

Corolla Hybrid: Legendary Value, Epic MPG

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PLANO, Texas (Dec. 16, 2021) – With eye-catching style that achieves at least 50 mpg combined fuel economy, the 2022 Corolla Hybrid is the most fuel-efficient model to ever wear the Corolla name. This high-efficiency model uses the latest Toyota Hybrid Synergy Drive and, like its gas-powered siblings, delivers a

highly satisfying driving experience. With a hybrid system that combines a 1.8-liter four-cylinder gasoline engine with two motor/generators, the combined system output of 121 horsepower yields decidedly responsive performance.

Corolla Hybrid also brings the latest advances in comfort, multimedia technology and safety.

Premium fabric-trimmed 6-way adjustable driver's seat and 4-way adjustable front passenger seats come standard, with Toyota Safety Sense 2.0 suite of active safety systems standard. Drivers can take command with a tilt/telescopic 3-spoke steering wheel with controls for audio, Multi-Information Display, Bluetooth® hands-free phone, voice-command, Dynamic Radar Cruise Control and Lane Departure Alert with Steering Assist. Upgrade to a new for 2022 Premium Interior Package with leather trimmed steering wheel, SofTex®-trimmed heated front seats and power-adjustable driver's seat with lumbar support.

In-cabin tech features a standard 8-in. touchscreen powering a six-speaker sound system that's Android Auto™, Apple CarPlay® and Amazon Alexa compatible. Drivers and passengers can shuffle to their hearts content by connecting with a front USB media port or Bluetooth® or enjoy an available SiriusXM® 3-month Platinum Plan trial subscription. A premium instrumentation cluster with 7-in. color Multi-Information Display (MID) with customizable settings keeps drivers in-the-know with a hybrid system power meter, eco-mode indicator, speedometer and tachometer, coolant temperature, one-touch 3-blink lane change turn signal indicator and warning messages.

Safety features are also packed into the 2022 Corolla Hybrid. High-tensile strength steel body panels provide a strong shell for the unitized body construction, and front and rear energy-absorbing crumple zones with side-impact door beams come standard on every Corolla model. On the inside, an Advanced Airbag System includes driver and front passenger seat-mounted side airbags, driver knee airbag, front passenger seat cushion airbag, rear seat-mounted side airbags and front and rear side curtain airbags. Toyota Safety Sense 2.0 comes standard with Collision System with Pedestrian Detection, Lane Departure Alert with Steering Assist, Automatic High Beams, Road Sign Assist, Lane Tracing Assist and Full-Speed Range Dynamic Radar Cruise Control. Blind Spot Monitor with Rear Cross-Traffic Alert are an available option.

Fit for a Hybrid

The hybrid powertrain and battery were a natural fit for the new Corolla because of the Toyota New Global Architecture (TNGA) platform. There's no compromise in cabin roominess, for example, when choosing the Corolla Hybrid versus a gas model.

Corolla Hybrid uses a Lithium Ion battery pack that's placed under the rear seat, rather than taking up trunk space, 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.

Driving the Corolla Hybrid

The Corolla Hybrid's linear acceleration response may take some by surprise. When pulling away, 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, differential-limited torque is distributed to the left and right wheels, yielding excellent handling stability. At mid-

range and high engine loads, the preload differential functions as an open differential.

Corolla Hybrid has 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.

Along with the expected NORMAL and ECO drive modes, a POWER drive mode setting allows for an increase in power for stronger acceleration response when desired.

- NORMAL mode: 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 mode: Improves hybrid system efficiency by limiting power in response to light to moderate accelerator pedal input.
- POWER mode: Available power is increased, allowing for improved acceleration response.

Stopping the Corolla Hybrid

Another boost to 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. Critically, should there ever be a malfunction in the ECB system, the conventional hydraulic braking system can stop the vehicle.

Brake Hold, when engaged, 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.

How the Other Half Works

The other half of the Hybrid Synergy Drive team, 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).

Friction created by the piston skirts, rotating parts and oil pump is reduced, and an electric water pump eliminates the parasitic losses with 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.

Hybrid Exclusives

The Corolla Hybrid rolls on 15-inch aluminum alloy wheels with low-rolling resistance tires. As on the Corolla gas models, the new multi-link rear suspension improves both handling agility and ride comfort compared to the previous-generation Corolla Sedan.

