Toyota Boosts 2023 Corolla Hybrid with All-New Infrared Edition, New Grades and Available AWD

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NASHVILLE, Tenn. (Oct. 18, 2022) – The Toyota Corolla Hybrid enters the 2023 model year as a thoroughly upgraded model. Make that five, as the <u>2023 Corolla Hybrid</u> now offers a choice of five model grades versus just one before. Debuting a more powerful hybrid system and available Electronic On-Demand All-Wheel Drive, the 2023 Corolla Hybrid also gains new safety and multimedia systems, updated styling and new paint colors.

The big news starts with the 2023 Corolla Hybrid LE grade getting a \$1,250 price reduction. The Hybrid LE is now joined by a new LE AWD grade, sporty SE and SE AWD grades and a premium focused XLE. The XLE grade is now only available as a hybrid for 2023. All Corolla Hybrid models upgrade to new Toyota Safety Sense 3.0 with new Proactive Driving Assist, including Obstacle Anticipation Assist and Deceleration Assist.

Next-generation Toyota Audio Multimedia equips all 2023 Corolla Hybrid models with an 8-inch highresolution touch screen and added capabilities, including standard wireless Apple CarPlay® and Android AutoTM compatibility. All models add two rear-seat USB-C ports for a total of four in the car.

The sporty SE gains new standard Smart Key, enhanced Sport driving mode tuning and red interior accents replacing blue. As an added value, all 2023 Corolla Hybrid models include Safety Connect and Service Connect up to 10-year trial subscriptions.

Hybrid SE Infrared Edition

To commemorate the sporty SE grade joining the enlarged Corolla Hybrid family for 2023, Toyota is offering a special SE Infrared Edition, with both FWD and AWD versions available. As a bit more icing on the cake, the sporty new Corolla SE Hybrid grades (FWD and AWD) inherit the Gas SE's sport suspension and the firmer-feel Electronic Power Steering. The 2023 Corolla Hybrid SE Infrared Edition earns its name from the unique red trim accenting the exterior and interior. The bright red stands out from the available Ice Cap, Midnight Black Metallic or all-new Underground exterior colors and 18-inch Gloss Graphite-colored alloy wheels that are standard with the SE for 2023. In the cabin, a red-stitched shift handle and red-accented floor mats and door trim add a custom look.

This package is expected later this year.

More Powerful Hybrid

All 2023 Corolla Hybrid models gain a more powerful Toyota Hybrid System. As before, the system pairs a 1.8liter Atkinson-cycle four-cylinder gas engine with two motor-generators through a planetary-type continuously variable transmission. A new compact high-output/low-loss drive motor for the transaxle/motor uses a redesigned magnet and electromagnetic steel plate configuration, with two additional magnets for increased output.

The revised hybrid system boosts output to 138 hp (up from 121) and 105 lb-ft. of torque, while EPA-estimated combined fuel economy reaches up to 50 MPG. The upgraded hybrid system improves acceleration and mid-range power.

Hybrid + AWD

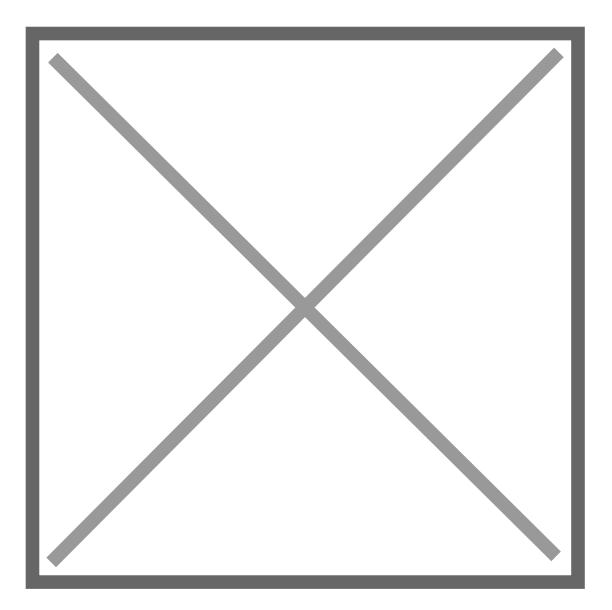
The newly available AWD for Corolla Hybrid will help give the model an even wider appeal, combining two features to deliver added traction for slippery road conditions and exemplary fuel economy. The EPA combined fuel economy rating is 44 MPG.

As on other Toyota Hybrids with AWD, Electronic On-Demand All-Wheel Drive employs a separate rearmounted electric motor to power the rear wheels when needed. The system works seamlessly and transparently, preemptively distributing driving force to the rear wheels to help suppress front wheel slip during off-the-line starts. It also engages the rear motor in response to slippage at the front wheels and enhances cornering agility by helping to reduce understeer.

