



# MAZDA 2

## 2022

PRESS KIT



# TABLE OF CONTENTS

01 . MESSAGE FROM THE PROGRAM MANAGER

02 . AT A GLANCE

03 . DESIGN

04 . DRIVING DYNAMICS

05 . POWERTRAINS

06 . SAFETY

07 . TECHNICAL SPECIFICATIONS



01  
MESSAGE FROM THE  
PROGRAM MANAGER

# MESSAGE FROM THE PROGRAM MANAGER

---

## LEADING A NEW ERA OF COMPACT CARS THAT REDEFINE DRIVING PLEASURE IN THE B-SEGMENT

Hello everyone.

This is Saito, Mazda 2 Program Manager.

Although we are still under the influence of COVID-19 and need to be careful continuously, we here in Hiroshima continue our vehicle production and our customers carry on enjoying their lives with our cars.

For some time now we have been forced to base our lives on a new normal; our minds and behaviour having become somewhat inward-looking. But we maintain our passion to enhance people's lives through driving cars such as our latest Mazda2. First and foremost, we want our customers to feel special; different from the ordinary when getting into the car. For 2022 we have made our Homura Special Edition – which has received much praise from the Japanese domestic market – available to our overseas customers. With its exterior of sharp black highlights and a sporting, black-based interior with red accents, the Mazda2 Homura expresses its strength and passion through new-found beauty. We developed this car to help our customers enjoy driving positively, and maintain their good mood after driving too. Mazda2 grades other than the Homura Special Edition also have quality interiors featuring carefully coordinated colour schemes. We hope you enjoy driving our Mazda2 and find the cabin a unique space, pleasingly different from your normal everyday environment. We want our customers to feel refreshed and invigorated by driving the 2022 Mazda2.

The driving agility of the Mazda2 continues to evolve through the adoption of new-generation technology. For 2022, we have introduced a new 1.5L gasoline engine that enhances fuel-economy performance using technology developed in our Skyactiv-X engine. Our goals of ever-better fuel economy, environmental friendliness and driving performance never ceases. And we will achieve them all through a well-balanced yet compromise-free approach. The Mazda2 has bilaterally symmetrical positioned pedals, an organ-type accelerator pedal, and a front seat designed to keep the driver's pelvis upright. These features are conventional for us but really Mazda unique, allowing you to enjoy driving with a natural feel to vehicle operation.

GVC Plus controls vehicle vibration and swaying to help prevent tiredness or car-sickness in every occupant. Outstanding cabin quietness encourages in-car conversation. And advanced safety technology more usually found in higher segment premium vehicles will help Mazda2 drivers to relax on the road.

We sincerely wish our customers a rich life with Mazda cars.

Keisuke Saito

Mazda2 Program Manager







AT A GLANCE

# AT A GLANCE

---

The 2022 Mazda2, the latest version of the company's popular B-segment hatchback, features an upgraded 1.5 litre Skyactiv-G powertrain with improvements to driveability, fuel efficiency and CO<sub>2</sub> emissions. 75, 90 and 115 PS versions of the new powertrain are available, and e-Skyactiv G 90 and 115 PS manual transmission versions are equipped with MHEV (Mild Hybrid Electric Vehicle) technology.

Further enhancements to the 2022 Mazda2 model range include the launch of a new Homura Special Edition model, the addition of one new exterior body colour and the wireless connectivity of Apple Car Play across the model range.

The 2022 Mazda2 brings unprecedented levels of quality, refinement and driving enjoyment to the compact car market.

## SOPHISTICATED AND PRESTIGIOUS EXTERIOR DESIGN

- New Homura Special Edition model with Black door mirror covers and 16-inch alloy wheels, bespoke interior with Black seat and door trims, Red seat stitching and dark Red air-conditioning vent louvre rings.
- New two-coat Platinum Quartz exterior body colour. Deep Crimson body colour now available in both LHD and RHD markets.
- Latest evolution of Kodo design gives the 2022 Mazda2 powerful styling prestige through the purity and dynamism of a minimalist aesthetic.
- A finely chiseled, sculpted form with a sense of width, stability and elegance for a luxurious, premium quality appearance.
- 16-inch alloy wheel design with high-gloss paint trim heightens the sense of quality.
- Silver 15-inch alloy wheel colour for greater visual sophistication.

Note: Apple CarPlay, iPhone, Siri are trademarks of Apple Inc.  
Note: Android and Android Auto are trademarks of Google LLC.



