

# PRIUS < PROTOTYPE >

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## Contents

- From The Chief Engineer 02
- History of the Prius 03
- Outline 04
- Hybrid System 05
- TNGA 08
- Design Concept 09
- Exterior 10
- Interior 12
- Color 14
- Package 15
- Seat 16
- Utility & Comfort 17
- Eco Drive Support 18
- E-Four 19
- Performance 20
- Aerodynamics 21
- Quietness 22
- Safety 23

## ● The Prius as a leader and a symbol of change

"Prius" in Latin means "going before." In 1997, the Prius was launched as the world's first mass-production hybrid vehicle, leading the way as a next-generation environmentally friendly car. The second generation achieved even more impressive fuel efficiency and broke new ground in green vehicle design with the now familiar triangular silhouette, which has become the aerodynamic standard around the world for environmentally friendly vehicles. The third generation took the lead in preparing the way for the widespread acceptance of hybrid vehicles in mainstream society. In this way, the Prius has remained at the head of the field in each and every generation, contributing to society with its environmental friendliness and presence.

Using human life as a metaphor, the Prius has passed through its school years. Now, eighteen years old, it's ready to graduate and start at university before taking on the world. The core DNA of the Prius will always remain based in extraordinary environmental performance, but now we are delighted to unveil a new and improved Prius which has evolved into an eye-catching beauty. The structural innovations brought about by the Toyota New Global Architecture (TNGA) have transformed the platform and hybrid system, giving this all-new Prius life after many years of hard work and development. We developed the new Prius to be the clear leader in its field, with the aim of establishing a fresh and advanced image for hybrid vehicles and of demonstrating how far our vehicles have come. We think that our customers will appreciate the extent of these changes by interacting with and driving the new Prius.

## ● A beautiful hybrid

The overarching development concept for the new Prius was the term "Beautiful hybrid (a beautiful car for a beautiful world)." We have created an expressive exterior design and a thoroughly user-centric interior beyond the base platform of extraordinary environmental performance. In its latest generation, the Prius combines exciting and fun-to-drive dynamic performance with advanced active safety systems, and also features power supply capabilities that allow it to play a valuable role in society in the event of a natural disaster. It has the potential to make the world a more beautiful place, both through clean driving and through its own eye-catching design. As such, every inch of this latest Prius was designed with this concept in mind, toward Toyota's end goal: the smiling faces of our customers.

The new Prius is designed to meet four distinguishing aims:

1. Impressive fuel efficiency and environmental performance
2. Eye-catching design
3. Fun-to-drive dynamic performance
4. Social responsibility.

We feel that we have met these aims, and are delighted to deliver a beautiful car that is equally friendly to the environment, to occupants, and to society in general. These are the changes that the new Prius has taken on in answer to the challenges it had been set to overcome. We started completely anew with a blank sheet of paper and re-created everything from scratch. Every member of the development team took on impossible challenges, battled through doubts and the occasional failure, and won through to produce something novel. All of us grew together with the development of the car but for me, the new Prius represents my team turning the impossible into reality. With great confidence, I am proud to introduce the beautiful latest reimagining of the Prius.



**Koji Toyoshima**  
Chief Engineer,  
Product Planning Group



Toyota is changing, with the Prius leading the way...

# The history of the Prius is a never-ending story of facing up to the challenge to be ahead of the times.

Eighteen years have passed since the birth of the first generation Prius. True to its name (which means “going before” in Latin), the history of the Prius has been one of continuous progress as the world’s leading hybrid vehicle. In terms of fuel economy and styling, the Prius is always in front of the times. The DNA of the Prius has now been passed down to the latest, fourth generation.



## First generation Prius: December 1997 debut

### A leader of next-generation vehicles

- The world’s first mass-production hybrid passenger vehicle, the original Prius was launched under the advertising slogan, “Just in time for the 21st century.”
- It brought about the hybrid revolution with its innovative advanced technology.

#### Good to know:

The system that allowed motor and engine to work both independently and yet together was so difficult to develop that the first prototype could not move for 49 days. The Prius was born after overcoming a myriad of difficult challenges just like this one.



## Second generation Prius: September 2003 debut

### Futuristic fuel-efficient styling

- With the second generation, the Hybrid Synergy Drive concept was born. The Prius retained its status as a hybrid leader with its enhanced dynamic and environmental performance.
- It featured the first use of the triangular silhouette.
- The second generation was packed with the (then) latest technologies such as Intelligent Parking Assist (IPA) and smart keyless entry.

#### Good to know:

The Prius found its place in the spotlight after being driven by Hollywood stars to the red carpet at the 2003 Academy Award Ceremony.



## Third generation Prius: May 2009 debut

### Leading the way to the widespread acceptance of hybrid vehicles in mainstream society

- The third generation featured exceptional fuel efficiency and enhanced dynamic performance.
- It brought hybrids into focus as a major vehicle category.

#### Good to know:

The newly developed hybrid system, with a 1.8-liter engine, achieved the world’s leading fuel efficiency for its time. Global sales of the Prius topped 3.5 million units.

## Prius DNA + TNGA = The new Prius

Always ahead of the times: that is the DNA of the Prius. The new Prius advances this DNA while incorporating the wide-reaching structural innovations of the Toyota New Global Architecture (TNGA) to create a completely new vehicle. TNGA brings with it even more impressive fuel efficiency and an exciting driving experience through a highly rigid vehicle frame and a low center of gravity. Turning the impossible into reality, the new Prius overwrites the conventional image of hybrid vehicles.

The new Prius is also packed with the latest technology and safety systems such as the Toyota Safety Sense P collision avoidance support package. Also, in response to requests from many customers, we have made the E-Four electronic 4-wheel drive system available for the first time. Furthermore, the new Prius continues to lead the way with an even more refined, eye-catching design. This latest generation brings to the world excitement beyond its appearance and an unprecedented emotional appeal.



### Excellent fuel efficiency



● The new Prius features a newly developed hybrid system with a wide range of fuel efficient technologies, such as a high-performance and compact lithium-ion or nickel-metal hydride battery and a refined engine, as well as a power control unit and motor that are smaller, lighter, and achieve a reduction in loss.

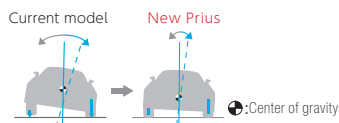


● The improved 2ZR-FZE engine achieves a class-leading maximum thermal efficiency of **40 percent** through improved combustion characteristics due to redesigned intake ports that increase the tumble ratio and increased exhaust gas recirculation (EGR).



● The body incorporates a number of cutting-edge aerodynamic technologies, such as a body profile that was designed based on a thorough mathematical analysis of air flows. The drag coefficient (Cd) of the new Prius has been lowered to **an impressive 0.24**.

### Enjoyable, intuitive driving experience



● The lower center of gravity ensures stability and ride comfort, keeping roll to a minimum and providing a comfortable ride to all occupants.

● The height of the hip point and angle of the steering wheel were optimized to create a driving position less tiring than the standard, improving comfort on long drives.



● The independent double wishbone rear suspension provides a comfortable, shock free ride and enjoyable cornering.

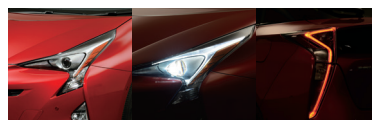


● The annular frame construction increases the rigidity of the body by about **60 percent** over the current model. Laser screw welding (LSW) makes a major contribution to the improved ride stability, quiet drive, and improved comfort of the new Prius.

### This futuristic design takes a giant leap forward



● The exterior of the new Prius has been given an even more emotional design, with a front face that emphasizes the Toyota emblem and the triangular silhouette introduced by previous models further accentuated by the lower center of gravity achieved through TNGA.



● Both tail lamps and rear combination lamps have a distinctive design with bold, curvaceous lines.



● The information displays and operation systems of the new Prius are organized and collected together in a straightforward instrument panel.

### A full range of advanced technologies and safety systems



● The new Prius is packed with advanced technologies to support fuel-efficient and comfortable driving performance, including a steering wheel covered in a temperature regulating material that balances hot and cold.



● The advanced safety systems in the new Prius include the Toyota Safety Sense P collision avoidance support package that uses both a millimeter-wave radar and monocular camera as well as Intelligent Clearance Sonar (with an all-round collision warning function), and the Simple Intelligent Parking Assist.

### New E-Four electronic 4-wheel drive system



● This compact system is installed at the rear of the vehicle, based on the layout of the front-wheel drive model, thereby ensuring sufficient legroom and a **457-liter** luggage compartment space.

● The system judges whether 4-wheel drive is needed in normal driving conditions and switches the drive system efficiently. Smooth, optimized control also ensures excellent fuel efficiency.

● E-Four allows stable and secure driving performance on difficult snowy roads, as well as when driving over ruts, up and down slopes, in car parks, and across slippery manhole covers.



# Target: Fuel consumption of 40 km/L\* (certain grades only)

## Excellent fuel efficiency attained by advancing the DNA of the Prius

The Prius has continued to re-write the definition of fuel efficiency in the history books.

The new Prius achieves superb fuel efficiency through its advanced new hybrid system that features a wide range of the latest fuel efficient technologies.


\*JC08 test cycle, in-house measurements

TOPIC  
1

### Fuel efficiency taken to the next level and a maximum engine thermal efficiency of 40 percent

The fuel-efficient 2ZR-FXE engine has been updated with the latest refinements to achieve a world-leading maximum thermal efficiency of 40 percent.

#### 1.8-liter 2ZR-FXE engine



**Maximum engine thermal efficiency trends**

- Toyota's conventional vehicle gasoline engines
- Competitors' gasoline engines

Second generation Prius 1NZ-FXE (38.5%)  
 Current (Third) generation Prius 2ZR-FXE (40%)  
 First generation Prius 1NZ-FXE (38.5%)  
 New Prius 2ZR-FXE (40%)

(Year: '95, '00, '05, '10, '15)

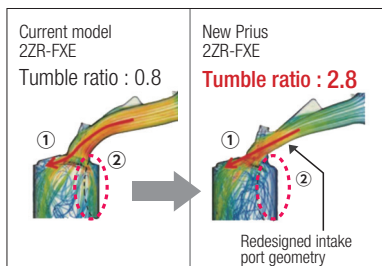
**Engine specifications 2ZR-FXE**

Cylinders	Inline 4-cylinder
Displacement	1797cc
Bore x stroke	φ 80.5×88.3mm
Compression ratio	13.1
Maximum power	72(98)kW/5200rpm
Maximum torque	142(14.5)Nm/3600rpm
Maximum thermal efficiency	40%

#### Measures taken to achieve a maximum thermal efficiency of 40 percent

##### Increased intensity of in-cylinder gas flows

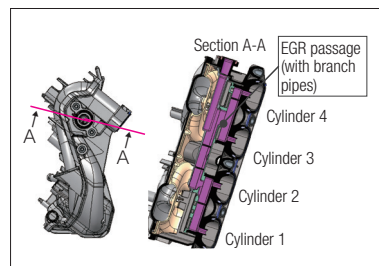
Redesigned intake port geometry



● Redesigning the intake port geometry creates more linear gas flows in the tumble direction ① and reduces the reverse tumble component ②, increasing the tumble ratio from 0.5 to 2.8. More intense tumble enables high-speed combustion and large-volume exhaust gas recirculation (EGR), which boosts combustion efficiency and makes a major contribution to higher fuel efficiency.

