



2022 Mirai

Product Guide



2022 MIRAI PRODUCT GUIDE

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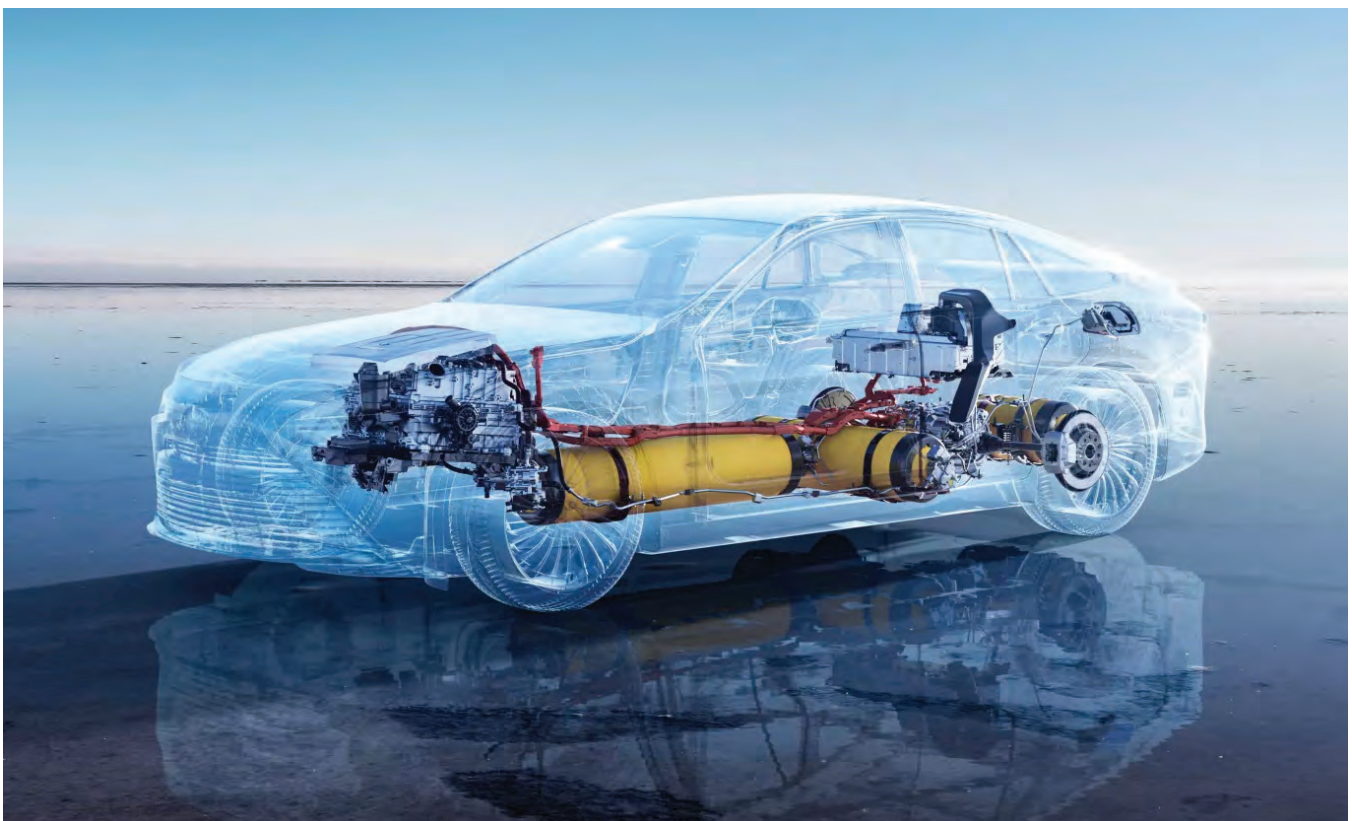
Hydrogen 101

Hydrogen is the most common element in the universe and has been used for more than 90 years in a wide range of industrial applications, from gasoline production to making toothpaste. It's a renewable resource and in ambient conditions is in a gas state. Hydrogen is used to fuel a Mirai and it only takes 5 minutes to refuel.



Fuel Cell Basics

Toyota began its fuel cell development around the same time Prius went on sale more than 20 years ago. Mirai shares some of its DNA with the technology and components used in the Toyota hybrid lineup. As more FCEVs are planned to hit the road over the next few years, the cost, size, and weight of fuel cell systems is anticipated to decrease, while refueling infrastructure growth is coming. The second-generation Mirai will deliver a significant evolution of Toyota's hydrogen fuel cell technology, offering a critical look into the future of Toyota's alternative fuel lineup.



The Mirai is a Fuel Cell Electric Vehicle, or FCEV. Like traditional electric vehicles, the Mirai runs on electricity and is classified as a zero emissions vehicle. Unlike traditional electric vehicles, Mirai never has to be plugged in.

Hydrogen is pumped into the vehicle and stored in carbon-fibre reinforced, polymer lined tanks. When you press the accelerator pedal, electricity is produced in the fuel cell stack and is used immediately to power the motor. Hydrogen travels from the tank to the fuel cell stack. There, hydrogen goes through a chemical reaction involving oxygen in the air – creating the electricity that powers the vehicle. The only by-product of this chemical reaction is water.