## PREMIUM QUALITY INTERIOR SPACE, COMFORT AND TECHNOLOGY

- Mazda Connect system now supports Android Auto™ and wireless Apple CarPlay® connectivity from Entry grade.
- Materials and colour schemes carefully chosen to create a high quality, harmonious cabin environment.
- Mazda's research into NVH results in a unique approach to the control of sounds entering the cabin to provide a high quality quietness for all occupants.
- Front seat designed to keep pelvis upright for ideal posture and optimum comfort.
- Heated steering wheel and auto-dimming rear view mirror.

## EFFORTLESS, ENGAGING DRIVING EXPERIENCE

- Latest developments in Mazda's Skyactiv-Vehicle Architecture adopted to enhance the Jinba-Ittai driving experience.
- MacPherson strut front and torsion beam rear suspension systems deliver smooth vehicle movement and a comfortable ride.
- Front seat design offers ideal occupant posture to reduce head sway and minimise fatigue for easier driving.
- Precise control delivers fast vehicle response to driver inputs.
- G-Vectoring Control Plus (GVC Plus) for even more stable vehicle behavior at speed.



## POWERTRAIN ENVIRONMENTAL PERFORMANCE ENHANCED

- Upgraded Skyactiv-G 1.5 litre petrol engine features Mazda-unique, world-first Diagonal Vortex Combustion technology and a higher 15:1 compression ratio to improve fuel efficiency by 6.8% and reduce CO<sub>2</sub> emissions by 9 – 12% in the WLTC mode.
- New, e-Skyactiv-X-developed engine control programme for improved vehicle response to and control of acceleration.
- Choice of five, Skyactiv-G 1.5 litre petrol engine, front-wheel drive powertrains<sup>1</sup>.
- 75 and 90 PS variants with 6-speed manual transmissions, a 90 PS unit mated to a six-speed automatic gearbox<sup>2</sup>, and e-Skyactiv G 90 and 115 PS manual transmission versions equipped with MHEV (Mild Hybrid Electric Vehicle) technology.
- MHEV (Mild Hybrid Electric Vehicle) capability provided by the Mazda M Hybrid system, which combines electric motor assistance with recovered energy recycling to improve fuel efficiency and offer a smoother driving experience.
- CO<sub>2</sub> emissions lowered from 120 g/km to just 107 g/km, combined fuel consumption as low as 4.7l/100km<sup>3</sup>.

## COMPREHENSIVE RANGE OF ADVANCED SAFETY FEATURES

- LED headlamps fitted as standard across the model range.
- Optional Adaptive LED Headlights (ALH) with an LED array divided into 20 independently illuminating blocks for even faster detection of danger.
- Advanced Smart City Brake Support (Advanced SCBS) with night-time pedestrian detection.
- Optional Lane Keep Assist System (LAS), Traffic Sign Recognition System (TSR) and 360° View Monitor with Front Parking Sensors.



<sup>1</sup> WLTP fuel consumption (combined): 5.0-4.7 l/100 km; CO<sub>2</sub> emissions (combined): 122-107 g/km. Vehicles are homologated in accordance with the type approval procedure WLTP (Regulation (EU) 1151 / 2017; Regulation (EU) 2007/715). NEDC fuel consumption (combined): 4.7-4.4 l/100 km; CO<sub>2</sub> emissions (combined): 106-100 g/km. To provide comparability the referred values are NEDC – values determined in line with Implementation Regulation (EU) 1153 / 2017

<sup>2</sup> WLTP fuel consumption (combined): 5.0-4.7 l/100 km; CO<sub>2</sub> emissions (combined): 122-107 g/km. Vehicles are homologated in accordance with the type approval procedure WLTP (Regulation (EU) 1151 / 2017; Regulation (EU) 2007/715). NEDC fuel consumption (combined): 4.7-4.4 l/100 km; CO<sub>2</sub> emissions (combined): 106-100 g/km. To provide comparability the referred values are NEDC – values determined in line with Implementation Regulation (EU) 1153 / 2017

<sup>3</sup> All fuel consumption and CO<sub>2</sub> emissions figures are WLTP – combined (90 PS with 6-speed manual transmission Mazda M Hybrid technology)



16



DESIGN

# EXTERIOR DESIGN

---

## SOPHISTICATED AND PRESTIGIOUS EXTERIOR DESIGN

The Mazda2 designers have imbued the hatchback with a sense of width, stability and elegance by simplifying and eliminating elements. It is styled with simple yet rich surfacing, and a horizontal emphasis to reinforce the car's broad stance and low centre of gravity.

Within the compact package, the front and rear bumpers, front grille, headlights and rear combination lights add stylish highlights a finely chiseled, sculpted form with a luxurious, premium quality appearance.

