2018 Mirai

At a Glance

Toyota's Hybrid Synergy Drive is a proven entity, but engineers took a second look at how to make it even more efficient. The result is the innovative hydrogen fuel cell-powered Mirai. As distinct as it is in appearance from other cars on the road, it's just as different mechanically. By using the most abundant element in the universe to power its electric motors – hydrogen – Mirai's tailpipe emits nothing but good, old-fashioned H2O.

Design

- * Mirai is distinct from everything else out there, and its fuel cell has a lot to do with it. Air enters through the grilles in the front, and by the time you look at the back of the car, the hidden tailpipe discretely releases the water emissions.
- * Inside, the design is as sophisticated as it is futuristic, with all the information displays stacked in the center of the dashboard, and sharp angles flowing outward.

Technology

- * Mirai is an electric car at heart, but its fuel cell is what distinguishes it from other vehicles on the road. Inside the fuel cell, the on-board hydrogen (H2) reacts with the oxygen (O2) found in ambient air, producing both water (H2O) and electrical current, which in turn is used to power Mirai's electric motors.
- * As an ingredient of Mirai's power supply, hydrogen gas is relatively safe. Consumers don't fret over the dangers of gasoline, which is flammable, or electricity, which can shock. Similarly, there's little cause for alarm about hydrogen that isn't rooted decades-old misconceptions.

Performance

- * With the equivalent of over 150 hp and nearly 250 lb.-ft. of torque from its electric motor, Mirai has plenty of power for any driving condition even getting up to speed after one of California's notorious on-ramp meters.
- * The overall refueling experience of Mirai is functionally similar to gasoline vehicles, with a pump and a fuel filler door. It takes about as long to fill up, too, and with a range of roughly 312 miles[35] Mirai goes just as far on a tank as many traditionally-fueled vehicles.

New for 2018

Compared to the 2017, Mirai advances to 2018 with mostly minor changes. The interior gains two additional charging points for the rear seat, the Qi-compatible charging tray[1] is now larger, to accommodate larger phones, and Wi-Fi® Destination Assist[2] with

Dynamic Navigation[3] is now available. The H2 Station Finder App is currently in development and will be deployed via an over-the-air update early in 2018.

Overall, the car that was declared World Green Car in 2016[7] continues to proudly wear its distinct shade of green technology – whether the car is painted black, blue, silver or white.

The Bottom Line

There still aren't many hydrogen fuel cell vehicles on the market, despite the ease of use and seamless integration with electric motors. Toyota continues to lead the way in hydrogen research and fuel cell development, and Mirai remains the avant-garde pace-setter for this advanced technology.

Awards

Coming Soon

Models

Model Code	Trim Name	Full Name	Engine
3000	Mirai	Mirai	Fuel Cell

Key Features

Mirai

Just as there's only one emission for Mirai (water), there's only one trim level from which to choose.

- Updated H2 Fuel Stations App prioritizes active and online pumps
- Water Release button purges water from the system
- Intelligent touch controls for climate and audio

Colors

Exterior Color (paint code)	Interior Color (paint code)	Mirai
Elemental Silver (2MR)	Warm White SofTex® (00-EA)	Х
Elemental Silver (2MR)	Deep Ocean Blue SofTex® (80-EA)	Х
Celestial Black (2MS)	Warm White SofTex® (00-EA)	Х
Celestial Black (2MS)	Deep Ocean Blue SofTex® (80-EA)	Х
Nautical Blue Metallic (2MT)	Warm White SofTex® (00-EA)	Х
Nautical Blue Metallic (2MT)	Deep Ocean Blue SofTex® (80-EA)	Х
Crystal White (2NL)	Warm White SofTex® (00-EA)	Х
Crystal White (2NL)	Deep Ocean Blue SofTex® (80-EA)	Х
Salsa Red Pearl (2NM)	Warm White SofTex® (00-EA)	Х
Salsa Red Pearl (2NM)	Deep Ocean Blue SofTex® (80-EA)	Х
Atmospheric Blue (2NV)	Warm White SofTex® (00-EA)	Х
Atmospheric Blue (2NV)	Deep Ocean Blue SofTex® (80-EA)	Х