The instrument panel uses a high-grade meter with a 7-inch Multi-Information Display (MID). The MID shows the speedometer, as well as a hybrid system indicator/real-time battery charge status indicator. ECO accelerator guidance, also shown in the MID, can provide a guideline for maximizing fuel efficiency by coaching the driver on optimal accelerator pedal operation to match driving conditions. Drivers who like the visual appeal of seeing engine rpm can choose to display a tachometer.

More Tech Per Mile

The 2022 Corolla Hybrid's multimedia offerings start with the standard Entune™ 3.0 Audio system that includes 8-in. touchscreen display, six speakers, Apple CarPlay compatibility, Amazon Alexa, Entune 3.0 App Suite Connect, Wi-Fi Connect, Scout GPS Link Compatible, Siri Eyes Free, auxiliary audio jack and USB 2.0 port with iPod connectivity and control, AM/FM, MP3/WMA playback capability, voice recognition training and tutorials, hands-free phone capability, voice recognition; music streaming via Bluetooth, customizable home screen and weather/traffic information via Entune 3.0 App Suite.

A Smart Key System with Push Button Start is also standard. The Smart Key works on the front doors and trunk, and also works for remote keyless entry with lock, two-stage unlock, panic and trunk-release functions. Additional tech touches include high-grade LED headlights, LED Daytime Running Lights (DRL), LED taillights and stop lights, one 12V auxiliary power outlet and optional color-keyed heated power outside mirrors with blind spot warning indicators.

Drivers can turn their Corolla into a rolling hot-spot with the included Wi-Fi Connect trial of 3-months or up to 2 GB of data (whichever comes first is included with the 2022 Corolla Hybrid. And for an extra layer of security on the road, a one-year trial to Toyota Safety Connect is also included. Accessible through the SOS Emergency Assistance Button, Safety Connect includes Enhanced Roadside Assistance, Automatic Collision Notification, Collision Assistance and Stolen Vehicle Locator. See [Toyota.com/connected-services](https://toyota.com/connected-services) for more information about Wi-Fi Connect and Safety Connect.

Safety

The Corolla Hybrid features eight standard airbags and Toyota's Star Safety System, which includes Enhanced Vehicle Stability Control, Traction Control, Electronic Brake-force Distribution, Brake Assist, Anti-lock Braking System and Smart Stop Technology. All Corolla models come equipped with a standard backup camera.

Significantly, all 2022 Corolla models are equipped as standard with Toyota Safety Sense™ 2.0, an advanced suite of integrated active safety features, including:

- **PCS (Pre-Collision System):** is designed to automatically activate the brakes to help avoid a collision or mitigate the impact force. PCS is able to detect a vehicle or pedestrian in day and low-light conditions, as well as a bicycle during daylight.
- **Full-Speed DRCC (Dynamic Radar Cruise Control):** designed for highway use, designed to maintain a set vehicle-to-vehicle distance and is also capable of low-speed following up to speeds of about 24 mph. The Corolla can stop when the vehicle ahead comes to a stop, maintaining an appropriate distance to it.
- **LDA (Lane Departure Alert) w/ Steer Assist:** designed to give the driver audible and visual warnings and, if necessary, provides steering assistance if it detects the possibility of leaving the driving lane. It also

detects excess weaving within the driving lane that might indicate driver distraction, inattention or drowsiness.

- **LTA (Lane Tracing Assist):** LTA is enabled when LDA and DRCC are both on and active. LTA employs a lane centering function that will make constant steering inputs to help the driver keep the vehicle in its lane. LTA is designed for uses on relatively straight highways to preemptively avoid unwanted lane departures and reduce driver fatigue.
- **AHB (Automatic High Beam):** when enabled, detects the headlights of oncoming vehicles and taillights of preceding vehicles and automatically switches between high and low beams as appropriate.
- **RSA (Road Sign Assist):** designed to recognize speed limit, Stop, Yield and Do Not Enter signs and display them on the vehicles MID to help assist the driver.