The signature wing has a wide, bold appearance, and the wing tips underscore a sharp new LED headlamp design. The stud pattern in the grille design gives it a solid yet dynamic look.

The lower front and rear bumpers feature horizontal plated trim garnishes at their extremities to reinforce both the prestige of the design and the wide, planted appearance of the vehicle. And 16-inch alloy wheels are trimmed with high-gloss black metallic paint to further heighten the premium appearance of the 2022 Mazda2.

A new, two-coat Platinum Quartz exterior colour is available for 2022. Making its first appearance on the Mazda2, it uses an elegant, high-quality platinum tone colour as a base, leaving highlighted areas looking silky white, while the mid-tones exude a quartz-like half-transparent feel. In addition, the exterior colour Deep Crimson is now available in both LHD and RHD markets.

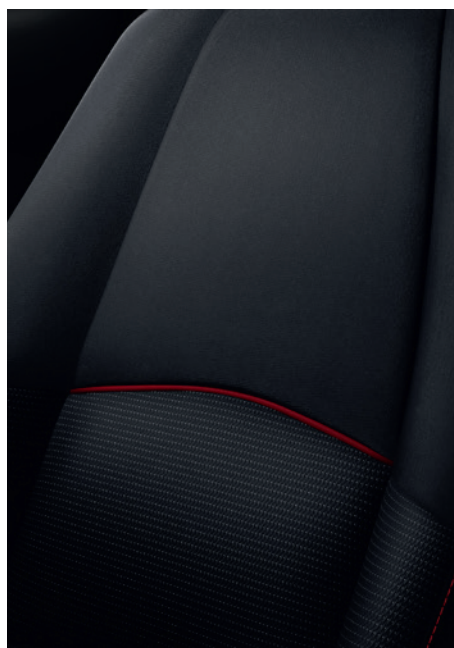




## NEW HOMURA SPECIAL EDITION MODEL

Celebrating the launch of the 2022 Mazda2, a New Homura Special Edition has been created to add further sporting appeal to the model range. The exterior is identifiable through Black door mirror covers and Black 16-inch alloy wheels.

And the bespoke interior features Black seat upholstery and door trims, Red seat stitching and dark Red air-conditioning vent louvre rings





# INTERIOR DESIGN

---

## HIGH-QUALITY, COLOUR COORDINATED INTERIOR DESIGN

The proven colour schemes and excellent finish of the interior are further refined by three distinctive and individual interior schemes. They incorporate leather upholstery, door and dash trim, kneepads, and air-conditioning vent louvers to reinforce the premium visual and tactile quality of the cabin.

Leather interiors feature a mature colour scheme based on a Blue-Grey shade, the appearance of which alters subtly in changing light. The Black Granlux (a suede-

like artificial leather) interior finish with white accents creates a modern, urban-focused look.

The high-grade fabric interior features a deep Navy Blue accented with warm Silver for an airy yet dignified feel. And the standard fabric interior combines Brown and Black to create a soft, chic ambience.

These leather and fabric interiors use rich, high-quality materials and refined colour coordination to emphasise a feeling of both spaciousness and prestige.

## CABIN QUIETNESS

Mazda's research into NVH has resulted in a unique approach to the control of sounds entering the cabin, providing a higher quality quietness for all occupants that enables natural conversation to be enjoyed in any seat.

A thick cabin ceiling headliner, the use of back door seal lips and vibration damping material on the inner rear wheel housing maximise sound absorption and

sound insulation performance, particularly for rear seat occupants. Damper improvements and newly developed tyres also suppress road surface vibration and reduce road noise.

All of these measures minimise the intrusion of sound and promptly control reverberant and reflected sound to deliver a pleasantly hushed interior that sets a benchmark for compact car interior quietness.





## FRONT SEAT DESIGN

The front seat design focuses on the fact that when people walk, and the pelvis is upright, they are inherently capable of maintaining balance and keeping their head stable.

This was incorporated into Mazda's thinking on next-generation technology concepts, resulting in seats that keep the pelvis upright to maintain the spine's natural S curve, which is considered to be the ideal sitting posture.

To achieve this, the seat's finely tuned internal structure features optimised spring rates, the use of torsion

springs which suppress occupant body roll, and support materials, as well as the adoption of high-damping urethane keep the pelvis upright in a structure that makes it easy to maintain this state.

As a result, the front seats are not only exceptionally comfortable, but also prevent the occupant's line of sight from wavering on curves or during lane changes, increase the sense of oneness with the car and improve ease of driving.