Factory Options

Mirai

No factory options available at this time

Packages

Mirai

No packages available at this time

Features

S - Standard | O - Optional | P - Package

	Mirai
Safety/Convenience	
Airbags	
Eight airbags[20] – includes driver and front passenger Advanced Airbag System, driver and front passenger seat-mounted side airbags, driver knee airbag, passenger seat cushion airbag, and front and rear side curtain airbags	S
Backup Camera	
Integrated backup camera[16] display with projected path	S
Braking Systems	
Regenerative braking	S
Vehicle Stability Control (VSC)[21] – part of Star Safety System™	s
Traction Control (TRAC) – part of Star Safety System™	S
Anti-lock Brake System (ABS) – part of Star Safety System™	S
Electronic Brake-force Distribution (EBD) – part of Star Safety System™	S
Brake Assist (BA)[22] – part of Star Safety System™	S
Smart Stop Technology® (SST)[23] – part of Star Safety System™	S
Convenience	
Tire Pressure Monitor System (TPMS)[24]	S
Child-protector rear door locks	S
Vehicle Proximity Notification System (VPNS)[25]	S
Front and rear parking assist sonar[26]	S
Cruise Control	
Dynamic Radar Cruise Control (DRCC)[18]	S
Power Outlets	
One 12V rear auxiliary power outlet and two USB 2.1A charging ports	S
Safety & Security	
Energy-absorbing collapsible steering column	S
Front and rear energy-absorbing crumple zones	S
Side-impact door beams	S
Collision sensors: deactivate high-voltage battery and close H2 tank valves	S
Safety Connect®[14] – includes Emergency Assistance, Stolen Vehicle Locator, Roadside Assistance and Automatic Collision Notification. Available by subscription. Complimentary three-year subscription included.	s
Pre-Collision System (PCS)[27]	S
Lane Departure Alert (LDA)[17]	S
Blind Spot Monitor (BSM)[28] with Rear Cross-Traffic Alert (RCTA)[29]	S
Anti-theft system with immobilizer[30]	s
Interior	
Air Conditioner, Heater & Defroster	
Dual-zone automatic climate control with Intelligent Touch controls, cabin air filter and individually controlled rear-seat vents	S
Intelligent Touch controls for heated seats, heated steering wheel and windshield wiper de-icer	S
Audio, Entertainment & Navigation	
Entune™ 3.0 Premium Audio with JBL® w/Clari-Fi®[5] Dynamic Navigation[3] and App Suite – includes 11 speakers including subwoofer, amplifier, 7-in. touch-screen AM/FM CD player, MP3/WMA playback capability, auxiliary audio jack, USB 2.0 port with iPod®[6] connectivity and control, Dynamic Navigation[3] with 3-year complimentary trial, Dynamic POI Search with 3-year complimentary trial, Dynamic Voice Recognition[7] with 3-year complimentary trial, hands-free phone capability[8]	S