Sharpened Styling

The 2023 Corolla Hybrid models share the new front fascia styling with the Corolla gas sedan, which varies across grades. The look is particularly sporty for the SE models, which feature a glossy black mesh-pattern lower grille and more sculptural front fascia and a rear sport diffuser. The SE grades get new 18-inch graphite-colored alloy wheels and the LE replaces the 15-inch steel wheels with a16-inch wheel. XLE features an all-new 10-spoke 16-in alloy wheel with a silver finish. All Corolla Hybrid models get new LED headlights that are now even more reminiscent of the eyes of a bird of prey.

On the Corolla color palette, Midnight Black Metallic replaces Black Sand Pearl, and Underground replaces Blue Cush Metallic. Colors carrying over for 2023 include Ice Cap (previously Super White), Classic Silver Metallic, Celestite and Blueprint. Wind Chill Pearl and Ruby Flare Pearl remain available for extra cost.



The Strong, Silent Type

Corolla's diverse model variety is made possible by the Toyota New Global Architecture-C platform (TNGA-C). A super-rigid structure, low center of gravity and highly refined tuning of the MacPherson-type strut front suspension and multi-link rear suspension endow all Corolla Hybrid models with exemplary handling agility, ride comfort and distinctive driving personality. This high-strength platform is fortified through the use of ultrahigh-tensile steel as well as the application of structural adhesive technology for body rigidity and passenger security.

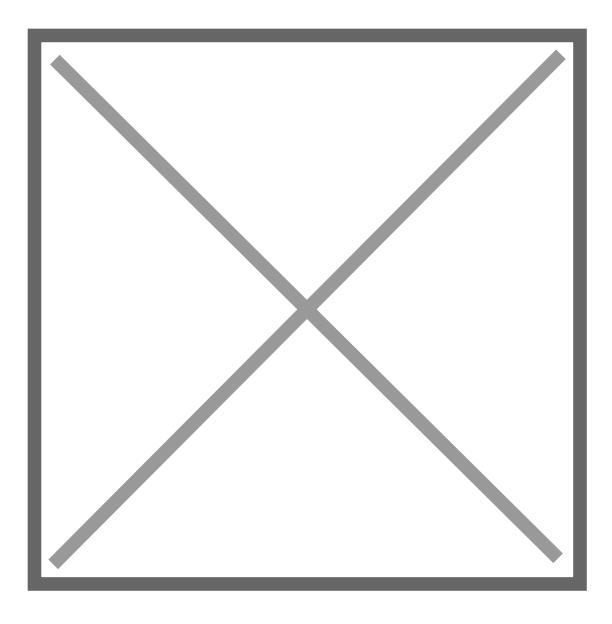
Corolla Hybrid's cabin is a sanctuary where powertrain and road noise have been minimized thanks to the widespread use of sound-absorbing materials, including Thinsulate[®], sealants, foams and silencer pads. The TNGA structure employs additional seals in its body panel gaps to insulate noise penetration and enhance air-sealing performance. As one example, the floor silencer pad is one large piece, instead of many smaller segments.

Comfort for All Aboard

The Corolla cabin provides an engaging interior space that surrounds the driver while offering a spacious environment for all passengers. High-gloss materials are paired with matte elements – silver accents with Piano Black and available contrasting stitching – contributing to a premium look and feel.

Seating materials include standard cloth or, in higher grades, SofTex[®] trim. For 2023, choices include Black/Red (black as the main color with red highlights), Moonstone (light gray as the main color with dark gray highlights) and Macadamia (a warm, inviting cream color). On front seats in the SE grade, shoulder supports, evocative of a competition bucket seat, overlap solid and thick side bolsters to help comfortably grip occupants.

For storage, Corolla comes equipped with a console tray and front cupholder. The tray can hold small items, such as a smartphone or wallet. When the XLE is equipped with the JBL Premium Audio Plus Wireless Charger package, it houses the available Qi wireless device charging pad. Terraced cup holders adapt to various-sized beverage containers.



Driving the Corolla Hybrid

Thanks to the smart layout of the TNGA-C platform, there is no compromise in cabin roominess, for example, when choosing the Corolla Hybrid versus a gas model. Corolla Hybrid uses a lithium-ion battery pack placed under the rear seat, allowing a 60/40 split folding rear seatback to expand cargo capacity. The battery location also contributes to the vehicle's lower center of gravity, a boon to agility.

The engine, working in concert with the electric motor (MG2), assures responsive performance, while exemplary energy efficiency is achieved by using both electric motors (MG1 and MG2) for hybrid battery charging.