##### Redesigned EGR distribution passage geometry

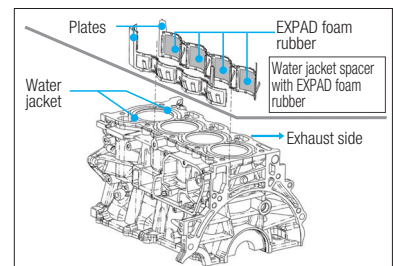
Large-volume cooled EGR



● Large amounts of EGR gas are guided evenly to each cylinder through a redesigned EGR passage inside the intake manifold, helping to improve combustion efficiency.

##### Optimization of cylinder bore wall temperature

Water jacket spacer



● Knocking is improved by cooling the upper exhaust side portion of the cylinder bore and friction is reduced by retaining heat in the lower portion of the bore, resulting in improved fuel efficiency.

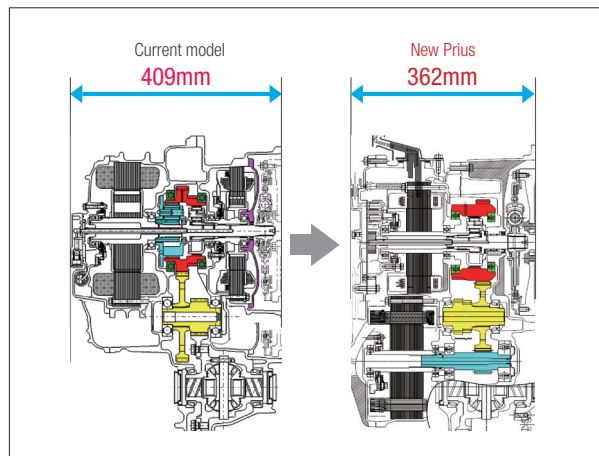
TOPIC  
2

Compact, lightweight, and highly efficient hybrid system

Reducing the size, weight, and loss of each component in the hybrid system enables more effective use of space and greater system efficiency, thereby boosting fuel economy.

Compact design with around 20 percent lower loss

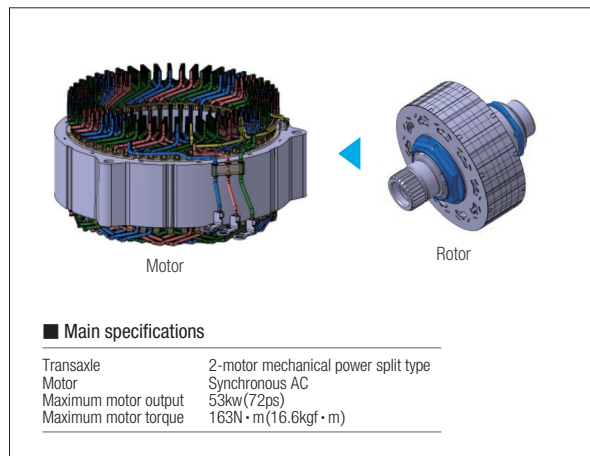
Hybrid transaxle



The transaxle features a new multi-axis structure for the motors and a new parallel reduction gear format (changed from a planetary gear to reduce loss), reducing size and achieving roughly **20 percent** lower loss than the current model.

Compact, lightweight, and higher power density

High-speed motor



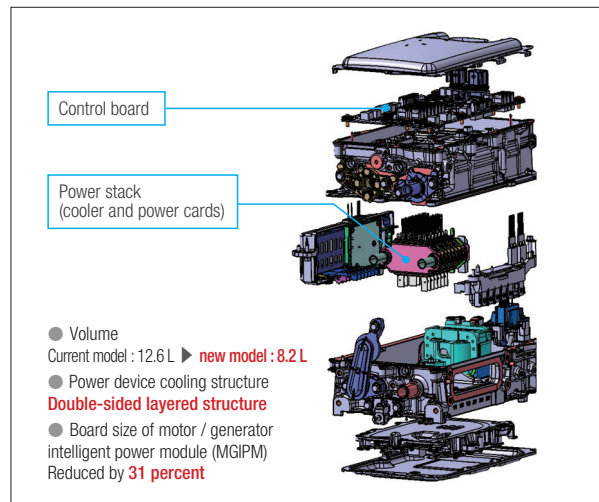
Main specifications

Transaxle	2-motor mechanical power split type
Motor	Synchronous AC
Maximum motor output	53kw(72ps)
Maximum motor torque	163N·m(16.6kgf·m)

The high-speed motor with a new rolling-coil structure is smaller and achieves a higher power density than in the previous Prius. In addition to reducing loss by around **20 percent**, the compact design increases installation flexibility and the multi-axis structure saves space.

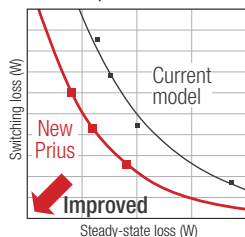
Contribution of space-saving design to new auxiliary battery positioning

Power control unit (PCU)



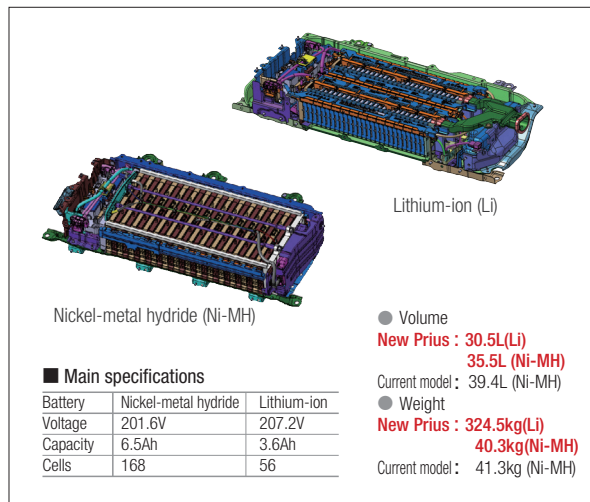
More efficient power devices reduce the loss in the PCU by **about 20 percent**. In combination with the smaller transaxle, the more compact PCU design allows it to be placed directly above the transaxle and the auxiliary battery to be moved from the luggage space to the engine compartment.

Low-loss power semiconductors



High-performance and compact design through newly developed batteries

Hybrid batteries

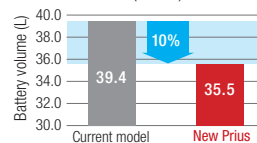


Main specifications

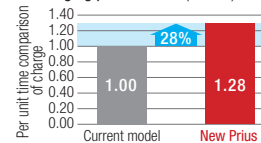
Battery	Nickel-metal hydride	Lithium-ion
Voltage	201.6V	207.2V
Capacity	6.5Ah	3.6Ah
Cells	168	56

Newly developed high-performance lithium-ion and nickel-metal hydride batteries (which use\* Hyper-prime Nickel) have both been adopted in this generation. These batteries are smaller and lighter than before, enabling installation under the rear seats. \*Registered trademark of Primearth EV Energy Co., Ltd.

Size reduction (Ni-MH)



Charging performance (Ni-MH)

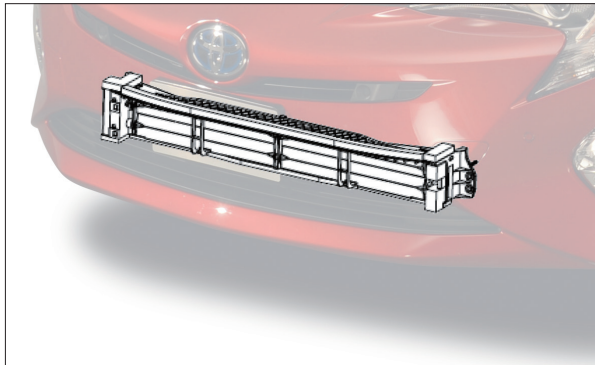


**TOPIC 3** Improved warm-up and aerodynamic performance

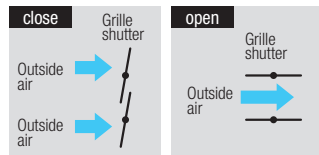
New technologies adopted to improve warm-up and aerodynamic performance help in attaining the new Prius' superb fuel efficiency.

**Faster warm-up and less drag**

Grille shutter

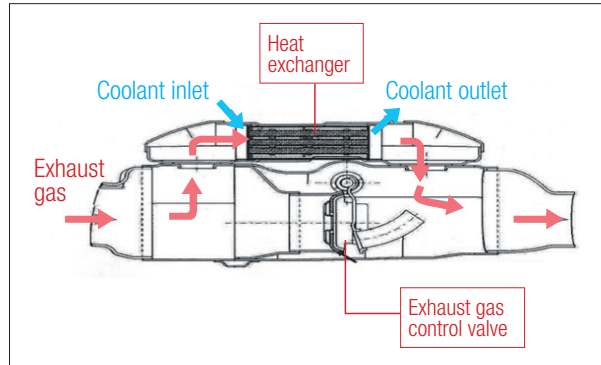


● The grille shutter opens and closes automatically based on the driving conditions and the degree to which the car has been warmed up. The shutter closes when the cooling system does not need cool air from the outside, expediting warm-up and reducing drag.