	Mirai
and music streaming via <i>Bluetooth</i> ®[9] wireless technology, Entune® App Suite[10], Siri® Eyes Free[11], HD Radio™[12], SiriusXM®[13] Satellite Radio with 3-month complimentary SiriusXM All Access trial, and Gracenote® album cover art. Entune™ 3.0 Toyota Connected Services — Safety Connect®[14] with 3-year complimentary trial, Wi-Fi Connect Powered by Verizon[15] with up to 2gb within the 6-month complimentary trial, Destination Assist Connect[2] 6-month complimentary trial. Access to Entune® App Suite[10] is subscription free. See Toyota.com/entune for details.	
Integrated backup camera[16] display with projected path	S
TFT Multi-Information Display with Trip Performance Score, Fuel Consumption History, Average Fuel Economy, Fuel Economy History, Fuel Cell Stack Power Level, Lane Departure Alert, Clock Settings, Trip History.	S
Cup & Bottle Holders	
Four cup holders and two front bottle holders	S
Instrumentation	
TFT Display with speedometer, odometer, two trip meters, current trip information, outside temp, fuel level indicator, MPGe, Eco driving indicator, fuel cell stack power level and battery charge indicator	S
Lights	
Overhead console with map lights, dome light, sunglasses storage and Safety Connect®[14] button	S
Mirrors	
Frameless auto-dimming day/night rearview mirror with HomeLink® universal transceiver	S
Dual extendable sun visors with sliding extensions and illuminated vanity mirrors	S
Power Outlets	
One 12V rear auxiliary power outlet and two USB 2.1A charging ports	S
Seats	•
SofTex®-trimmed, two-stage heated front seats with contrasting inserts and seatback pockets; 8-way power-adjustable driver's seat with 2-position memory function and power lumbar support; 8-way power adjustable front passenger seat with power lumbar support	S
SofTex®-trimmed, two-stage heated rear seats	S
Rear seat with center console and armrest cup holders	S
Steering Wheel	
SofTex®-trimmed, power heated tilt/telescopic steering wheel with two-position memory function and piano black accents and audio, Multi-Information Display, <i>Bluetooth</i> ®[9] hands-free phone[8], voice-command, Lane Departure Alert (LDA)[17], Dynamic Radar Cruise Control (DRCC)[18]	S
Storage Areas	-
Passenger-side lockable glove compartment	s
Multi-function front-seat center console with carbon fiber-style accents, sliding cover and armrest, two front cup holders, Qi charging[1], USB 2.0 port with iPod®[6] connectivity and control	S
Covered rear seat-center console with tilt open and armrest, storage compartment, and two cup holders	S
Trim	
Water release control switch	S
Piano black interior trim with carbon fiber-style and matte silver interior accents and chrome door handles	S
Smart Key System[19] on front doors and trunk with Push Button Start and remote illuminated entry	S
Power windows with auto up/down and jam protection in all positions and retained-power features	S
Rear window defogger with timer	s
Power door locks with shift-linked automatic lock/unlock feature and anti-lockout feature	S
Exterior	
Lights	
LED low- and high-beam headlights with Automatic High Beams and auto on/off feature	S
LED Daytime Running Lights (DRL)	S

	Mirai
LED stop lamps	S
Mirrors	
Color-keyed and heated power outside mirrors with auto-dimming, turn signal and blind spot warning indicators, reverse tilt and power-folding features with two-position memory function	S
Trim	
Black sport front grille	S
Color-keyed front bumpers with black inserts with chrome accents	S
Color-keyed rear bumpers	s
Exclusive fuel cell vehicle badging	s
Color-keyed outside door handles (with touch-sensor lock/unlock feature on front doors)	s
Wheels & Tires	
17-in. silver-painted, machine-finished, engraved alloy wheels with painted black accents; P215/55R17 tires[4]	S
Windows, Glass & Wipers	
Rain-sensing, washer-linked, variable intermittent windshield wiper with heated windshield wiper de-icer	S
Acoustic noise-reducing windshield and front/rear side glass	S
Color-keyed, roof-mounted, shark-fin antenna	S

Specs

	Mirai
Brakes	
Front	11.6-in. ventilated disc
Rear	11.4-in. solid disc
Dimensions - Exterior	
Wheelbase (in.)	109.5
Overall length (in.)	192.5
Overall width (in.)	71.5
Overall height (in.)	60.5
Track - front (in.)	60.5
Track - rear (in.)	61
Coefficient of drag (Cd)	0.29
Ground clearance (in.)	5.1
Dimensions - Interior	
Head room, front/rear (in.)	38.5/36.8
Shoulder room, front/rear (in.)	54.3/53.52
Hip room, front/rear (in.)	53.4/52.4
Leg room, front/rear (in.)	42.5/30.1
Drive Battery	
Туре	Sealed Nickel-Metal Hydride (Ni-MH)
Voltage (V)	244.8
Capacity (kWh)	1.6
Number of battery cells	34 cell modules
Drive Systems & Differentials	
Drivetrain layout	Front-wheel drive
Electric Motor	
Hybrid system net power	114kW (153hp)
Туре	Permanent magnet AC synchronous