When pulling away from a stop in the Corolla Hybrid, the battery provides a subtle power boost in order to put less strain on the engine and eliminate the "rubber band" effect experienced with some hybrids. A preload differential adds to the confident acceleration feel. During low loads and low differential rotation, differentiallimited torque is distributed to the left and right wheels, yielding excellent handling stability.

Corolla Hybrids offer EV mode, which allows the vehicle to be operated as a pure electric vehicle for short distances, depending upon certain conditions, such as battery charge level. This mode is useful for operating the

vehicle in parking lots or indoor parking garages, for example. The Vehicle Proximity Notification feature alerts pedestrians of the vehicle's presence when running in battery mode. Drive modes include:

- NORMAL: Allows the hybrid system to achieve an ideal combination of fuel economy and vehicle acceleration. The accelerator opening amount changes linearly in response to accelerator pedal operation.
- ECO: Improves hybrid system efficiency by limiting power in response to light to moderate accelerator pedal input.
- SPORT: Enhances dynamic performance and acceleration.

Smart Brakes

Another boost to Corolla Hybrid's fuel efficiency comes from the Electronically Controlled Brake (ECB) system, which coordinates operation between the regenerative braking force of the electric motors and the hydraulic braking system force to provide optimal stopping power. By proactively using the electric motors to recover as much electrical energy as possible from the regenerative braking system, this extremely efficient cooperative control helps to maximize fuel economy.

An active hydraulic booster on the conventional (non-regenerative) braking system improves pedal feel and feedback for the driver. Brake Hold also comes standard, when engaged it is a convenient technology that reduces driver effort while waiting at a traffic light or while driving in heavy traffic. When the driver presses the accelerator, Brake Hold releases instantly.

Super-Efficient Throughout

The other half of the hybrid system, the gas engine, is no less impressive than the electric side. The 2ZR-FXE 1.8-liter inline four-cylinder engine was designed specifically for a hybrid application. The long-stroke configuration employs the Atkinson cycle, which uses a very high compression ratio (13.0:1) along with a shorter intake stroke and longer expansion stroke than the Otto cycle. The Atkinson cycle extracts more energy from the fuel, and the electric motors compensate for reduced low-end power (versus the Otto cycle).

Internal friction is minimized, and an electric water pump eliminates the parasitic losses caused by a conventional belt-driven pump. Toyota sought efficiency gains in every system. The highly efficient air conditioning system, for example, uses S-FLOW control, which automatically optimizes airflow throughout the cabin according to the temperature setting, actual cabin and outside temperatures, sunlight intensity and occupied seats.

Getting the engine up to operating temperature quickly is critical to conserving fuel and reducing emissions at start-up. In the Corolla Hybrid, an exhaust heat recirculation system speeds up engine coolant warm-up. That in turn allows the hybrid system to stop the gas engine earlier and more often in the driving cycle when it's not needed, for example in low-power-demand city driving conditions. The PTC (Positive Temperature Coefficient) heater quickly provides cabin heat electrically in cold temperatures.

Next-Gen Multimedia

All 2023 Corolla and Corolla Hybrid models debut a new standard next-generation 8-inch Toyota Audio Multimedia system designed and engineered by Toyota's Texas-based Connected Technologies team. This new system provides a wide range of enhanced connectivity and convenience features and is Over-the-Air (OTA) updatable.

Users can interact with the new system's design through intuitive touch and voice activation controls. With the latest available Connected Service, Drive Connect, users have access to Intelligent Assistant, Cloud Navigation

and Destination Assist. (Active Drive Connect trial or subscription required.)

With Intelligent Assistant, speaking simple phrases like "Hey Toyota" awaken the system for voice activated commands to search for driving directions, find Points of Interest (POI), adjust audio controls, change the cabin temperature and more. Cloud Navigation is the available onboard navigation solution that utilizes the cloud to download the latest available map, traffic and routing information.

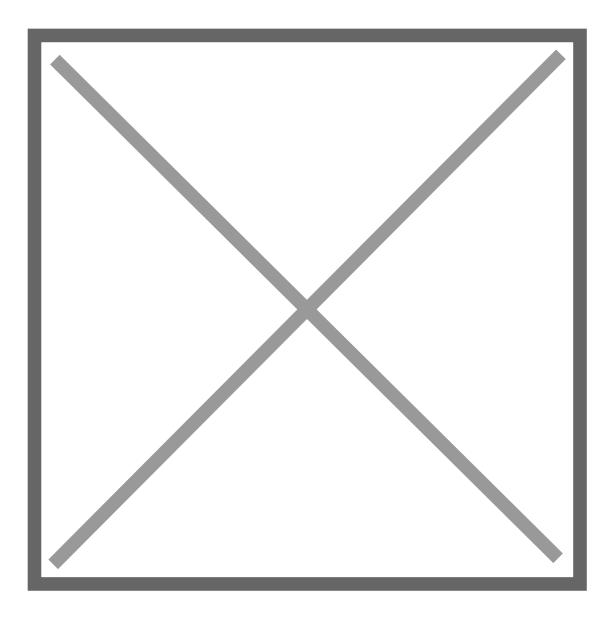
To ensure the most up-to-date search capabilities, POI search is provided by Google Points-of-Interest data. Destination Assist also gives access to 24/7 live agent assistance to locate your next destination.