**Compact and improved heat exchange performance**

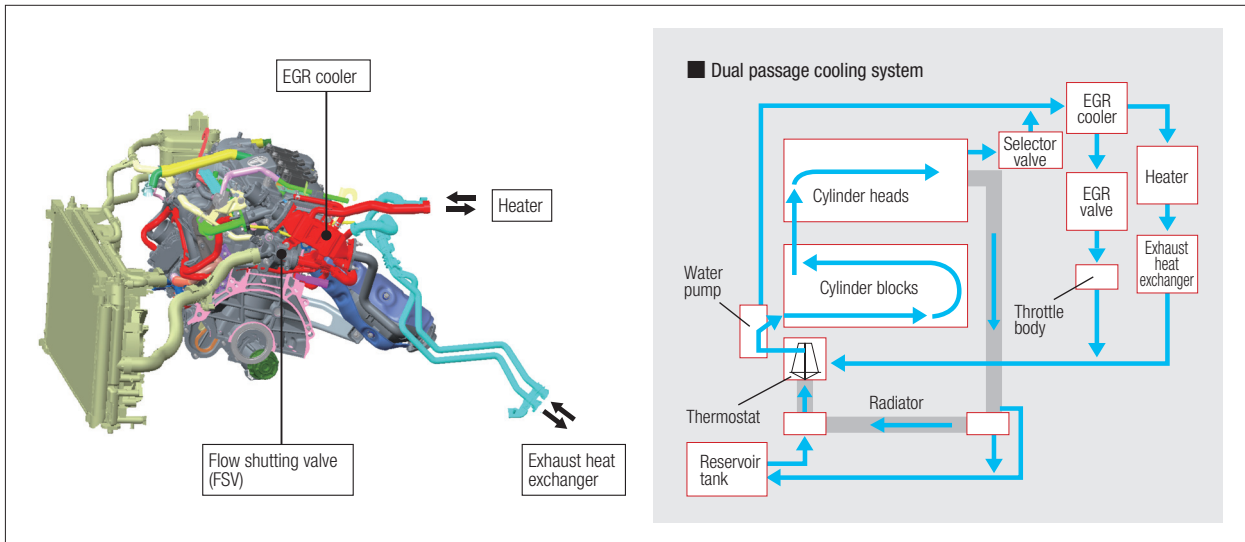
Exhaust heat exchanger



● The exhaust heat exchanger recovers energy from the engine exhaust and re-uses it to speed up the temperature increase of the coolant for engine warm-up. A new fin-type structure reduces the size of the heat exchanger while boosting performance, thereby helping to improve fuel efficiency.

**Dual passage cooling system**

Electric water pump



● There are two cooling passages, one for the main engine unit, and one for the exhaust heat recovery system and heater engine cooling. Warm-up performance is improved by optimizing the flow of coolant to the main engine unit using a selector valve (the FSV).

**POINT!** Faster initiation of warm-up using dual passage cooling system with electric water pump

Conventionally, vehicle users have to wait for the engine to warm up before using the heater because coolant flow is stopped until then. However, adopting two cooling passages lets the user turn on the heater before the engine has warmed up, heating the occupant compartment quickly, even on cold days.

# An innovative vehicle creation process that results in eye-catching and fun-to-drive cars

“Rewarded with a smile by exceeding your expectations.” The Toyota New Global Architecture (TNGA) was developed to achieve this goal—as laid out in Toyota’s Global Vision. TNGA incorporates wide-reaching structural innovations that promise substantially improved basic performance and product appeal. Starting with the new Prius, Toyota is revealing its new vehicle creation process to the world.



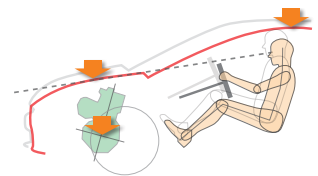
Note: Vehicle developed using TNGA

## What TNGA brings to the new Prius

1

### Natural and comfortable driving position

- In addition to the lower center of gravity in the new platform, Toyota aimed to create the best possible driving position through a dedicated ergonomics-based approach. Then, by optimizing the layout of the steering wheel, pedals, shift lever, and switches, the new Prius creates a natural and comfortable driving feel seamlessly integrated with the vehicle.



2

### Intuitive driving performance

- One of the keys to safety and peace of mind is an intuitive drive—almost as if the car can sense what you want to do. Above and beyond that expectation, the performance of the new Prius is designed to make drivers want to continue driving as much as possible, and help them fall in love with cars all over again.

#### [ Key points behind improved dynamic performance ]

- Lower center of gravity in the new platform
- Annular frame structure and rigid body created using laser screw welding (LSW)
- Shock-suppressing independent double wishbone rear suspension for enjoyable cornering

3

### Quiet private space

- The adoption of a highly rigid body frame and noise-suppressing acoustic material helps to create a refined, quiet, and private space within the vehicle. Once inside, you'll never want to leave.



4

### Combining environmental friendliness with fun-to-drive acceleration

- The driving force behind the Prius has always been harmony with nature and the aim of never wasting a single drop of precious fuel. Thanks to the new powertrain system that is a part of TNGA, the new Prius combines starting fuel efficiency with fun-to-drive acceleration.

5

### Advanced safety performance and complete peace of mind

- Toyota’s ultimate goal is a world where no-one is hurt or killed in traffic accidents. The new Prius provides advanced safety performance and complete peace of mind to our customers. In addition to driving support technologies that take the new Prius one step further toward the goal of becoming a car that never crashes, it also features the latest body structure which has been designed following Toyota’s Global Outstanding Assessment (GOA) safety standards.



The new Prius combines the triangular silhouette inherited from previous Prius generations with a body featuring a low center of gravity thanks to TNGA, resulting in an advanced and expressive design.



## Design concept : 「Iconic human-tech」

「 Iconic: Design that shouts Prius 」

「 Human-tech: instinctive and advanced functionality 」

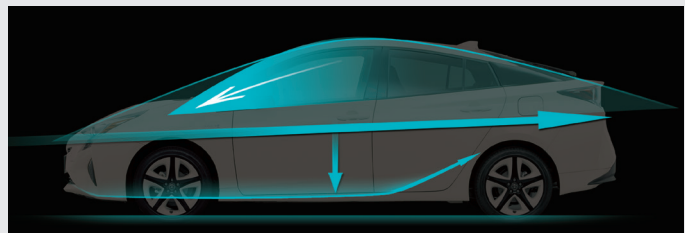
The advanced functionality of the new Prius is easily recalled and highly instinctive.

The unique internal design shouts "Prius!" as loudly as the exterior.

Combining functionality and playfulness in both exterior and interior, the overall result is an expressive and unique design.

### ► Overall design theme

The design emphasizes the low center of gravity through sleek lines that flow from the Toyota emblem on the front to the sides and rear, which is further underlined by the light-catching surface of the rocker panels. The belt line curves upward, infusing an evocative dynamism into the design.



**POINT!** A triangular silhouette to enhance aerodynamic performance

In redesigning the Prius, Toyota has moved the peak of the roof forward by 170 mm. The rear spoiler is 55 mm lower, creating a further enhanced version of the famous triangular silhouette. This silhouette ensures that air flows smoothly from the roof peak to the rear spoiler, improving both fuel efficiency and dynamic performance.



An exciting and distinctive front face, bringing playfulness into an attractive look  
 The most advanced hybrid vehicle in the world has taken another big step forward in appearance.



► Front view

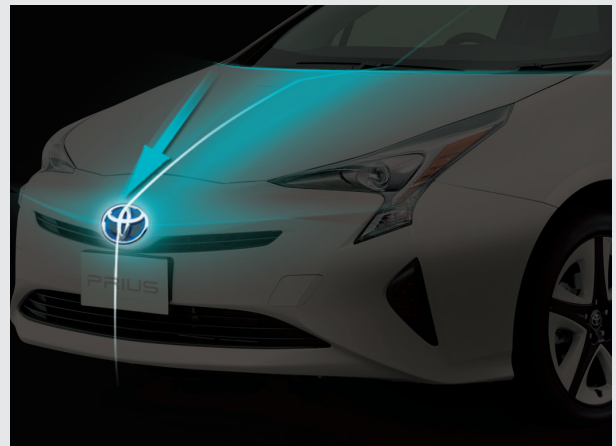
The front face that emphasizes the Toyota emblem is part of the historical DNA of the Prius. Taking advantage of the new platform with its lower engine position, the new Prius features a new, advanced front design based on Toyota's "keen look"\*1 styling language.

\*1 The "keen look" styling language is Toyota's unique front design that creates an intelligent and edgy appearance. This design combines a three-dimensional emphasis of the Toyota emblem with the dynamic "under priority" \*2 concept.

\*2 The "under priority" concept is part of Toyota's unique front design language that emphasizes the lower grille for better aerodynamic, cooling, and pedestrian protection performance.

**POINT!** A design combining smooth surfaces with sharp-edged functionality

The design creates a dynamic form through contrast between curvaceous and taut styling surfaces. The sharp lines of functional parts such as the headlamps act to accentuate the unique sweep of the front face.



Bi-beam LED headlamps (with auto-leveling function) + LED clearance lamps



● The integrated front headlamps that combine both high and low beams are expressed through an individualistic hawk-eye design. The clearance lamps make full use of the triangular outline to create a sharp impression.

LED front fog lamps (with accessory lamps)



● The LED front fog (incorporating accessory lamps) are designed with plated extensions to create a refined appearance.



An expressive rear design that emphasizes aerodynamic performance  
The playful spirit and good looks of the rear complement the front face.



► Rear view

From a rear spoiler that emphasizes aerodynamic performance to rear combination lamps and the side corners of the rear bumper, the use of lines in the new Prius creates a memorable rear view. The wide stance of the underbody set below the taut lines of the occupant compartment is designed to create a sense of stability.

**POINT!** Distinctive structures inspired by flowing winds

The tail end of the cabin is emphasized from the side with a sweeping structure designed to create an impression of wind flowing from the side windows to the rear. One of the aims of the exterior design in the new Prius is to highlight its aerodynamic performance.



Rear combination lamps

● The tail lamps highlight the fluidity of the design which flows from the rear spoiler to the corners of the rear bumper. The lamps were positioned to best emphasize this flowing style.



Aluminum wheels

● The combination of light aluminum and plastic reduces weight while also enhancing aerodynamic performance. Three aluminum wheel options are available.



17-inch (black coated plastic ornamental parts + center ornament)

15-inch (silver + black coating + wheel cap)

15-inch (wheel cap only)

Inheriting the basic user-friendly design of previous models, the interior of the new Prius adds futuristic touches to create a warm and inviting space.



► Instrument panel

One of the distinguishing features of the Prius has always been the intuitive functional layout of the instrument panel. The new Prius takes this approach another step forward. Inheriting the traditional Prius DNA that places display systems further away from the driver and control systems close at hand, the information displays and switches have been further organized and grouped together for ease of use. Combined with the intertwined design that places the meters and displays at the heart of the instrument panel, the functional parts have gained a recognizable, futuristic look.

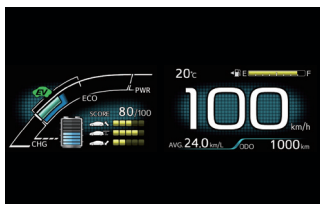


**POINT!** Wider field of view

The top of the hood has been lowered by 62 mm, opening up the forward view for the driver. The wipers have been designed to be almost invisible from the inside, creating an uncluttered and expansive view. The driver's diagonal views, to the front and to the rear, have also been increased to exhibit an excellent field of vision.