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	Mirai
Voltage (V)	Variable, Max 650V
Electric motor horsepower (hp)	151
Electric motor torque (lbft.)	247
Fuel Cell Assembly	
Name	Toyota Fuel Cell Stack
Type	Solid polymer electrolyte
Weight (lbs.)	123.46 lbs (56kg)
Humidification method	Internal circulation form (humidifier-less)
Power output density by volume (kW/L)	3.1
Number of cells (single-line stacking)	370 cells single-line stack
Cell separator material	Titanium
Number of phases	4 phase boost converter
Voltage after boost converter (V)	Max 650 (variable)
Fuel Facts	
EPA-estimated MPGe (city/hwy/comb)[31]	67
California emissions rating	Zero Emission Vehicle (ZEV)
Hydrogen Tank	
Fuel type	Compressed hydrogen gas
Storage method	High-pressure tank
Number of tanks	nign-pressure tank
Type	Type-4
Maximum filling pressure (MPa)	87.5
Normal operational pressure (MPa)	70
Storage capacity, hydrogen vs. tank weight (wt%)	5.7
Size (L)	122.4 (fore tank: 60; aft tank: 62.4)
Approx. hydrogen storage mass (kg)	5
Material	Inner layer: plastic liner
riateriat	Middle layer: carbon fiber reinforced plastic Surface layer: glass fiber reinforced plastic
Approx. refueling time (minutes)	3-5
Safety	
Total number of airbags[20]	8
Front airbags[20]	Driver and passenger
Seat-mounted side airbags[20]	Driver and passenger
Side curtain airbags[20]	Front and rear
Seat cushion airbags[20]	Passenger
Knee airbags[20]	Driver
Driver seatbelt	3-point seatbelt, Emergency Locking Retractor (ELR)
Front passenger seatbelt	3-point seatbelt, Automatic/Emergency Locking Retractor (ALR/ELR) on all passenger belts
Rear passenger seatbelts	3-point seatbelts, Automatic/Emergency Locking Retractor (ALR/ELR) on all passenger belts
LATCH locations	Lower anchors and upper tether anchors on rear seats
Steering	
Туре	Electric Power Steering (EPS); power-assisted rack-and-pinion
Turning circle diameter, curb-to-curb (ft.)	18.7
Suspension	
Front	MacPherson strut
Rear	Torsion beam
Transmissions	
Туре	Single-speed transaxle – 2.48:1 drive gear ratio; 3.48:1 final gear ratio; 8.78:1 overall drive ratio
Warranties & Maintenance	J . J
Basic	3 year / 36,000 miles
Powertrain	5 year / 60,000 miles
Rust-through	60 months / unlimited miles
Emissions	*Refer to Vehicle *Owner's Manual
Fuel Cell System	8 years / 100,000 miles
ToyotaCare No Cost Maintenance Plan[32]	3 years / 35,000 miles
ToyotaCare Roadside Assistance Coverage[33]	36 months / unlimited miles
Weights & Capacities	
Passenger volume (cu. ft.)	85.7
Curb weight (lb.)	4075

	Mirai
Seating capacity	4
GVWR (lb.)	4,806
Cargo volume (cu. ft.)[34]	12.8
Hydrogen tank (gal.)	32.33 (122.4L)
Fuel cell stack weight (lbs.)	123.46 (56kg)
Wheels & Tires	
Wheel type	Silver-painted, machine finished, engraved alloy wheels with painted black accents
Wheel size (in.)	17
Tire type	All-season
Tire size[4]	P215/55R17
Spare	Tire repair kit