Why H₂?

Hydrogen offers numerous benefits as a fuel. It is the most common element on earth, it is non-toxic and less flammable than gasoline. Hydrogen is also highly efficient—1 kilogram (2.2 lbs.) of hydrogen gas has about the same energy density as 1 gallon (3.79L) of gasoline.



Hydrogen Safety

Facts about Hydrogen Safety:

- 1 Hydrogen is non-toxic and naturally occurring. It's the most common element in the universe.
- 2 Hydrogen is 14 times lighter than air and disperses quickly in the atmosphere.
- 3 Hydrogen has a lower ignition energy than gasoline (less energy is required to ignite it), but a much higher stoichiometric mixture than gasoline (there must be a much higher concentration before ignition is possible). Gasoline will ignite with just a 2% concentration. Hydrogen requires a 29% concentration.
- 4 The Mirai (and all fuel cell electric vehicles) have extremely strong hydrogen tanks and highly advanced leak detection systems designed to quickly respond in the rare event of a leak. It uses a three-layer tank design and can absorb crash energy without damaging the tanks.

Hydrogen Infrastructure

Several hydrogen stations are open in British Columbia and Quebec. Hydrogen infrastructure continues to be developed in Canada as we work towards a net carbon future.

Overview

The new Mirai arrives with a completely redesigned fuel cell that has a 30% higher estimated driving range rating (XLE model only) compared to the first-generation Mirai. It also offers a bold new design, and a responsive rear-wheel drive platform.

The new Mirai offers all of the traditional benefits of a Fuel Cell Electric Vehicle without asking owners to compromise style, substance or refinement.

Now available in two grades – XLE and Limited – and built on a new TNGA GA-L platform, the sleek appearance and even a rear-wheel drive platform is a major departure from the original front-wheel drive layout.



Emotional Design

Mirai's exterior design captures the eye and stands out in a crowd. Its coupe-inspired profile and elegant, sculptural form inspires emotion. Mirai carries itself into the future with grace. It takes on a premium sedan look, thanks in part to a **longer wheelbase, longer overall length, width, lower height and wider track**.



Exterior Features

Not only eye catching, the Mirai is functional and offers power folding mirrors with a blind spot monitor indicator, LED headlights and 19" alloy wheels standard. The Limited adds panoramic moonroof, 20" chrome alloy wheels and multi-LED front turn signal lamps.

The Mirai is available in five exterior colours: Hydro Blue (08Y7), Oxygen White (0090), Heavy Metal (01L5), Black (0202), Supersonic Red (03U5).



Hydro Blue (08Y7)



Oxygen White (0090)



Heavy Metal (01L5)



Black (0202)



Supersonic Red (03U5)

Interior Craftsmanship

The interior is luxurious, elegantly designed and is trimmed in high quality materials, brimming with advanced technology. Mirai's 5-passenger cabin offers intuitive controls and beautiful design, raising the bar for Fuel Cell Electric Vehicles.



Mirai's inviting cabin doesn't just look good, it feels good. Both models include standard SofTex®-trimmed heated front seats to comfortably envelope occupants. All passengers can enjoy heated and ventilated front and rear seats on the Limited. A leather wrapped heated steering wheel is standard and perfect for cold winter days. An available three-zone automatic climate control lets the driver, front and rear passengers set the temperature to their preference. Mirai also includes on the Limited manual rear seat sunshades and a power rear window shade. And best of all, Mirai now seats up to five passengers and rear passenger control switches are integrated into the rear armrest; convenience available at your fingertips. The available rear capacitive touch switches include controls for rear ventilated, heated seats, rear sunshade, volume, audio on/off and temperature. Simply press the power switch and it illuminates and is ready to use. If no switches are operated within 10 seconds or the power switch is pressed, the switch illuminations are turned off and will go into hibernation.





Interior Colours

The stitching on dash and door panels, interior trims and ambient lighting create a premium feel. The XLE model will receive the black interior with silver accents. On the Limited model, there is a choice between the black interior with copper accents or the white/dark brown interior with copper accents.



Limited: white/dark brown interior with copper accents



XLE: black interior with silver accents



Limited: black interior with copper accents

Enhanced Driving Experience

The Mirai is built on the rear-wheel drive TNGA GA-L Platform. The longer, wider proportions offer stability on the road, and the rear-wheel drive architecture along with the multi-link front and rear suspension delivers the response and driving fun of a premium rear wheel drive sedan. The low centre of gravity, 50-50 weight distribution, responsive handling and precise steering feel deliver fun on twisty backroads. The ride is noticeably quieter and more refined, encouraging you to explore Mirai's impressive driving range.