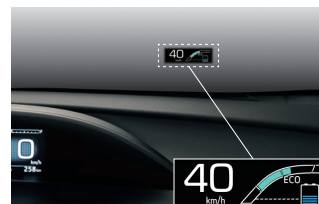


4.2-inch color thin film transistor (TFT) twin screens



● The new Prius features two brand new 4.2-inch TFT screens. The main display on the right contains basic information such as speed and fuel levels. The multi-information display on the left can be changed by pressing a switch on the steering wheel, thereby combining both functionality and clever design.

Color head-up display(HUD)



● The new color HUD creates images at a point two meters from the driver, further outside the focal length. The position and width of the images makes them clearly visible with just the slightest adjustment of focus.

Note: The photo shows an illustrated example of the HUD.





► Warm, friendly textures

Providing contrast to the futuristic meter and center displays, the instrument panel and door trim pieces are designed to exude warmth and grace as an expression of the "human-tech" design concept. The white trimmings on the steering wheel and front console tray are simple and inviting touches that help to create a perfectly balanced fusion of the futuristic and the familiar.



3-spoke steering wheel

● The steering wheel designs on offer are covered in beautifully textured genuine or synthetic leather. The synthetic leather is a temperature-balancing material that makes the steering wheel cooler to the touch in summer and warmer to the touch in winter.



Genuine leather + white ornamentation

Synthetic leather (temperature balancing material) + white ornamentation

Synthetic leather (temperature balancing material)

**Toyota's first** Temperature-balancing material that reduces wasteful A/C use

A steering wheel that is too hot or too cold might tempt the driver into turning up the A/C. The temperature-balancing synthetic leather in the new Prius helps to alleviate that too-hot or too-cold sensation in the middle of summer or winter. This material makes the steering wheel more comfortable to hold and helps to reduce wasteful A/C use, resulting in even better fuel efficiency.

■ Palm temperature five seconds after gripping steering wheel

Condition	Surface Temperature	Current Model	New Prius
Summer	55°C	Hot (red)	Cooler (green)
Winter	2°C	Cool (blue)	Warmer (red)

Radiant silver molding (center cluster/instrument panel)



● The radiant silver molding that links the center cluster and instrument panel helps to create a sense of refinement at the front.

Plated air vent knobs (center and sides)



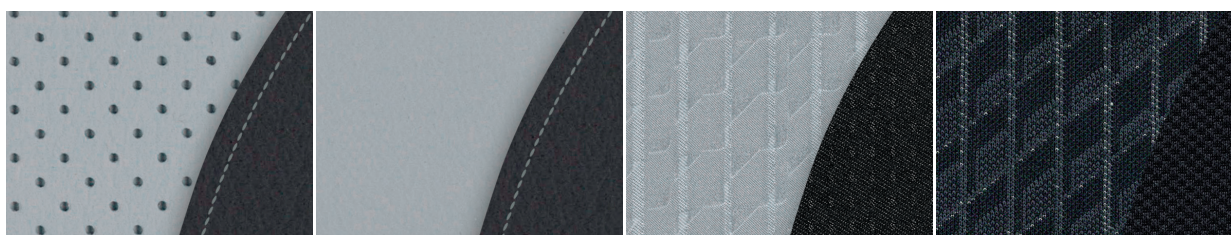
● The air vent knobs at the center and the sides are plated and stamped with the name of the vehicle for a personal touch.

Side air vents come with silver bezels accented with color



● The side air vent bezels are a subtle silver accented to match the color of the seat stitches.

Seat coverings: Choose between four high-class options



Genuine leather  
Note: The photograph shows the Cool Gray color option.

Synthetic leather  
Note: The photograph shows the Cool Gray color option.

Luxury cloth  
Note: The photograph shows the Cool Gray color option.

Normal cloth  
Note: The photograph shows the Black color option.

Just like the interior colors, the body colors of the new Prius are designed to express a futuristic image.

The new Prius is available in nine body colors that further emphasize its futuristic exterior design.

Newly developed



**Emotional Red <3T7>**  
A deep and lustrous red with strong presence

Newly developed



**Thermo-Tec Lime-Green <6W7>**  
A fresh, lime-green color inspired by new green shoots (with thermal support)

Newly developed



**Steel Blonde Metallic <4X1>**  
Sharp textures designed to emphasize both futuristic and premium performance

New option



**Gray Metallic <1G3>**  
A deep, powerful, and lustrous metallic color

New option



**Attitude Black Mica <218>**  
A black with both depth and shine

New option



**Dark Blue Mica Metallic <8W7>**  
A dark blue with mysterious appeal



**Super White II <040>**  
A simple, solid white



**White Pearl Crystal Shine <070>**  
A luxurious white, redolent of the shine given off by a high-class pearl



**Silver Metallic <1F7>**  
A smooth, lustrous silver

**POINT!** Special painting processes for the newly developed colors

**Emotional Red <3T7>** The specially layered coating creates a clear, fresh color with a deep presence and strength.

**Coating process that creates separate reflective and transparent layers**

- : Highly chromatic pigment
- : Bright aluminum

**Previous coating**: Shows a cross-section of a coating with a color layer containing pigments and a reflective layer below it. A note states: "The red pigment and aluminum mix together, dulling the intensity of the reflection."

**Emotional Red**: Shows a cross-section of the new coating with a transparent layer on top of the color layer, and a reflective layer below. A note states: "Intense reflection from the aluminum, creating a strong, solid impression"

**Color/shadow map**: A graph showing the relationship between color and shadow. The y-axis is labeled "Shadow" and the x-axis is "Color". A dashed line represents the "Color range of previous coating". A solid line represents "Emotional Red", showing a higher shadow level for the same color. A note states: "The new body color has an appealing combination of color and shadow beyond that achieved by previous colors."

**Thermo-Tec Lime-Green <6W7>** The first technology in the world to use infrared-reflecting particles, resulting in a body color with thermal support.

**Thermal barrier technology using large titanium oxide particles** **World-first**

**Previous coating**: Shows a cross-section of a coating with a color basecoat containing carbon black. A note states: "Carbon black in the color basecoat absorbs infrared rays, increasing the vehicle body's surface temperature instead of the interior surface temperature."

**Thermo-Tec Lime-Green**: Shows a cross-section of the new coating with a color basecoat containing large titanium oxide particles. A note states: "Large titanium oxide particles in the color basecoat reflect infrared rays, reducing the vehicle body temperature by about 5°C compared to the previous coating."

A simple yet futuristic interior color design



**Cool Gray**  
A beautiful, refreshing gray that creates the perfect contrast to black

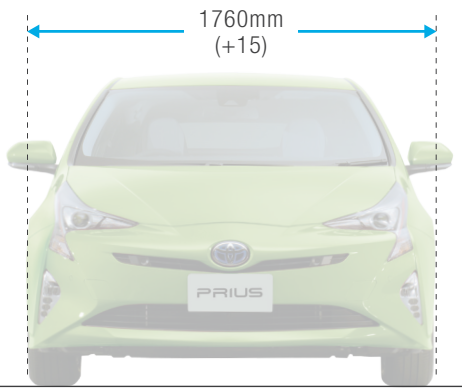
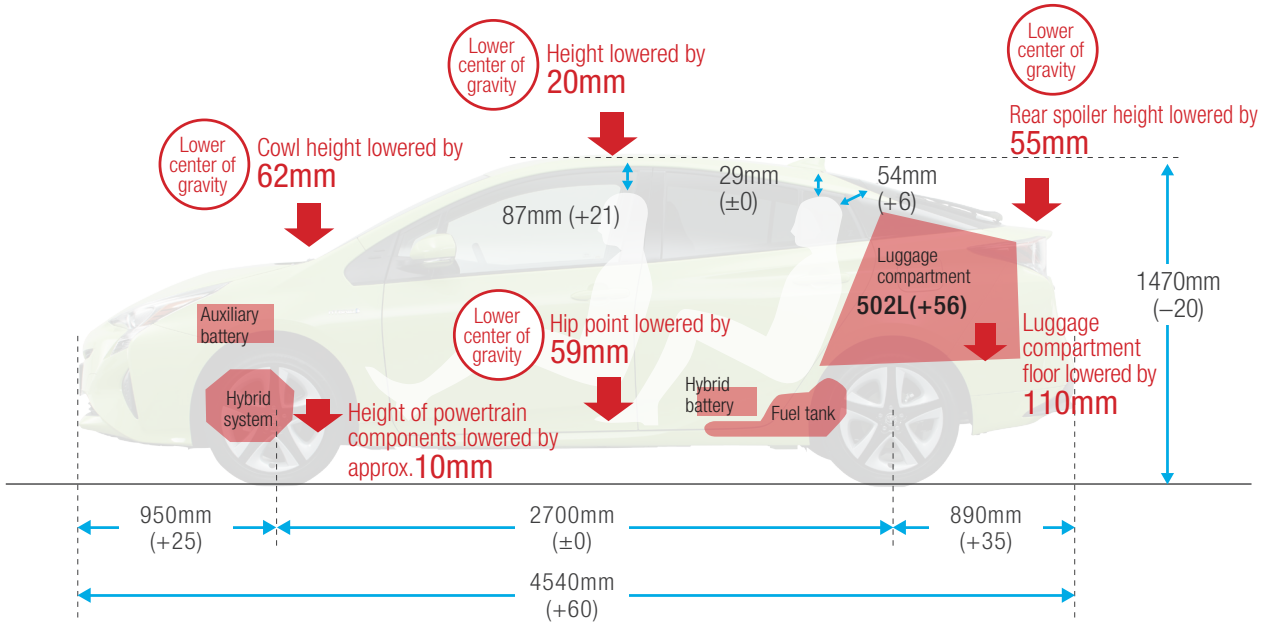


**Black**  
A luxurious black that perfectly offsets the white ornamentation

A lower center of gravity using the new TNGA platform.  
 The new Prius has a lower profile and a spacious interior.  
 The new battery location results  
 in an even larger luggage compartment.



Note: Vehicle developed using TNGA



Note: All dimensions are for the 2WD model. Figures inside parentheses show differences from the current model.

**Optimized positioning of auxiliary and Hybrid batteries**

■ : New Prius  
 □ : Current model

Reducing the size of the hybrid system enabled the auxiliary battery to be moved from the luggage space to the engine compartment and the traction battery to under the rear seats. As a result, the luggage compartment of the new Prius is large enough to fit four golf bags.  
 Size of golf bags: 9.5 inches × 46 inches (The luggage compartment in vehicles equipped with a spare tire or the E-Four system is large enough for three golf bags.)