Disclaimers

- 1. Qi wireless charging may not be compatible with all mobile phones, MP3/WMA players and like models. When using the wireless charging system avoid placing metal objects between the wireless charger and the mobile device when charging is active. Doing so may cause metal objects to become hot and could cause burns.
- 2. Availability & accuracy of the information provided is dependent upon many factors. Use common sense when relying on this information. Services & programming subject to change. Service not available in every city or roadway. See *Owner's Manual* for details
- 3. Availability & accuracy of the information provided by the Dynamic Navigation system is dependent upon many factors. Use common sense when relying on information provided. Services & programming subject to change. Services not available in every city or roadway. Subscription required after end of 3-year complimentary service. See *Owner's Manual* for details.
- 4. 17-in. performance tires are often expected to experience greater tire wear than conventional tires. Tire life may be substantially less than mileage expectancy, depending upon tires used and driving conditions.
- 5. JBL® & Clari-Fi™ are registered trademarks of Harman International Industries, Incorporated.
- 6. iPod® is a registered trademark of Apple Inc. All rights reserved.
- $7. \ \ For more information, please visit: toyotanews.pressroom.toyota.com/releases/toyota+mirai+world+green+car+2016.htm$
- 8. Concentrating on the road should always be your first priority while driving. Do not use the hands-free phone system if it will distract you.
- 9. The *Bluetooth*® word mark and logos are registered trademarks owned by *Bluetooth* SIG, Inc. and any use of such marks by Toyota is under license. A compatible *Bluetooth* enabled phone must first be paired. Phone performance depends on software, coverage & carrier
- 10. Apps/services vary by phone/carrier; functionality depends on many factors. Select apps use large amounts of data; you are responsible for charges. Apps & services subject to change. See Toyota.com/entune for details.
- 11. Always drive safely, obey traffic laws & focus on the road while driving. Siri® is available on select iPhone/iPad models & requires Internet access. Siri® is not available in all languages or all areas & features vary by area. Some Siri® functionality & commands are not accessible in the vehicle. Data charges may apply. See Apple.com & phone carrier for details. Siri® is a registered trademark of Apple Inc.
- 12. HD Radio™ Technology manufactured under license from iBiquity Digital Corporation U.S. and Foreign Patents. HD Radio™ and the HD, HD Radio, and "Arc" logos are proprietary trademarks of iBiquity Digital Corp.
- SiriusXM® audio services require a subscription sold separately by Sirius XM Radio Inc. If you decide to continue service after your trial, the subscription plan you choose will automatically renew thereafter and you will be charged according to your chosen payment method at then-current rates. Fees and taxes apply. To cancel, you must call SiriusXM at 1-866-635-2349. See SiriusXM Customer Agreement for complete terms at www.siriusxm.com. All fees and programming subject to change. Not all vehicles or devices are capable of receiving all services offered by SiriusXM. Current information and features may not be available in all locations, or on all receivers. ©2018 Sirius XM Radio Inc. SiriusXM and all related marks and logos are trademarks of Sirius XM Radio Inc.
- 14. Contact with the response center may not be available in all areas. Service Agreement required. A variety of subscription terms available; charges will vary. See Toyota.com for details.
- 15. Wi-Fi Connect is available on select 2018 and newer Toyota vehicles. Visit Toyota.com for vehicle availability. Verizon Wireless is the network provider for Wi-Fi Connect, which uses Verizon's 4G LTE network to transmit data. Data usage applies. Coverage not available everywhere; see vzw.com. See verizonwireless.com/bestnetwork for details. LTE is a trademark of ETSI. Other terms apply. Up to 5 devices can be supported using in-vehicle connectivity. Verizon Wireless data subscription required upon end of 6-month trial period or use of 2-GB data (whichever comes first). Use of Wi-Fi Connect subject to Verizon Wireless' Customer Agreement (verizon.com/about/privacy/privacy-policy-summary), and data use policies (verizonwireless.com/support/vz-email-legal/).
- 16. The backup camera does not provide a comprehensive view of the rear area of the vehicle. You should also look around outside your

vehicle and use your mirrors to confirm rearward clearance. Environmental conditions may limit effectiveness and view may become obscured. See *Owner's Manual* for additional limitations and details.