## AUTO-DIMMING REAR VIEW MIRROR

This feature helps driver concentration during night driving. When the auto-dimming rear view mirror detects light from the headlights of following vehicles

that is stronger than a pre-set level, it automatically changes the rear view mirror's reflectivity, reducing glare experienced by the driver.

## STEERING WHEEL HEATER

The steering wheel has a built-in heater which quickly heats the grip to offer comfortable, safe driving in

winter. 30 minutes after being switched on it will automatically deactivate.

## APPLE CARPLAY® AND ANDROID AUTO™

The Mazda Connect system in the 2022 Mazda2 supports Android Auto™ and now wireless Apple CarPlay® connectivity across the model range. Wirelessly, or through a simple USB connection to the car's system for Android Auto™, customers can easily use applications on their smartphone via Mazda Connect's Human-Machine Interface (HMI). Usable applications are limited according to the individual smartphone's in-car system.

Apple CarPlay® allows occupants to make calls, send messages, listen to Apple Music®, and get directions with Apple Maps® through Siri® voice control. Android Auto™ uses the 'OK Google' voice commands system to access Google Maps, Google Play Music, media, and messaging apps in the car.

Note: Apple CarPlay, iPhone, Siri are trademarks of Apple Inc.  
Note: Android and Android Auto are trademarks of Google LLC.





04  
DRIVING DYNAMICS



# DRIVING DYNAMICS

---

The 2022 Mazda2 features the latest developments in the company's Skyactiv-Vehicle Architecture to enhance the Jinba-Ittai driving experience.

## SUSPENSION SYSTEM

Incorporating Mazda's latest technology concepts into the MacPherson strut front and torsion beam rear suspension has facilitated a balance of linearity in response to handling and ride comfort, at a higher level than ever before.

Both the saturation characteristics of the front and rear dampers and the valve design of both the front and rear dampers have been optimised, and the rear dampers benefit from a large radius.

These features increase damping force in the low-speed damping range on reasonably even road surfaces for smoother movement, while decreasing damping

force in the high-speed damping range when driving on rough roads, resulting in significantly improved smoothness and stability.

In addition, the use of a urethane type rear damper top mount reduces spring characteristics for enhanced responsiveness to fine vibrations and improved ride comfort.

This suspension system demonstrates linear damping force at the slightest input, while firmly suppressing bounce in response to larger inputs to achieve a high-quality ride.







## G-VECTERING CONTROL PLUS (GVC PLUS)

GVC Plus introduces technology that enhances handling stability by using the brakes to add direct yaw moment control to the conventional engine control of GVC.

As the driver steers out of a corner by returning the steering wheel to the centre position, GVC Plus applies a light braking force to the outer wheels, providing a stabilizing moment that helps restore the vehicle to straight line running. The system realises consistently

smooth transitions between yaw, roll and pitch even under high cornering forces, improving the vehicle's ability to accurately track sudden steering inputs and exit corners crisply.

In addition to improving handling in emergency collision avoidance manoeuvres, GVC Plus offers a reassuring feeling of control when changing lanes at high speeds on the highway and when driving on snow or other slippery road surfaces.



POWERTRAINS

## POWERTRAINS

---

The 2022 Mazda2 is available with a choice of five Skyactiv-G 1.5 litre, DOHC 16 valve petrol engine, front-wheel drive powertrains – 75 and 90 PS variants with 6-speed manual transmissions, a 90 PS unit mated to a six-speed automatic gearbox<sup>1</sup>, and e-Skyactiv G 90 and 115 PS manual transmission versions equipped with MHEV (Mild Hybrid Electric Vehicle) technology.

The Skyactiv-G engine has been upgraded for 2022 and is now equipped with Mazda's unique, world-first Diagonal Vortex Combustion technology and a commensurate increase in the engine's compression ratio from 14 to 15:1. This has improved fuel economy by some 6.8%, and lowered CO<sub>2</sub> emissions across the powertrain range by 9-12% in the WLTC mode.

In addition, the Skyactiv-G unit benefits from a new engine control programme created during the development of the e-Skyactiv-X engine, improving vehicle response to and control of acceleration.

In manual transmission versions of the Mazda2, improving the throttle's response to accelerator operation and choosing gear settings that link together well have resulted in a responsive and rhythmical up-shifting of gears from the moment the car starts moving.

The 75 PS unit develops maximum power at 6000rpm and maximum torque of 143 Nm at 3500 rpm. It will accelerate the Mazda2 from 0-100 km/h in 11.3 seconds and on to a top speed of 171 km/h, whilst returning a combined fuel consumption figure of 4.4l/100km and CO<sub>2</sub> emissions of only 101 g/km<sup>2</sup>.