Comparison of dimensions (2WD models)		New Prius		Current (third generation) Prius	Second generation Prius	First generation Prius
		S	Difference			
Length	mm	4540	+60	4480	4445	4310
Width	mm	1760	+15	1745	1725	1695
Height	mm	1470	-20	1490	1490	1490
Wheelbase	mm	2700	±0	2700	2700	2550
Length of occupant compartment	mm	2110	+205	1905	1890	1850
Width of occupant compartment	mm	1490	+20	1470	1440	1400
Height of occupant compartment	mm	1195	-30	1225	1225	1250
Weight	kg	1360	+10	1350	1260	1220
Minimum turning circle	m	5.1	-0.1	5.2	5.1	4.7
Size of tires		195 / 65R15		195 / 65R15	185 / 65R15	165 / 65R15

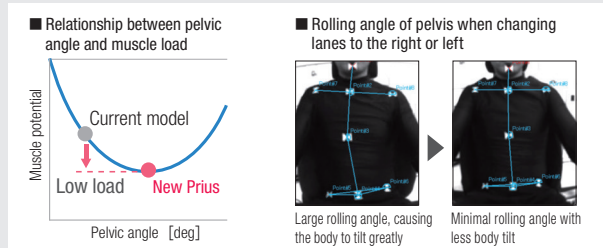


Go on long drives without feeling tiring from the posture  
The seats in the new Prius are comfortable and cozy.

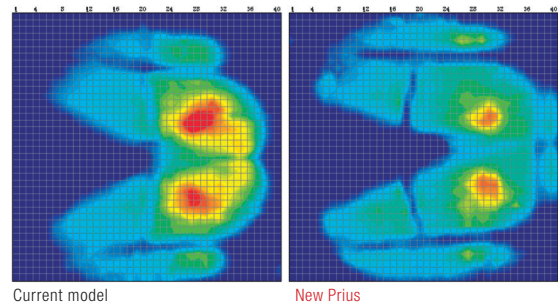


► Front seats

To achieve the most comfortable driving position, we optimized the spring characteristics of the seats, resulting in a pelvic angle that applies a smaller load on the back and the muscles of the driver. We also redesigned the materials and thickness of the seat cushions to disperse the pressure that tends to concentrate around the pelvic area, and to create the sensation of the seat embracing the driver. This design restricts pelvic movement during the frequent left and right lane changes that occur during day-to-day driving and also ensures comfort on long drives.

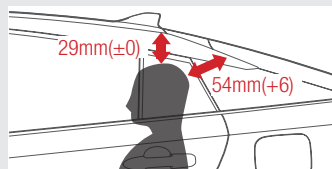


■ Comparison of body pressure when seated



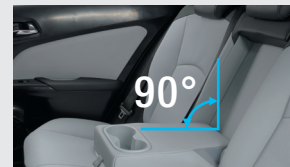
► Rear seats

The rear seats also feature improved cushioning characteristics and wider contact surfaces to provide the same degree of comfort as the front seats. At the same time, to ensure a spacious interior despite the lower roof, the shape of the headlining was redesigned to create even more headroom than before.



**POINT!** Redesigned armrests for greater rear seat comfort

To allow guests to ride in comfort, the rear armrest was set horizontally and raised by 24 mm, offering the optimum position for the elbow. The elbow rests on the doors were also redesigned to ensure a natural posture.



6:4 split rear seats

● The current model required the user to release a lock button before pushing the seatbacks down. This double-action design has been replaced by a simple lever that pushes down the seatbacks in a single action.



6:4 split rear seats



Lock-release lever



A whole range of advanced and useful technologies make the new Prius more comfortable than ever.

**Accessory outlets**  
(2 AC 100 V/1500 W outlets)



● Two outlets matching the specifications of those in ordinary homes (AC 100 V/1500 W) are provided in the interior. The new Prius also features an emergency power supply system in the event of a power outage.

**Seat position adjusters**

The new Prius features an 8-way adjustable driver's seat and a 4-way adjustable front passenger seat. The driver's seat also includes electronically adjustable lumbar support.



● The lumbar support can be adjusted by pressing a switch in order to select a driving position that better matches the physique of the driver.

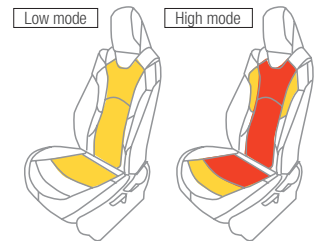
**Smart entry (driver and front passenger doors and rear luggage hatch) and start system**

● This system allows the user to lock and unlock the doors without taking out and pressing a button on the key. Just depress the brake pedal and push the power switch to start up the hybrid system.



**Comfortable heated seats (driver and front passenger seats)**

● The new Prius now features heated seats for greater comfort on cold days.



**S-Flow**

● The S-Flow A/C system detects the presence of occupants in the front and rear passenger seats, as well as sampling the interior temperature, to speed up the time required to achieve the most comfortable interior environment. The system automatically reduces the flow of air to empty seats, helping to improve fuel efficiency while also enhancing comfort.



**Automatically retracting remote-controlled electric side mirrors with LED turn signals (color, with plated ornamentation)**

● The side mirrors of the new Prius are now automatically retracting and feature a larger mirror surface and smaller curvature for a wider rear-view.



**Tilting and inward sliding electric moon roof**

● The opening of the moon roof has been shifted toward the front of the vehicle to create a greater sense of space.

**Anti-theft system (immobilizer + automatic alarm)**

● The vehicle verifies the electronic ID code of all keys and engages the immobilizer system if a key that is not a match is detected.

**Convenient storage and accessories throughout the vehicle**

Front passenger side glove compartment (lit)



Door pocket and bottle holder (front and rear doors)



Large console box with armrest



Front console tray and cup holders



Overhead console



Card holder



Rear central armrest (with two cup holders)



Seatback pocket (driver and front passenger seats)



Accessory outlet (DC 12V / 120W)



Electronic fuel lid opener



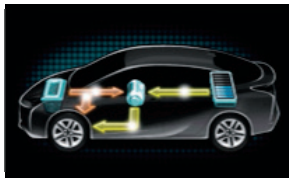
Inductive charger



## More enjoyable and comfortable environmentally friendly driving

### Examples of meter displays

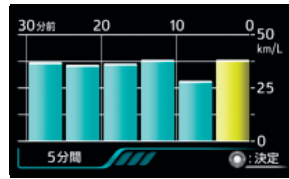
New meter displays include the Eco-Judge and A/C Score functions that evaluate accumulated environmentally friendly driving point and A/C use. The blue display in the hybrid system indicator changes in accordance with the driving scenario and conditions, and the new Eco-friendly Accelerator Guidance provides optional support for the accelerator pedal. As a result, the new Prius is even more fun-to-drive in an environmentally responsible manner.



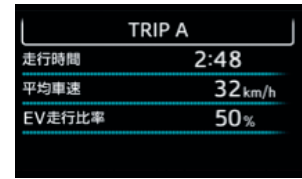
Energy monitor



Hybrid system indicator and Eco-Judge



Fuel consumption history



Drive monitor



Eco-Wallet

日付	距離 (km)	平均燃費 (km/L)
1/31	32.2	26.5
1/30	13.5	29.2
1/29	29.8	22.3
1/28	13.5	19.8

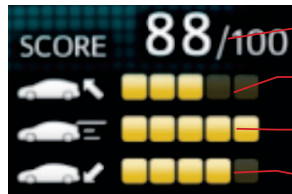
Eco-Diary



A/C display (A/C Score function)

#### ■ Eco-Judge

The Eco-Judge function evaluates the driver in three categories of environmentally friendly driving: starting off, steady driving, and stopping. The score for each category is displayed after the vehicle stops (the score is reset every time the vehicle starts off—no total score is calculated). Then, when the vehicle's power is switched off, an overall evaluation for the whole drive is shown, including the A/C Score. The A/C Score function evaluates the driver's A/C settings with respect to the ambient environment (exterior and interior temperature, and amount of sunlight).



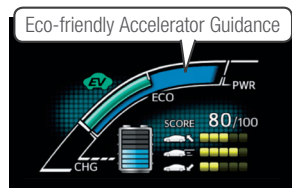
- Score: an overall evaluation out of 100 between two stops
- Starting off: a 5-level evaluation of the acceleration between starting off and reaching a steady speed
- Steady driving: a 5-level evaluation of driving at a steady speed
- Stopping: a 5-level evaluation of the deceleration between starting off and stopping



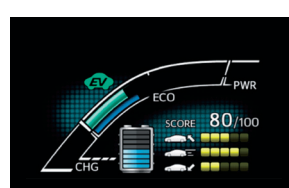
Example of final screen

#### ■ Eco-friendly Accelerator Guidance

The Eco-friendly Accelerator Guidance in the hybrid system indicator (the blue curving bar) changes in accordance with the driving state when starting off, during steady driving, and when slowing down. The driver can use the Eco-friendly Accelerator Guidance as simple guidance for accelerator pedal operation to ensure even more environmentally friendly driving.



When starting off



During steady driving

### Mode switch (EV mode/drive mode) and A/C mode switch

● Pressing the drive mode switch cycles the vehicle through the eco-drive, normal, and power modes. Pressing the EV mode switch puts the car into a silent mode where only the motor is used to drive (the A/C can still be operated as normal in EV mode). The eco-A/C mode switch is a new feature and can be used to increase the environmental friendliness of A/C operation.

