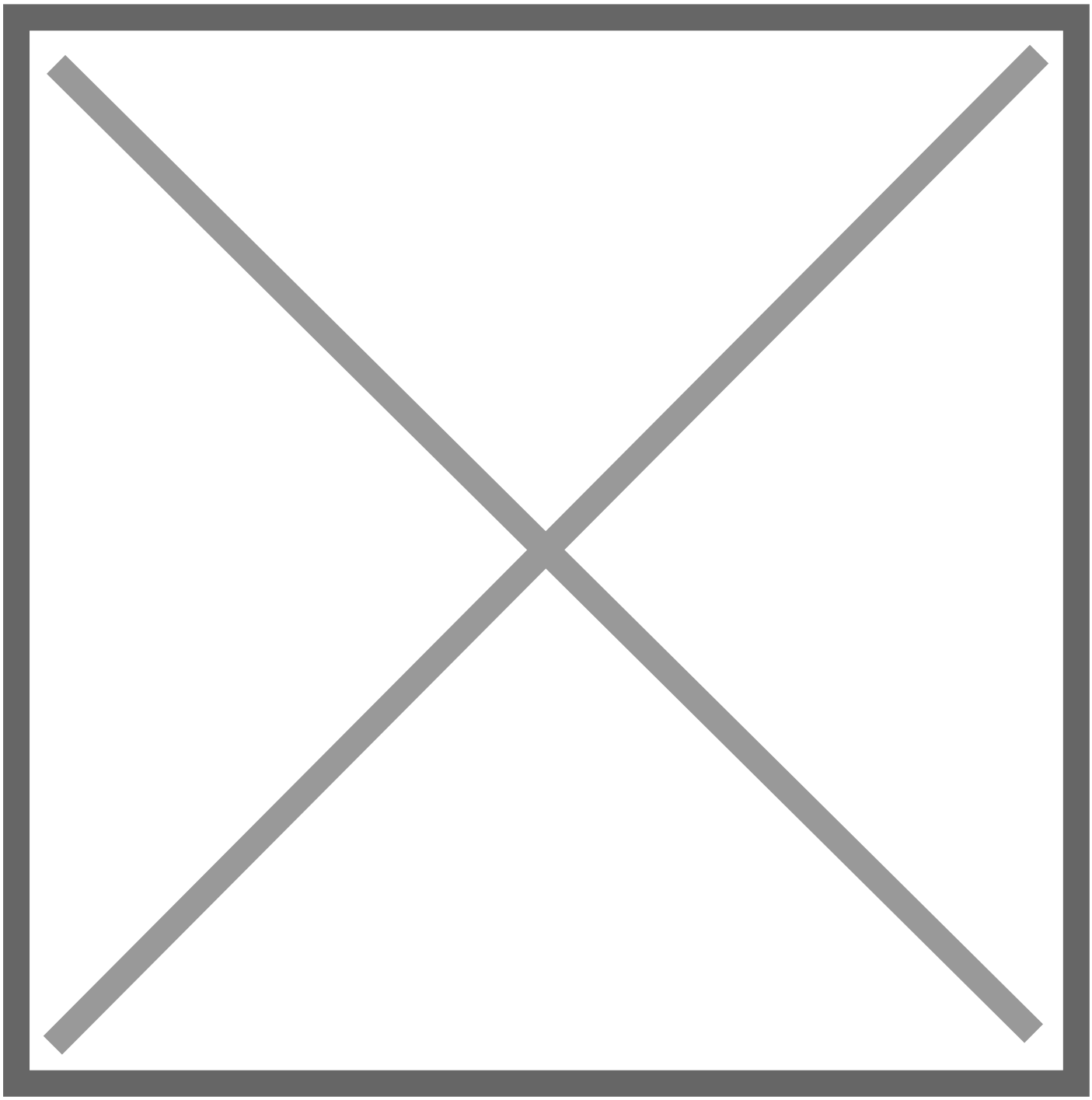
The 2020 Highlander is equipped with the second-generation of Toyota Safety Sense (TSS 2.0). Blind Spot Monitor (BSM) with Rear Cross Traffic Alert (RCTA) are standard on LE grade and above. Rear Cross Traffic Braking (RCTB) is available with clearance sonar on Limited and above.

The standard backup camera features projected path. A Bird's Eye View Camera with Perimeter Scan, available on Limited and standard on Platinum, provides a live rotating 360-degree view around the vehicle.

The 2020 Highlander is equipped with eight airbags, including side curtain airbags for all three rows. Toyota's Star Safety System includes Enhanced Vehicle Stability Control (VSC), Traction Control (TRAC), Electronic Brake-force Distribution (EBD), Brake Assist (BA), Anti-lock Braking System (ABS), and Smart Stop Technology (SST).

Priced for Value

No matter the grade, every Highlander offers something to suit varying lifestyles, whether it's for a city exploration or a weekend trip to the countryside. With five gas models and five hybrid models, the 2020 Highlander arrives at dealerships with an option for everyone.



Limited Warranty

Toyota's 36-month/36,000 mile basic new-vehicle warranty applies to all components other than normal wear and maintenance items. Additional 60-month warranties cover the powertrain for 60,000 miles and against perforation from corrosion for 60 months with no mileage limitation. Hybrid-related components that require repairs needed to correct defects in materials or workmanship are covered for 8 years/100,000 miles, whichever comes first from original date of first use when sold as new. The HV battery is covered for 10 years/150,000 miles, whichever comes first, and is transferrable across ownership.

The 2020 Highlander also comes standard with ToyotaCare, a complimentary plan covering normal factory-scheduled maintenance, for two years or 25,000 miles, whichever comes first, and 2 years of Roadside Assistance, regardless of mileage.