The 90 PS engine develops maximum power at 6000rpm, and maximum torque of 151 Nm at 3500rpm. It offers 0-100km/h acceleration in 9.8 seconds and a 183 kph maximum speed. Combined fuel consumption and CO<sub>2</sub> emissions are 4.4 l/100km and 101 g/km respectively.

<sup>1</sup> WLTP fuel consumption (combined): 5.0-4.7 l/100 km; CO<sub>2</sub> emissions (combined): 122-107 g/km. Vehicles are homologated in accordance with the type approval procedure WLTP (Regulation (EU) 1151 / 2017; Regulation (EU) 2007/715). NEDC fuel consumption (combined): 4.7-4.4 l/100 km; CO<sub>2</sub> emissions (combined): 106-100 g/km. To provide comparability the referred values are NEDC – values determined in line with Implementation Regulation (EU) 1153 / 2017

<sup>2</sup> All fuel consumption and CO<sub>2</sub> emissions figures are NEDC – combined (75 PS and 90 PS with 6-speed manual transmission)



Combined with a six-speed automatic transmission, the 90 PS accelerates from 0-100 km/h in 12.1 seconds and has a top speed of 177 km/h. Combined fuel consumption is 4.7 l/100km and CO<sub>2</sub> emissions 106 g/km<sup>3</sup>.

The e-Skyactiv G 90 PS engine with MHEV technology develops maximum power at 6000 rpm, and maximum torque of 151 Nm at 3500 rpm. It offers 0-100km/h acceleration in 9.8 seconds and a 183 kph maximum

speed. Combined fuel consumption and CO<sub>2</sub> emissions are 4.4 l/100km and 100 g/km respectively.

The e-Skyactiv G 115 PS engine with MHEV technology develops maximum power at 6000 rpm, and maximum torque of 151 Nm at 3500 rpm. It offers 0-100km/h acceleration in 9.1 seconds and a 200 kph maximum speed. Combined fuel consumption and CO<sub>2</sub> emissions are 4.4 l/100km and 105 g/km respectively<sup>4</sup>.

<sup>3</sup> All fuel consumption and CO<sub>2</sub> emissions figures are NEDC – combined (90 PS with 6-speed automatic transmission)

<sup>4</sup> All fuel consumption and CO<sub>2</sub> emissions figures are NEDC – combined (115 PS with 6-speed automatic transmission)

## M HYBRID TECHNOLOGY FOR ENHANCED ENVIRONMENTAL PERFORMANCE

Mazda's Skyactiv-eSync electrification technologies work together with the company's highly efficient Skyactiv engines to not only improve fuel economy and reduce CO<sub>2</sub> emissions but also to enhance the quality of the driving experience.

These technologies deliver efficient, smooth, high-quality dynamic performance by coordinating and harmonizing the functions of all actuators and motors, including the engine, transmission and brakes.

e-Skyactiv G 90 PS and 115 PS manual transmission versions of the 2022 Mazda2 adopt Skyactiv-eSync technology for a compact car in the form of a unique mild hybrid system called Mazda M Hybrid.

Compact and highly efficient, the mild hybrid system combines Mazda's existing i-ELOOP regenerative braking technology with a belt-driven integrated starter generator (B-ISG) and a capacitor.

The B-ISG converts recovered kinetic energy into electric power and stores it in the capacitor. When sufficient energy has been stored in the capacitor, the system uses the B-ISG's power-generation and drive functions to make the most of the stored electricity.

Acting in combination with a six-speed manual transmission, the B-ISG delivers a refined driving feel by enabling the system to provide drive assistance and helping the engine restart more quickly and quietly after extended i-stop engine off periods.

The combination of Mazda M Hybrid technology and a new approach to tyre design has lowered the Mazda2's CO<sub>2</sub> emissions from 122 g/km to just 107 g/km (90PS with 6-speed manual transmission and Mazda M Hybrid technology).





**Improved fuel economy and emissions performance:**

The B-ISG's motor assist function reduces the load on the engine and enables quick engine restarts that help to lower CO<sub>2</sub> emissions and improve fuel economy by extending the auto engine stop operating time. The engine now remains off until first gear has been engaged and the driver is on the point of releasing the brakes. **Quiet restart after auto engine stop:** The belt drive suppresses vibration and delivers a quiet, smooth restart.

**Gear change assist when shifting up:** When the driver backs off the accelerator and depresses the clutch in order to shift to a higher gear, the B-ISG proactively generates power to ensure that engine revs drop quickly to suit the higher gear. This delivers a smooth gear change with no shift shock.