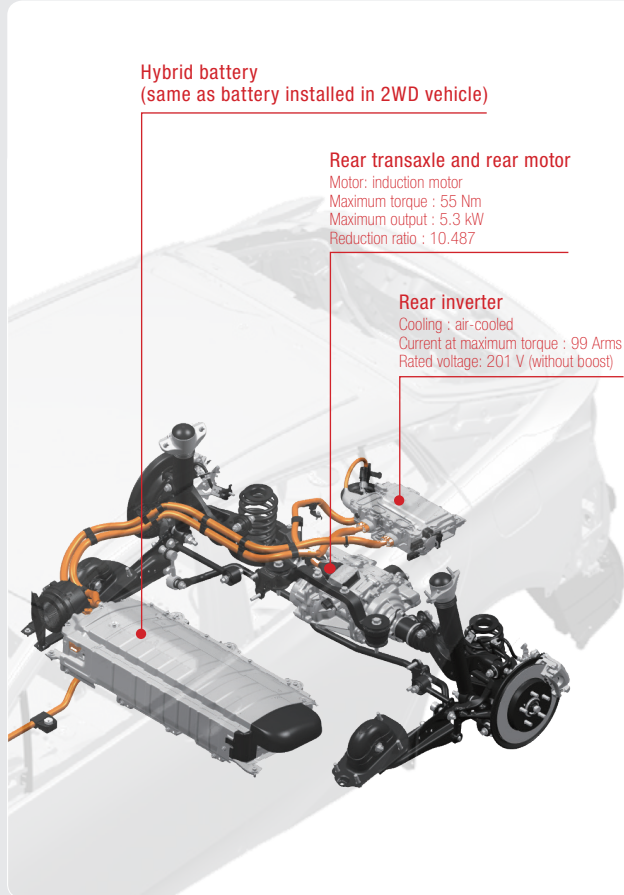


Mode switch



Eco-A/C mode switch

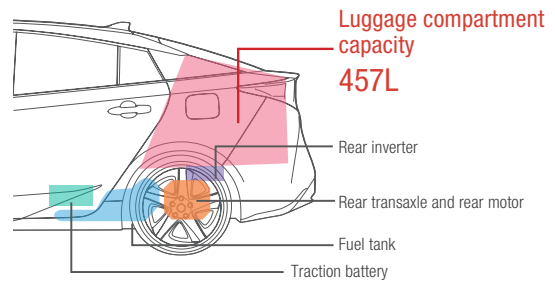
The E-Four electronic 4-wheel drive system has been newly re-developed and optimized to suit the new Prius.



**E-Four (electronic 4-wheel drive system)**

The system judges whether 4-wheel drive is needed in normal driving conditions and switches the drive system intelligently. Smooth, optimized control also ensures excellent fuel efficiency. This compact system is installed at the rear of the vehicle, based on the layout of the 2WD model, thereby ensuring sufficient legroom and a spacious luggage compartment.

**The E-Four layout ensures a spacious luggage compartment.**

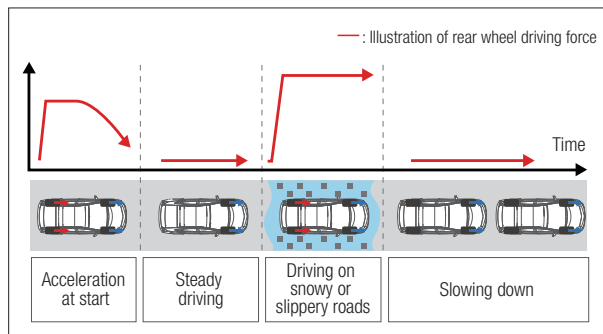


Same sized luggage compartment (457L) as 2WD vehicle equipped with spare tire

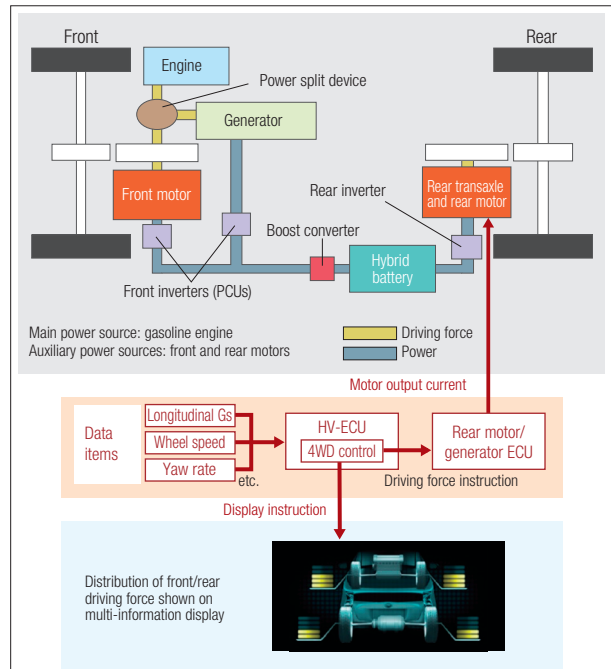
**Optimized control of front and rear wheel drive**

The system is constantly checking the state of the vehicle. In situations requiring greater stability than usual, such as when starting off or driving on snowy roads, driving force is transferred smartly to the rear wheels to support comfortable and safe driving. The distribution of driving force is shown on the multi-information display. Being offered a visual example when driving force is transferred to the rear wheels gives the driver more confidence on slippery roads.

**Outline of front/wheel driving force distribution**



**E-Four system configuration**



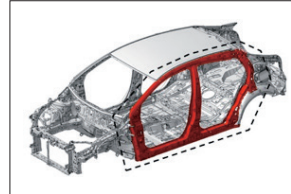
The new Prius is more enjoyable and comfortable to drive than ever before thanks to an innovative frame structure and advanced hybrid system.

**A stable, quiet ride thanks to enhanced body rigidity**

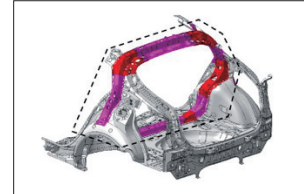
The new Prius adopts a highly rigid, annular body frame structure and the use of LSW (laser screw welding) for enhanced stability and reduced noise. In fact, the rigidity of the new frame is around 60 percent higher than the current model. In addition, expanded use of 1500 MPa hot stamped parts\* enables a stronger yet lighter occupant compartment.

\*High-strength lightweight materials manufactured by a heating and stamping process

■ Annular frame structure



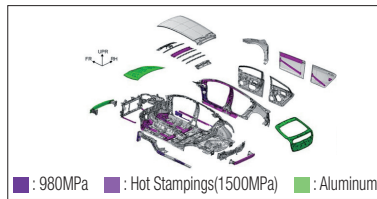
■ Rear body frame structure



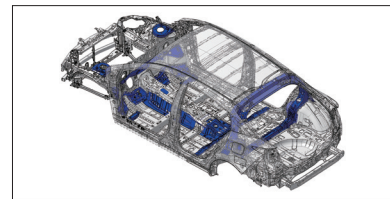
■ LSW



■ Locations of high-strength steel



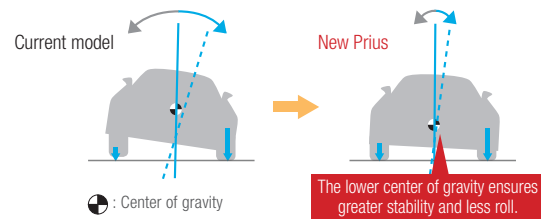
■ New highly rigid body frame



**Independent double wishbone rear suspension for greater driving enjoyment**

The rear suspension has been changed to an independent double wishbone setup to enable a shock-free, comfortable ride and enjoyable cornering.

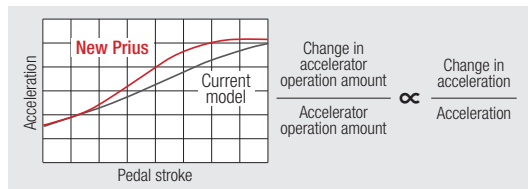
■ Different balance achieved by lowering the center of gravity



**Lower, more stable center of gravity**

Lowering the center of gravity ensures stability and ride comfort with minimal roll for all occupants.

■ Differences in acceleration (when starting off)



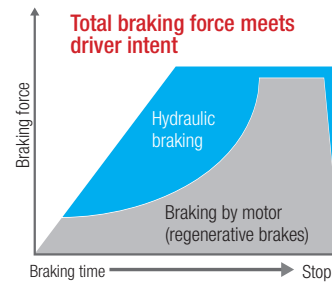
**Advanced acceleration sensation**

When the driving force characteristics were defined, a formulation was calculated to describe the relationship between accelerator operation and vehicle acceleration response, resulting in a smooth and comfortable sensation of acceleration. In addition, intelligent use of the hybrid battery ensures that the vehicle's acceleration is perfectly aligned with changes in engine speed.

**POINT!** Power Mode responds even more closely to driver intent

When Power Mode is selected, a newly developed control estimates the driving scenario based on the longitudinal and lateral acceleration, and automatically varies the degree of deceleration and accelerator response to enable agile handling on winding, mountainous roads and the like. As a result, Power Mode is even more responsive to the intent of the driver.

■ Example of cooperative brake control



**Brake control that meets driver intent**

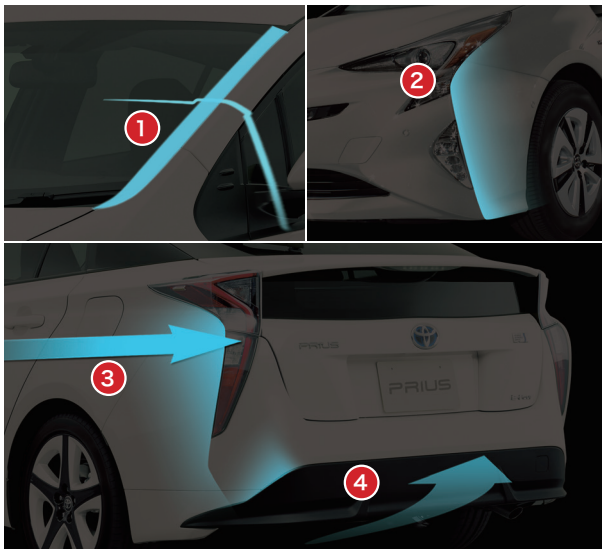
To ensure natural and smooth braking in the new Prius, highly precise sensors are used to optimally control the balance between the regenerative and hydraulic brakes. This creates a braking feel that perfectly matches driver intent, resulting in even greater peace of mind that the vehicle will stop in exactly the right place.



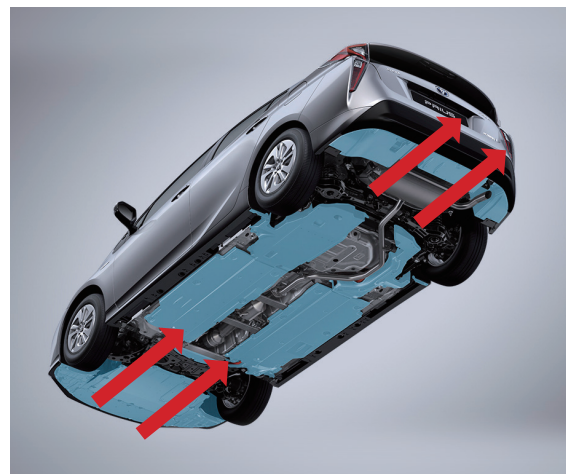
Innovative measures to enhance aerodynamic performance enable an impressive drag coefficient (Cd) value of just 0.24.

### Thorough approach to aerodynamic performance

The bodywork of the new Prius features several innovations designed based on aerodynamic technologies, including ① flat front pillars with airflow-correcting garnishes on the inside, ② front bumper corners that create the optimum angle to correct the airflow in front of the front tires, ③ rear bumper corners that guide the airflow stably out of the rear, and ④ a rear design that also optimizes underbody airflows. Aero-stabilizing fins are also provided under the floor to ensure optimum correction of underbody airflows.