- 17. Lane Departure Alert is designed to read visible lane markers under certain conditions, and provide visual and audible alerts when lane departure is detected. It is not a collision-avoidance system or a substitute for safe and attentive driving. Effectiveness is dependent on many factors including road, weather and vehicle conditions. See *Owner's Manual* for additional limitations and details
- 18. Dynamic Radar Cruise Control is designed to assist the driver and is not a substitute for safe and attentive driving practices. System effectiveness is dependent on road, weather and traffic conditions. See *Owner's Manual* for additional limitations and details.
- 19. The Smart Key System may interfere with some pacemakers or cardiac defibrillators. If you have one of these medical devices, please talk to your doctor to see if you should deactivate this system.
- 20. All the airbag systems are Supplemental Restraint Systems. All airbags (if installed) are designed to inflate only under certain conditions and in certain types of severe collisions. To decrease the risk of injury from an inflating airbag, always wear seatbelts and sit upright in the middle of the seat as far back as possible. Do not put objects in front of an airbag or around the seatback. Do not use a rearward-facing child seat in any front passenger seat. See *Owner's Manual* for further additional limitations and details.
- 21. Vehicle Stability Control (VSC) is an electronic system designed to help the driver maintain vehicle control under adverse conditions. It is not a substitute for safe and attentive driving practices. Factors including speed, road conditions, weather and driver steering input can all affect whether VSC will be effective in preventing a loss of control. See *Owner's Manual* for additional limitations and details.
- 22. Brake Assist (BA) is designed to help the driver take full advantage of the benefits of ABS. It is not a substitute for safe driving practices. Braking effectiveness also depends on proper vehicle maintenance, tire and road conditions. See *Owner's Manual* for additional limitations and details.
- 23. Smart Stop Technology operates only in the event of certain contemporaneous brake and accelerator pedal applications. When engaged, the system will reduce power to help the brakes bring the vehicle to a stop. Factors including speed, road conditions and driver input can all impact stopping distance. Smart Stop Technology is not a substitute for safe and attentive driving and does not guarantee instant stopping. See *Owner's Manual* for details.
- 24. The Tire Pressure Monitor System alerts the driver when tire pressure is critically low. For optimal tire wear and performance, tire pressure should be checked regularly with a gauge; do not rely solely on the monitor system. See *Owner's Manual* for details.
- 25. This device is not a substitute for safe and attentive driving practices. It is the driver's responsibility to maintain a lookout for pedestrians, cyclists, other cars and objects and to drive the vehicle in a safe and attentive manner to avoid making contact.
- 26. Intelligent Clearance Sonar (ICS) is designed to assist drivers in avoiding potential collisions at speeds of 9 mph or less. Certain vehicle and environmental factors, including an object's shape and composition, may affect the ability of the ICS to detect it. Always look around outside the vehicle and use mirrors to confirm clearance. See *Owner's Manual* for additional limitations and details.
- 27. The Pre-Collision System is designed to help reduce the crash speed and damage in certain frontal collisions only. It is not a collision-avoidance system and is not a substitute for safe and attentive driving. System effectiveness is dependent on many factors including road, weather and vehicle conditions. See *Owner's Manual* for additional limitations and details.
- 28. Do not rely exclusively on the blind-spot monitor. Always look over your shoulder and use your turn signal. There are limitations to the function, detection and range of the monitor. See *Owner's Manual* for additional limitations and details.
- 29. Do not rely exclusively on the Rear Cross-Traffic Alert system. Always look over your shoulder and use your mirrors to confirm rear clearance. There are limitations to the function, detection and range of the system. See *Owner's Manual* for additional limitations and details.
- 30. The engine immobilizer is a state-of-the-art anti-theft system. When you insert your key into the ignition switch or bring a Smart Key fob into the vehicle, the key transmits an electronic code to the vehicle. The engine will only start if the code in the transponder chip inside the key/fob matches the code in the vehicle's immobilizer. Because the transponder chip is embedded in the key/fob, it can be costly to replace. If you lose a key or fob, your Toyota dealer can help. Alternatively, you can find a qualified independent locksmith to perform high-security key services by consulting your local Yellow Pages or by contacting www.aloa.org.
- 31. 2017 EPA-estimated combined MPG equivalent. Actual mileage will vary for many reasons including driving conditions and how you drive and maintain/charge your vehicle. Battery capacity will decrease with time and use. See fueleconomy.gov.
- 32. Standard ToyotaCare covers normal factory scheduled maintenance for two years or 25,000 miles, whichever comes first and also includes 24-hour roadside assistance for two years, regardless of mileage. The Mirai enhancement of ToyotaCare—a total of 3 years or 35,000 miles, whichever comes first—is valid only at authorized Mirai Fuel Cell dealers in the continental United States. See an Authorized Mirai Fuel Cell dealer for details and exclusions.
- 33. Roadside Assistance coverage is 3 years unlimited mileage. Does not include parts and fluids, except emergency fuel delivery. See Toyota dealer for details and exclusions. Valid only in the continental U.S. & Alaska.
- 34. Cargo and load capacity limited by weight and distribution.
- 35. 2017 EPA-estimated 67 city/67 highway/67 combined MPGe for Mirai and 312-mile driving range. Actual mileage will vary. Range measurement pursuant to SAE J2601 standards (ambient temperature: 20°C; hydrogen tank pressure when fueled: 70 MPa). Fueling time varies with hydrogen fueling pressure and ambient temperature.