	Horsepower	Estimated Driving Range
2022 Mirai	182	647 km (XLE) 575 km (Limited)
2020 Mirai	151	500km

The redesigned fuel cell has an EPA estimated rating of approximately 647 kilometres of driving range (Mirai XLE only, the Limited grade has an EPA estimated rating of 575km). The 3-tank design preserves passenger space and offers more capacity (5.6kg) — the 2022 Mirai offers 5-passenger seating versus 4 passenger seating in the previous generation. The fuel cell stack has been relocated under the front hood rather than under the front seats. The first generation Mirai had a 2-tank design and a smaller hydrogen tank capacity (5kg).

The innovation doesn't stop there. Mirai's flat underbody paneling and sleek coupe-like roofline offer impressive efficiency and advanced aerodynamics without sacrificing beauty and design. Even better, it only takes Mirai approximately 5 minutes to refuel. It offers zero-emissions, fully electric driving without having to spend hours at a charging station. A new battery is used in the Mirai, a higher voltage but lighter weight lithium ion cell design. With less cells, it can produce more power.



The Mirai is net zero for many reasons and with the intake air, the fuel cell must be purified through the electrostatic air cleaner element that captures ultra-fine particles (Particulate Matter 2.5), and a charcoal filter removes chemical substances.

Advanced Technology

Mirai is packed with the tech that premium buyers want, including a 12.3" touchscreen multimedia display, Apple CarPlay®, Android Auto™, wireless charging and a 14 speaker JBL® Premium Surround Sound audio system. You can now drive electric without sacrificing premium features, including an available Head-Up Display and Digital Rearview Mirror and offering a new large 8" gauge cluster standard.



US Model Shown

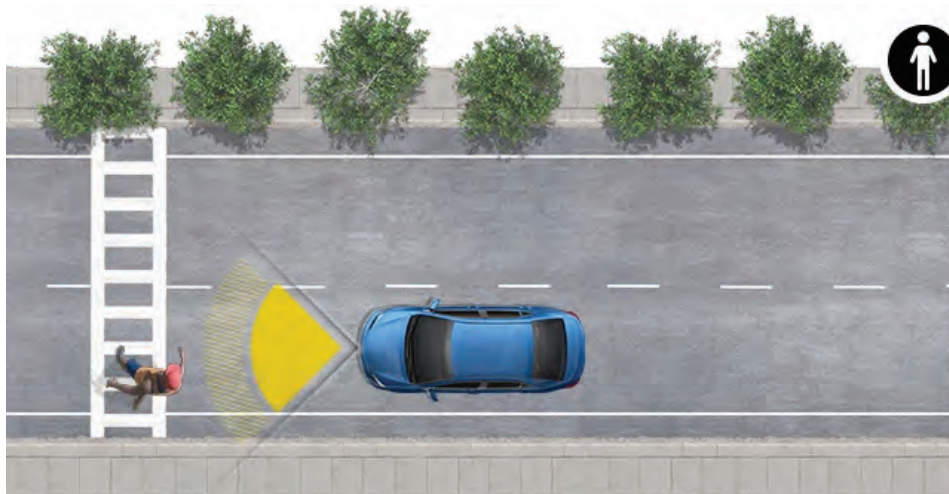


US Model Shown

Toyota Safety Sense

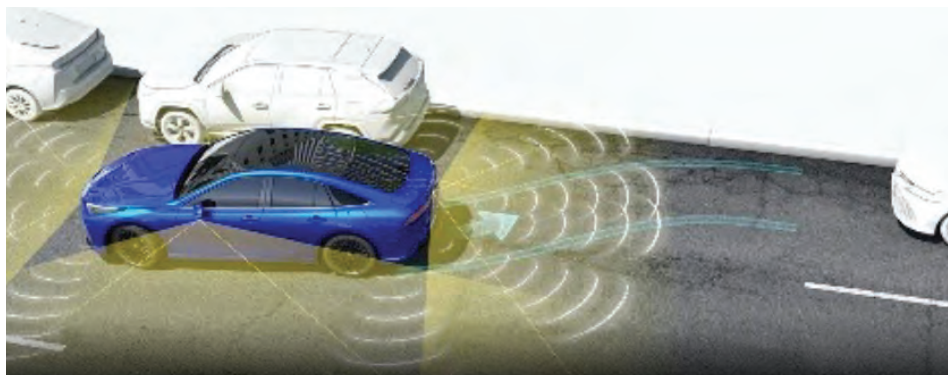
Toyota Safety Sense 2.5+ is standard on every Mirai. Pre-Collision System (PCS) with pedestrian and cyclist detection, Lane Departure Alert with Steering Assist (LDA with SA), Lane Tracing Assist (LTA), Automatic High Beams (AHB) and Full-Speed Dynamic Radar Cruise Control (DRCC) are all included.

Panoramic View Monitor is standard, along with Front and Rear Parking Assist with Emergency Braking. For the first time on a Toyota vehicle, Advanced Park is introduced on the Limited grade.



What is Advanced Park?

Advanced Park can assist in the operations necessary for hands-free parking by automatically controlling steering, acceleration, braking and gear changes when parallel parking or backing into a parking space. Using 360-degree sensing, which integrates the functions of complete-circumference cameras with ultrasonic sensors, the system also provides a bird's-eye view display to allow the driver to check the vehicle's position relative to any obstacles during Advanced Park operation.





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