#### ■ Underbody airflow correction



### Aerodynamic testing in new large-scale wind tunnel

The new Prius was tested over and over again in the latest large-scale wind tunnel facility to improve its aerodynamic performance. One of the outstanding characteristics of this facility is its capability to simulate realistic road conditions and analyze actual driving phenomena in great detail while the wheels are turning. Using the results of these analyses, the exterior of the Prius was shaped millimeter by millimeter to achieve a Cd of just 0.24.



Exterior of new large-scale wind tunnel facility



Large fan



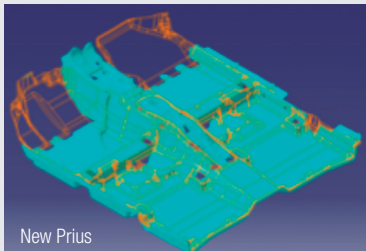
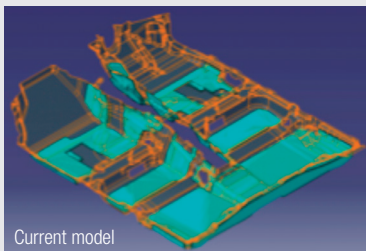
Vehicle undergoing wind tunnel testing

## Thorough noise reduction for greater comfort

### Noise insulating performance for an impressively silent interior

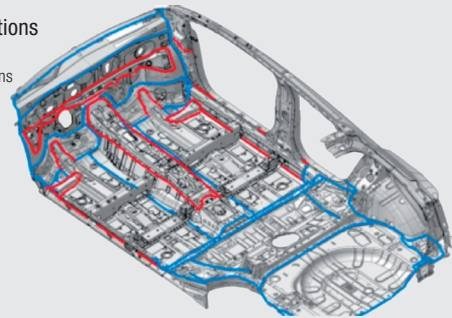
To enhance the noise insulating performance of the body, the new Prius features greater use of a special sealant that fills in the gaps between welds. The result is an interior cabin that is more sealed off from unwanted noise than ever before. The current model used a silencer built into the carpet, which limited its use. However, the noise insulation in the new Prius uses a dual silencer/carpet structure that can be used over the whole floor. Innovations like these ensure an impressively silent interior.

#### ■ Floor silencer



#### ■ Body sealant locations

■ : Newly applied locations



#### POINT! Measures to ensure a solid sound upon closing the door

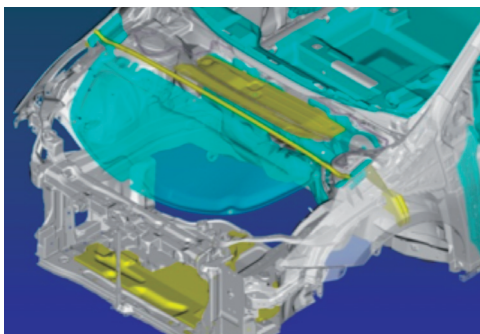
Another noteworthy aspect in the development of the new Prius was a focus on the sound of the door closing. By inserting vibration-suppressing sheets and sealing rubber, as well as by adopting a highly rigid vibration-reducing door frame, we were able to ensure a solid sound when the doors are closed.



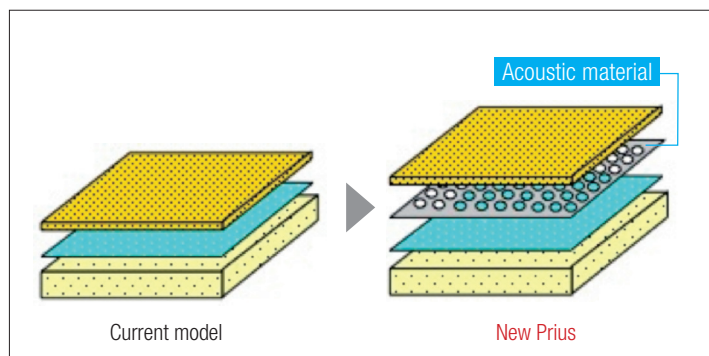
### Less noise facilitates even more comfortable driving

In addition to reducing the noise and vibration of the engine, the new Prius is quieter than ever before thanks to innovations such as partitions in the engine compartment and the adoption of high-performance acoustic (noise absorption and insulation) materials. A new porous acoustic material is also located between the engine compartment and driver. The internal structure of the acoustic material is designed to cancel out certain frequencies of noise, allowing for efficient reduction of the principal engine noise frequencies.

#### ■ Engine room acoustic materials



#### ■ Outline of acoustic material structure





## The new Prius incorporates the Toyota Safety Sense P collision avoidance support package, which features four advanced safety systems.

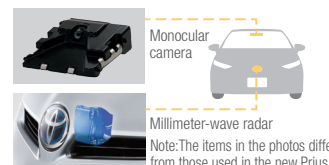


After analyzing a wide range of traffic accident data, including the degree to which high speeds increase the severity of accidents, it was decided to package together four advanced safety systems to help address frequently occurring potential accident scenarios. These systems feature newly developed high-precision sensors for greater reliability and a range of the latest cutting edge technological innovations, providing all-round support for safe driving.



### Two types of highly accurate “eyes” that detect vehicles and pedestrians to help ensure safety in front of the vehicle

The Toyota Safety Sense P sensor suite combines millimeter-wave radar and a monocular camera to achieve integrated control capable of detecting both vehicles and pedestrians, thereby helping to avoid collisions and mitigate collision damage. The millimeter wave radar has a long detection range and is effective even at high speeds. The monocular camera can recognize the shapes and sizes of objects, including pedestrians, as well as other vehicles, lane markings, and the headlights of oncoming traffic. These differing characteristics of these two sensors enable superior detection of various dangers.

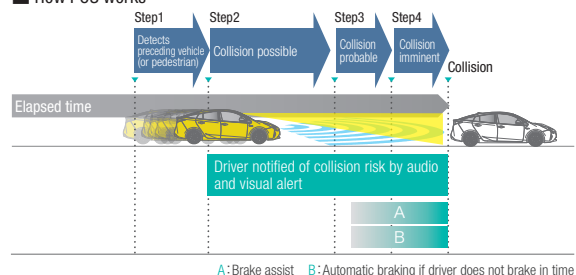


#### Collision avoidance and collision damage mitigation support

##### Pre-collision System (with pedestrian detection function; millimeter-wave radar + monocular camera)

This system uses millimeter-wave radar and a camera to detect pedestrians in addition to vehicles. To help prevent or mitigate collisions, the system activates an audio and visual alert in addition to brake assist, followed by automated braking if the driver does not brake in time. Automated braking operates at relative speeds of between 10 to 80 km/h for potential collisions with pedestrians, and can reduce speed by approximately 30 km/h. For potential collisions with vehicles, the enhanced PCS system included with the Toyota Safety Sense P package operates at relative speeds of between 10 km/h and the vehicle's top speed, reducing speed by approximately 40 km/h. System operation depends on the driving environment (including road and weather) and vehicle circumstances.

##### How PCS works



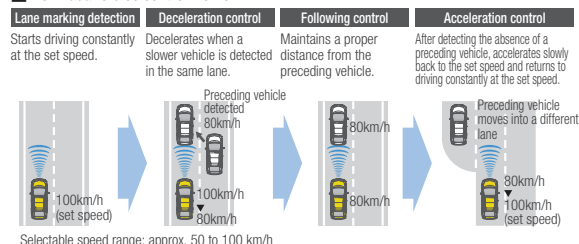
■ The pre-collision brake assist functions when the speed of the driver's vehicle is approximately 10 km/h or higher in the event of a potential collision with another vehicle, and in a speed range of approximately 10 to 80 km/h in the event of a potential collision with a pedestrian. However, the system may not function depending on the condition of the road, the driver's vehicle, or the weather. See the user's manual for more details. ■ PCS is only intended as a driving support function. The driver must operate the vehicle responsibly at all times without becoming over-reliant on this function.

#### Maintaining a proper distance from the vehicle ahead

##### Radar cruise control (with full-speed following function)

In addition to enabling driving at a constant speed on a highway, radar cruise control helps the driver to maintain a proper distance behind the vehicle ahead in a wide speed range from 0 to approximately 100 km/h. Even if the preceding vehicle slows to a stop, this system will smoothly stop the driver's vehicle while maintaining a proper distance, and keep the vehicle at a standstill. When the preceding vehicle moves off, the radar cruise control can be re-engaged by tapping the accelerator or by pressing a switch.

##### How radar cruise control works



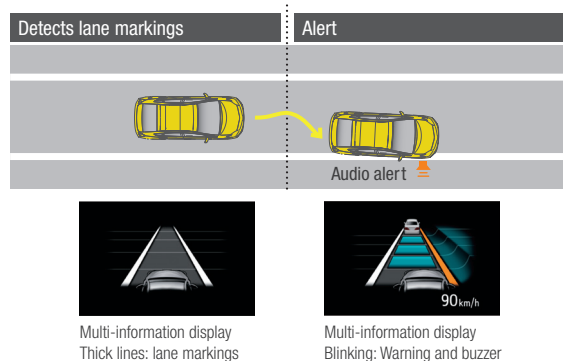
■ There are restrictions to vehicle-to-vehicle distance control depending on the driving conditions. The driver must operate the vehicle safely without becoming over-reliant on this system. ■ The system may not function depending on the condition of the road, the driver's vehicle, or the weather. See the user's manual for more details. Communicating radar cruise control can be selected by pressing the "Connect" option.

#### Potential lane departure notification

##### Lane Departure Alert (with steering control and zigzag warning function)

The Lane Departure Alert system uses the monocular camera to detect white or yellow lane markings. If the system judges that the vehicle might be departing the lane without operation of an indicator, the driver will be notified by a buzzer and an onscreen display. In addition, the system will control the electric power steering to make it easier for the driver to prevent lane departure. The system also detects unsteady zigzagging and encourages the driver via an audio and visual alert to pull over and take a break.

##### How LDA works



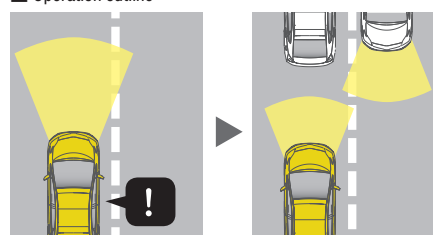
■ This system operates when the lane is at least three meters wide and the driver's vehicle is travelling at 50 km/h or above. The system may not be available depending on the condition of the road, the driver's vehicle, or the weather. See the user's manual for more details. ■ The lane departure alert system is only intended as a driving support function. The driver must operate the vehicle responsibly at all times without becoming over-reliant on this function.