## FASTER MORE LINEAR ACCELERATION RESPONSE

A new engine control programme created during the development of the e-Skyactiv-X engine improves vehicle response to and control of acceleration.

Precise torque control also keeps vibration low when accelerating or changing gears, which in turn curbs driver and passenger head movement and allows occupants to enjoy smooth acceleration.

For variants equipped with an automatic gearbox, the transmission time and timing has been fine-tuned so

that occupants can use their innate balance ability in response to gear changes. The acceleration inclination before and after gear changes has been made more uniform, smoothing out acceleration and minimising occupant head and body movement.

The balance between transmission time and timing has also been carefully adjusted so that occupants can keep their heads stable with minimal body movement, much like when walking.



## SKYACTIV-G 1.5 LITRE PETROL ENGINE

Skyactiv-G 1.5 is a highly efficient, high compression ratio direct injection petrol engine combining nimble performance with outstanding fuel economy and low emissions. The engine adopts numerous advanced technologies to maximise its efficiency and performance.

Mazda's unique, world-first Diagonal Vortex Combustion technology and a commensurate increase in the engine's compression ratio from 14 to 15:1 combine to improve fuel economy by some 6.8%, and lower CO<sub>2</sub> emissions across the powertrain range by 9-12% in the WLTC mode.

The configuration of both the piston ring and the piston skirt surface has been optimised to reduce mechanical

resistance. Optimisation of the piston head design and multistage fuel injection improve fuel efficiency and suppresses knocking. The fuel injector design produces atomized spray under high fuel pressure, preventing wasteful adherence of fuel to the cylinder walls and achieving good combustion. The coolant control system's thermal management achieves a quick temperature increase, reducing the use of fuel that does not contribute to combustion.

Acting in combination, not only do these technologies improve fuel economy and significantly reduce particulate matter emissions, they also improve torque output at all rpm.



## KEY SKYACTIV-G 1.5 TECHNOLOGIES

**Diagonal Vortex Combustion:** Destined to become the company's standard (non SPCCI) petrol combustion technology in the future, Mazda's unique, world-first Diagonal Vortex Combustion technology works in conjunction with the fuel injection and air intake systems to create a diagonal vortex of evenly mixed air and fuel within the combustion chamber, gathering the mixture around the spark plug to effect efficient and rapid combustion. This ground-breaking new technology improves fuel economy by some 6.8%, and lowers CO<sub>2</sub> emissions across the Skyactiv-G 1.5L powertrain range by 9-12% in the WLTC mode.

**Precise fabrication of air intake port, optimised piston configuration:** Precise crafting of the air intake port configuration increases intake-generated vertical vortex tumble. Geometry optimisation by reducing the height of the piston head bowl intensifies tumble during the compression process and increases turbulent energy at ignition. These measures result in fast flame spread after ignition, and prompt completion of combustion without generating abnormal combustion. This translates into improved low- to mid-range torque and better fuel economy at high speed.

**Highly efficient fuel injection:** High fuel injection pressure of 30 MPa and a multi-hole injector enable

faster atomization over a wider area and achieve efficient, less wasteful combustion that steadily vaporizes fuel before it can adhere to the cylinder walls. Furthermore, during the cooling period, which is prone to the generation of particulate matter, the use of three-stage split fuel injection improves vaporisation and atomisation and reduces the generation of particulate matter during combustion by about 80%.

**Coolant control system:** A coolant control valve system almost completely stops coolant flow around the combustion chamber during initial warm-up to prevent heat loss. Vaporising petrol when cold requires the extra injection of fuel. But the coolant control valve quickly raises the chamber wall temperature, reducing that excess fuel volume to about half that of the previous Skyactiv-G 1.5 model, thereby improving fuel efficiency.

**Optimisation of oil ring and piston skirt configurations:**

The oil ring features an asymmetrical profile with a larger radius on the upper circumference and a smaller radius on the lower circumference. This optimises oil film thickness during vertical piston action, reducing mechanical resistance. The ideal, barrel-shaped curvature of the piston skirt further reduces mechanical resistance, which in turn improves fuel economy.





SAFETY



# SAFETY

---

The 2022 Mazda2 is equipped with a comprehensive range of safety features including LED headlamps fitted, as standard, across the model range, and optional Adaptive LED Headlights (ALH), Advanced Smart City Brake Support (Advanced SCBS) now featuring

pedestrian detection and Lane Keep Assist (LAS - standard on High grade). Traffic Sign Recognition (TSR) and a 360° View Monitor with Front Parking Sensors are both optionally available on High grade models.