Warranty & Included Maintenance

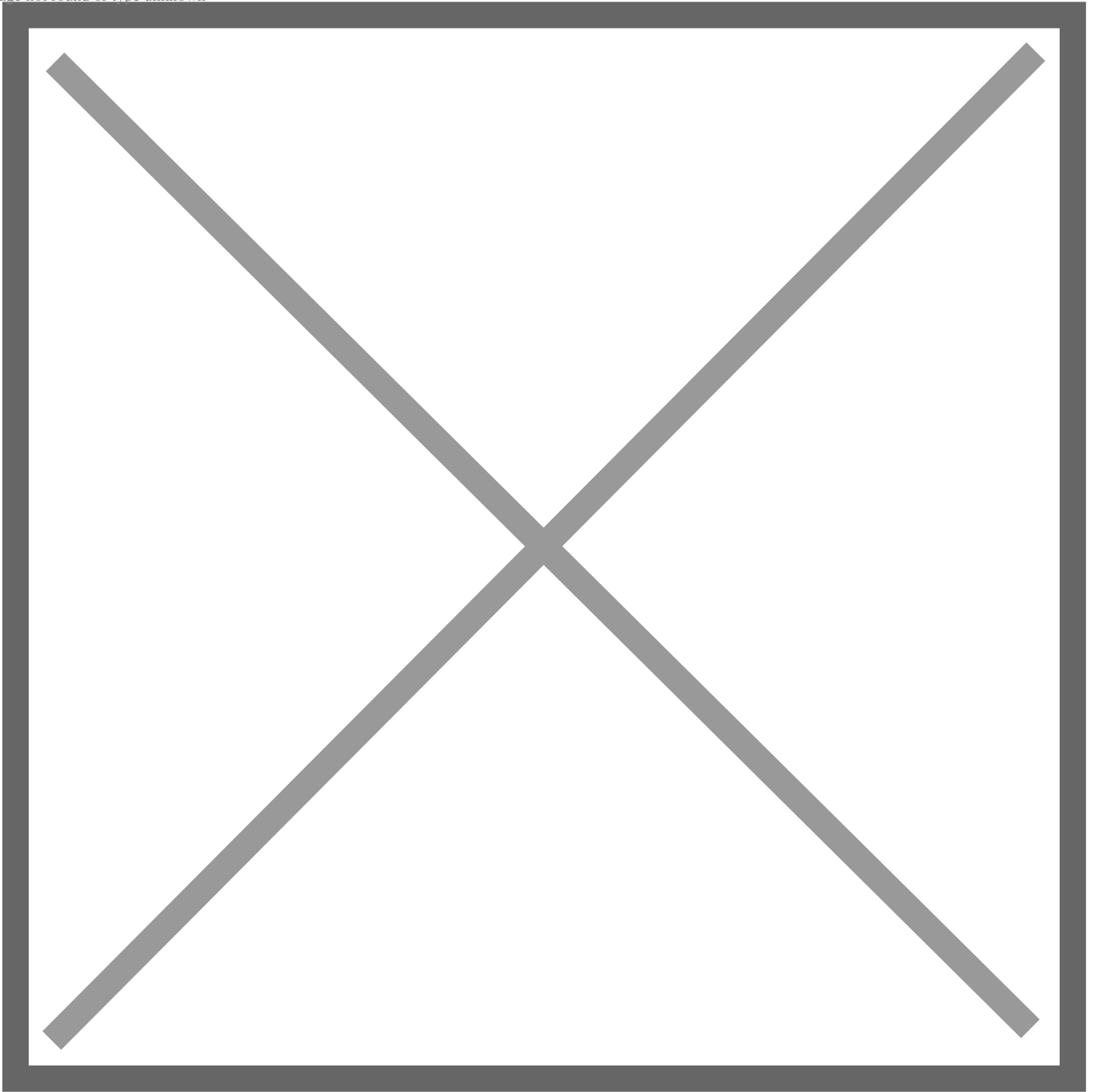
The 2022 Corolla Hybrid comes with a 3-year/36,000-mile warranty, comprehensive 5-year/60,000-mile Powertrain warranty, 5-year/unlimited-mileage Corrosion Perforation warranty, 5 year/60,000-mile restraint system warranty, 8-year/100,000-mile Hybrid-Related Component Coverage and 10-year/150,000-mile Hybrid Battery.

The ToyotaCare complimentary maintenance plan comes with the purchase or lease of every new Toyota for 2 years or 25,000 miles, whichever comes first, every new Toyota will be covered for all normal factory scheduled service, as well as 24/7 roadside assistance.

2022 Corolla Hybrid Colors & Manufacturer's Suggested Retail Pricing*

The 2022 Corolla Hybrid is available in Celestite, Classic Silver Metallic, White, Black Sand Pearl and Blueprint. Extra cost colors (\$425) include Wind Chill Pearl and Ruby Flare Pearl. Interior colors include Light Grey/Moonstone or Black fabric; Macadamia/Mocha or Black SofTex.

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* Manufacturer's Suggested Retail Price, excludes Delivery Processing and Handling (DPH) fee of \$1,025 (DPH subject to change).

Updated December 20, 2021.