#### Support for early detection of objects and pedestrians at night

##### Automatic High Beams

This system supports early detection of pedestrians and other objects at night by automatically switching between high and low beams. It also helps to relieve the burden of having to manually initiate the switch.

##### Operation outline



■ This system functions when the speed of the vehicle is approximately 30 km/h or higher. ■ The automatic high/low beam switching control has restrictions depending on the driving conditions. When driving, the driver should be aware of the surrounding environment at all times and concentrate on driving safely. This includes switching the headlamp beams manually when required. ■ The system may not function depending on the condition of the road or the weather. See the user's manual for more details.

## A full range of advanced safety systems to help avoid collisions or contact with other vehicles or objects

### Blind spot monitor

● Radar sensors detect vehicles travelling in adjacent lanes. When these vehicles enter the blind spots to the vehicle's sides, an LED indicator on the rearview mirror is turned on. If the driver then switches on the turn signal, the LED indicator will also blink, warning the driver.

■ The blind spot monitor is capable of detecting vehicles larger than a small motorcycle. Under some special road conditions, it may also detect stationary objects. ■ The system may not function depending on the condition of the road, the driver's vehicle, or the weather. ■ The blind spot monitor is a system that supports the driver when confirming safety to the rear before making a lane change. Regardless, the driver must directly confirm safety around the vehicle before making a lane change.

■ Operation outline

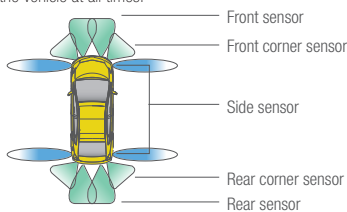
■ : Area visible using side mirror  
■ : Detection range

Note:  
Car pictured is not a Prius

### Intelligent Clearance Sonar (with all-round collision warning function)

● The Intelligent Clearance Sonar helps the driver to avoid contact with an obstacle or mitigates collision damage at low speeds, regardless of accelerator or brake pedal operation. Ultrasonic sensors at the sides of the vehicle also provide warnings of potential contact to the right and left, helping to further enhance safety.

■ Although the Intelligent Clearance Sonar includes an automatic braking function, it may not bring the vehicle to a complete stop in all situations. The system may not function depending on the condition of the road, the driver's vehicle, or the weather. The system may also activate when there is no potential for collision. See the user's manual for more details. ■ The Intelligent Clearance Sonar has a restricted detection range and activation speed. The driver must confirm safety around the vehicle at all times.



■ How all-round collision warning function works

Driving forward

Vehicle starts moving forward

Detection of the angle in relation to a parked vehicle.

While in motion, data from the wheel speed sensors, etc., is used to calculate the location of driver's vehicle in relation to the parked vehicle.

The driver is notified even a parked vehicle is not detected directly.

Beep!

■ How Intelligent Clearance Sonar works

Engine power restriction

Brake control

When the driver starts the car and tries to accelerate too close to an object:

Example of multi-information display

ブレーキ!

アクセルが踏まれています。ブレーキを踏みなおしてください

(The system stops the car.)

Note: The system also functions in response to an object in front of the car.

### Simple IPA (Intelligent Parking Assist)

● This system uses ultrasonic sensors to detect objects around the vehicle and identify parking spaces. When the driver stops in front of the desired parking space and presses a button, the system will provide guidance to bring the vehicle to the appropriate reversing position and steering assistance to reverse into the parking space. This system is capable of accurate parking using precise object detection even without a rear camera.

■ Simple IPA may not be available depending on the driving conditions. The driver must make a thorough confirmation of safety even while using this system.

■ Outline of system support (when reversing into parking space)

Previous system:  
The previous IPA required the driver to stop in this area.

New Prius:  
Simple IPA can be engaged after stopping in this area.

■ Outline of system support (when parallel parking)

Previous system:  
The previous IPA required a space at least 7 m long.

New Prius:  
Simple IPA requires a space at least 5.5 m long.

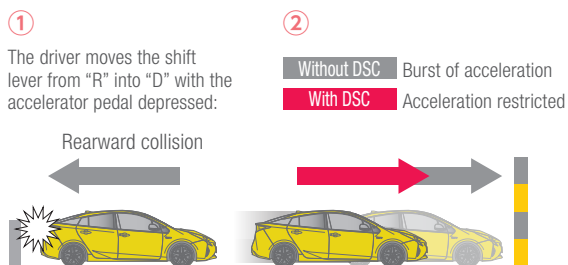
## In constant pursuit of enhanced safety performance

### Active safety

#### Drive-start Control

● This system helps to restrict sudden movement and acceleration after gear shift operation, thereby helping to mitigate collision damage. For example, if a driver hits an object while backing up and then throws the shift lever from "R" into "D" with the accelerator pedal depressed, the vehicle might shoot forward. In this case, the system notifies the driver via an onscreen display and the power of the hybrid system is restricted.

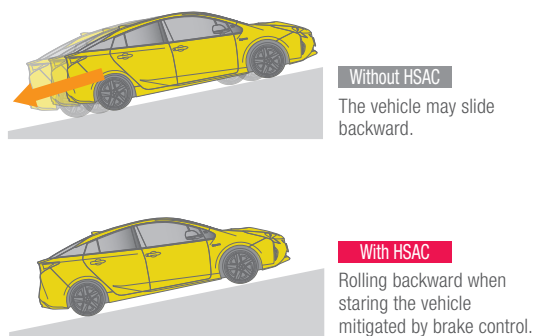
■ In the following scenario, the vehicle will restrict the engine power and warn the driver.



#### Hill Start Assist Control

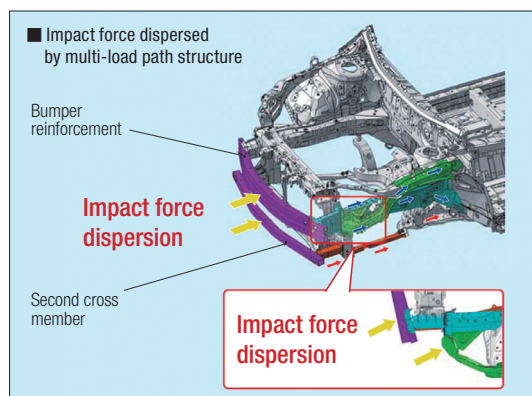
● This system helps to prevent the vehicle from sliding backward down a hill and enables a smooth start by maintaining brake pressure when the driver moves from the brake pedal to the accelerator.

■ Operation outline



### Passive safety

#### Body structure with all-around compatibility\*1



● The new Prius features the latest Global Outstanding Assessment body structure that satisfies the latest safety assessments, and incorporates impact-absorbing components and a high-strength occupant compartment. New frame components have been added to provide extra support in the event of an angled impact. The bumper reinforcement and second cross member provide a multi-load path structure that disperses and absorbs impact energy. The new Prius has an advanced body structure with enhanced compatibility in the event of a collision with a different type of vehicle or a vehicle with a different height.

\*1The word "compatibility" is used to express the concept of enabling greater mutual safety in the event of a collision between a lighter and a heavier vehicle. Under this concept, the collision safety performance of the lighter vehicle is enhanced while the potential damage caused by the heavier vehicle is mitigated.

#### SRS airbags\*2

● The new Prius is provided with a total of seven airbags, including SRS airbags, to help disperse and mitigate impact force applied to the head and chest of front seat occupants, as well as SRS curtain shield airbags to help protect the sides of the heads of rear seat occupants.

\*2 supplemental restraint system. ■ Supplemental restraint system (SRS) airbags are only intended as an auxiliary device to support the function of the seatbelts. Seatbelts must be worn at all times. ■ Depending on the conditions of the collision, it is possible that not all SRS airbags will deploy. The image shows SRS airbags deployed for explanatory purposes. In the event of an actual collision, the SRS side airbags and SRS curtain shield airbags will only deploy on the same side as the impact. ■ Vehicle users must be aware of the usage conditions of airbags. For example, child seats must not be placed on the front passenger seat facing the rear. Users must read the user's manual for details.

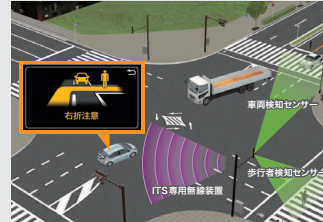
#### Body that mitigates pedestrian injury

● In the event of collision with a pedestrian, the structure of the new Prius is designed to mitigate impacts to the head or abdomen of the pedestrian.

The new Prius is installed with ITS Connect systems that provide information to the driver via infrastructure-to-vehicle and vehicle-to-vehicle communication.



Information from locations not fully visible to the vehicle sensors and information from traffic signals and the like are provided to the driver via vehicle-to-infrastructure and vehicle-to-vehicle communication, enabling safer driving



Outline of infrastructure-to-vehicle communication

Infrastructure-to-vehicle driving safety support systems



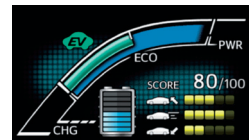
Right-turn Collision Caution

If the foot of the driver leaves the brake pedal while waiting to turn right at an intersection when an oncoming vehicle is approaching or a pedestrian is crossing the road to the right, the system assumes that the driver has not spotted the collision risk and provides a warning via a visual and audio alert.



Red Light Caution

If the driver continues to accelerate while approaching a red traffic signal, the system assumes that the driver has not noticed the red light and provides a warning via a visual and audio alert.



Eco-friendly Accelerator Guidance revoked

Eco-friendly accelerator guidance using traffic signal information

If the system judges that the next traffic signal will be red, the Eco-friendly Accelerator Guidance gauge in the hybrid system indicator is reset to zero in order to encourage the driver not to continue accelerating and thus avoid waste.



Signal change advisory

While waiting at a red light, the system shows an estimation of the wait time before the signal turns green.

Connected vehicles support systems (CVSS)



Communicating radar cruise control

If the preceding vehicle is also equipped with radar cruise control, vehicle-to-vehicle communication allows rapid notification of the acceleration or deceleration of the preceding vehicle. This helps to restrict fluctuations in vehicle-to-vehicle distance and allows for smoother following.



Emergency vehicle notification

If an emergency vehicle (ambulance) is nearby with an activated siren, the system will sound a buzzer and show the driver its direction, distance, and heading. Emergency vehicles in Nagoya and Tokyo have started to install the emergency vehicle notification system.

A large white rectangular area with rounded corners, containing 25 horizontal dashed lines for writing.

We support environmentally friendly driving.

**FUN TO DRIVE, AGAIN.** 

Press Information Oct.13.2015

**トヨタ自動車株式会社**