## ADAPTIVE LED HEADLIGHTS (ALH)

ALH incorporates the following features to improve visibility when driving at night: auto-controlled Glare-free High Beams, Wide-range Low Beams that illuminate a wider area, and Variable Speed Mode, which progressively raises the axis of illumination as driving speeds rise.

The headlamp's array of LEDs has been divided more finely into 20 blocks that can be independently illuminated. High beam visibility has been significantly enhanced to illuminate 80 meters further ahead than the current model.

By dividing the array of LEDs more finely, the area in which the headlamps are turned off when detecting an

oncoming vehicle is greatly reduced, making it possible to detect pedestrians more quickly. The system also makes use of controls that allow the light from the high beams to be distributed in three different patterns depending on the car's speed, ensuring optimum visibility for the driver at all times.

The operation control range of the adaptive headlights, which illuminate the area ahead based on the steering angle, has been expanded from two stages to six. This finer, smoother adjustment of the light enhances visibility when cornering for even more precise control of the illuminated area.

## ADVANCED SMART CITY BRAKE SUPPORT (ADVANCED SCBS) WITH PEDESTRIAN DETECTION

Advanced SCBS uses the forward viewing camera to detect vehicles and pedestrians ahead and to help avoid collisions or mitigate damage in the event one

does occur. The system can detect vehicles at speeds of from 4 to 80 km/h and pedestrians at from 10 to 80 km/h.



## LANE KEEP ASSIST SYSTEM (LAS)

LAS uses an audible alarm and steering wheel vibration to alert the driver that the vehicle may be deviating from its lane and provides steering assistance to help the driver stay within vehicle lanes.

In order to prevent deviation from a lane, models with the Mazda Connect (MZD Connect) system can select

either a 'Lane Departure Prevention' function with a slightly slower assistance response, or a new 'Lane Trace Assist' system that gives early assistance to keep the vehicle centred in its lane or guided around road curves. These systems operate at speeds of 60 km/h and above.

## TRAFFIC SIGN RECOGNITION SYSTEM (TSR)

TSR uses the forward viewing camera to detect speed limit, no entry, and stop signs while driving, and displays the sign's message on the Active Driving Display. If the

vehicle exceeds the speed limit, TSR warns the driver by blinking graphics on the display and sounding an alert.

## 360° VIEW MONITOR WITH FRONT PARKING SENSOR

Four cameras on the front, sides and rear of the vehicle show the area around the car on a central display. In conjunction with eight parking sensors at the front and rear that detect proximity to obstacles and trigger an alarm when necessary, the system helps the driver perceive obstacles they cannot see.

After the cameras have been activated, drivers can select from different views and view combinations using the touch screen or commander control.

In the case of entering or exiting a parking space, for instance, the central display shows the near view in front of or behind the vehicle, together with a separate overhead view. When the driver wants only a front or rear view, wide-angle cameras mounted at either end of the vehicle can provide a 177° view of the road up to 25 meters in both directions.





SKYACTIV G

# TECHNICAL SPECIFICATION

# DIMENSIONS

HATCHBACK		
Body type		Monocoque
Doors		4 + liftgate
Seating capacity		5
EXTERNAL		
Overall length (without licence plate holder)	mm	4,065
Overall width	mm	1,695
Overall width (mirror to mirror)	mm	2,028
Overall height (without shark fin antenna)	mm	1,495
Wheelbase	mm	2,570
Overhang front (without licence plate holder)	mm	815
Overhang rear	mm	680
Tread front	mm	1,495
Tread rear	mm	1,485
Ground clearance between axles (laden), w. driver 75kg	mm	143
INTERIOR		
Front headroom	mm	984
Rear headroom	mm	945
Front shoulder room	mm	1,352
Rear shoulder room	mm	1,273
Front hip room	mm	1,322
Rear hip room	mm	1,212
Front legroom	mm	1,063
Rear legroom	mm	881
BOOT		
Cargo volume - VDA (without underfloor storage space)	l	250
Cargo volume - VDA (with underfloor storage space)	l	255