The new Toyota Audio Multimedia system allows dual Bluetooth[®] phone connectivity, with support for standard wireless Apple CarPlay[®] and Android AutoTM compatibility. An available Wi-Fi Connect subscription offers 4G connectivity for up to five devices, turning the car into an AT&T Hotspot, along with the ability to link customers separate Apple Music[®] and Amazon Music subscriptions to the vehicle with the new Integrated Streaming feature. This augments the already robust audio playback ability that includes HD Radio, USB data and a SiriusXM[®] Platinum Plan 3-month trial subscription.

For the Corolla Hybrid SE and XLE grades, the audio experience goes to a higher level with the available JBL® Premium Audio system with 9 speakers, including an 800-watt amplifier and 10-in. subwoofer.

All Corolla models offer a host of Connected Services available on all grades (trial or subscription required ¹). Safety ConnectTM, now with up to a 10-year trial subscription for 2023, includes an Emergency Assistance Button (SOS), 24/7 Enhanced Roadside Assistance, Automatic Collision Notification, Stolen Vehicle Locator and Collision Assistance. Service Connect, also with up to a 10-year trial subscription for 2023, offers drivers the capability of receiving Vehicle Health Reports, Maintenance Alerts and reminders. With the Toyota app, users can stay connected to their Toyota with the available Remote Connect service.

Standard Smart Key System with Push Button Start for Corolla Hybrid SE and XLE grades works on the front doors and trunk and for remote keyless entry with lock, two-stage unlock, panic and trunk-release functions.



¹4G network dependent. Certain features include a trial period at no additional cost upon original date of new vehicle purchase or lease. After the trial period ends, a paid subscription is required. More details on trial periods and subscription-based features can be found at <u>https://www.toyota.com/connected-services/</u>.

Upgraded Safety Tech: TSS 3.0

All Corolla Hybrid models come standard with Toyota Safety Sense 3.0 (TSS 3.0), which includes enhancements made possible by system sensors with advanced detection capability. The Pre-Collision System with Pedestrian Detection is also capable of detecting motorcyclists and bicyclists in certain conditions. When making a turn or approaching an intersection, the system is designed to detect forward or laterally approaching oncoming vehicles and provides audio/visual alerts and automatic braking in certain conditions.

Lane Departure Alert with Steering Assist is designed to notify the driver via audible and visual alerts and slight steering force if it senses the vehicle is leaving the lane without engaging a turn signal. Corolla hybrid will be equipped with Dynamic Radar Cruise Control (DRCC), which is designed to detect the preceding vehicle and adjust speed in order to maintain a preset distance. And when DRCC is set and engaged, and Lane Tracing Assist is activated, this system uses sensors to detect the lane or a preceding vehicle and provides steering

support to help keep the vehicle centered in its lane while improved lane recognition delivers refined performance of Lane Departure Alert with Steering Assist and Lane Tracing Assist.

Automatic High Beams are designed to detect preceding or oncoming vehicles and automatically switch between high beam and low beam headlights. Road Sign Assist is designed to recognize certain road sign information using a forward-facing camera and display them on the multi-information display (MID).

In addition to the TSS 3.0 system, other available safety features on the Corolla Hybrid include Blind Spot Monitor (BSM), which is designed to help detect and warn when vehicles are approaching or positioned in the adjacent lanes. Rear Cross Traffic Alert (RCTA) helps detect vehicles approaching from either side while backing out and provides a visual and audible warning. Toyota's Rear Seat Reminder comes standard on the Corolla Hybrid. The feature can note whether a rear door was opened within 10 minutes of the vehicle being turned on, or at any time after the vehicle has been turned on, with a reminder message in the instrument cluster after the engine is turned off, accompanied by multitone chimes.

Limited Warranty and ToyotaCare

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 corrosion 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 hybrid battery is covered for 10 years/150,000 miles, whichever comes first, and is transferrable across ownership.

The Corolla Hybrid models also come with ToyotaCare, a no additional cost plan that covers normal factoryscheduled maintenance for two years or 25,000 miles, whichever comes first, and 24-hour roadside assistance for two years, unlimited mileage.

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