# ENGINES & PERFORMANCE

		SKYACTIV-G 1.5 (75 PS)	SKYACTIV-G 1.5 (90 PS)	SKYACTIV-G 1.5 (90 PS)	e-SKYACTIV- G 1.5 (90 PS)	e-SKYACTIV- G 1.5 (115 PS)
		6MT	6MT	6AT	6MT Mazda M Hybrid	6MT Mazda M Hybrid
Powertrain		FWD	FWD	FWD	FWD	FWD
Engine type		I4 DOHC 16 valves				
Displacement	cc	1,496	1,496	1,496	1,496	1,496
Bore x stroke	mm	74.5x85.8	74.5x85.8	74.5x85.8	74.5x85.8	74.5x85.8
Fuel injection type		Direct injection				
Compression ratio		15	15	15	15	15
Max. power	kW (PS) / rpm	55 (75) / 6,000	66 (90) / 6,000	66 (90) / 6,000	66 (90) / 6,000	85 (115) / 6,000
Max. torque	Nm/rpm	143 / 3,500	151 / 3,500	151 / 3,500	151 / 3,500	151 / 3,500
Recommended fuel type		95 RON	95 RON	95 RON	95 RON	95 RON
Fuel tank capacity	l	44	44	44	44	44
Fuel Consumption (WLTP) <sup>1</sup>	l/100km combined	4.8	4.8	5.4	4.7	5.0
Fuel Consumption (NEDC) <sup>2</sup>	l/100km combined	4.4	4.4	4.7	4.4	4.4
Emission regulations		Stage6 G2	Stage6 G2	Stage6 G2	Stage6 G2	Stage6 G2
CO <sub>2</sub> emissions (WLTP) combined	g/km	109	109	122	107	113
CO <sub>2</sub> emissions (NEDC) combined	g/km	101	101	106	100	105
Transmission		6MT	6MT	6AT	6MT	6MT
Top speed	km/h	171	183	177	183	200
Acceleration	sec.	11.3	9.8	12,1	9,8	9,1
GEAR RATIOS						
1 <sup>st</sup>		3.583	3.583	3.529	3,583	3,583
2 <sup>nd</sup>		1.904	1.904	2.025	1,904	1,904
3 <sup>rd</sup>		1.218	1.218	1.348	1,218	1,290
4 <sup>th</sup>		0.918	0.918	1.000	0,918	1,028
5 <sup>th</sup>		0.717	0.717	0.742	0,717	0,837
6 <sup>th</sup>		0.549	0.549	0.594	0,549	0,680
Reverse		3.416	3.416	2.994	3.416	4.416
Final gear ratio		3.619	3.619	4.319	3.619	4.105

<sup>1</sup> Vehicles are homologated in accordance with the type approval procedure WLTP (Regulation (EU) 1151 / 2017; Regulation (EU) 2007/715)

<sup>2</sup> To provide comparability the referred values are NEDC data – values determined in line with Implementation Regulation (EU) 1153 / 2017

# MAZDA M HYBRID SYSTEM

		e-SKYACTIV-G 1.5 6MT (90 PS)	e-SKYACTIV-G 1.5 6MT (90 PS)
Hybrid type		Capacitor	Capacitor
Capacitor	kWh	0.012	0.012
Voltage	V	22.5	22.5

## SUSPENSION & WHEELS

	SKYACTIV-G 1.5 (75 PS)	SKYACTIV-G 1.5 (90 PS)	SKYACTIV-G 1.5 (90 PS)	e-SKYACTIV- G 1.5 (90 PS)	e-SKYACTIV- G 1.5 (115 PS)
	6MT	6MT	6AT	6MT Mazda M Hybrid	6MT Mazda M Hybrid
SUSPENSION					
Front suspension	MacPherson strut				
Rear suspension	Torsion beam axle				
WHEEL & TYRES					
Wheel size	15X5.5J				16X5.5J
	16X5.5J				16X5.5J
Tyre size	185/65R15				

## STEERING & BRAKES & WEIGHT

		SKYACTIV-G 1.5 (75 PS)	SKYACTIV-G 1.5 (90 PS)	SKYACTIV-G 1.5 (90 PS)	e-SKYACTIV- G 1.5 (90 PS)	e-SKYACTIV- G 1.5 (115 PS)
		6MT	6MT	6AT	6MT Mazda M Hybrid	6MT Mazda M Hybrid
STEERING						
Steering type		Rack and pinion				
Power assist type		Column-EPAS				
Turning circle diameter (wall to wall)      kg		10.1 (15") / 10.4 (16")				
BRAKES						
Type front		Ventilated discs				
Type rear		Drum				
Diameter front      mm		258				
Diameter rear      mm		200				
WEIGHT						
Minimum curb weight      kg		1,021	1,021	1,037	1,035	1,042

# M A Z D A 2

# M A Z D A

# D R I V E T O G E T H E R

For more information please visit the Mazda Press Portal

[www.mazda-press.com](http://www.mazda-press.com)

