ALL-NEW Mazda2

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CONTENT

THE ALL-NEW MAZDA2

1 MESSAGE FROM THE PROGRAM MANAGER

MAZDA'S NEWEST SUBCOMPACT

The All-New Mazda2 follows the Mazda CX-5, Mazda6 and Mazda3 to become the fourth model and first subcompact to join Mazda's line-up of new-generation vehicles that adopt the 'KODO—Soul of Motion' design language and full range of SKYACTIV Technology.

It is the third generation of the Mazda2, which has consistently brought new value to the B-segment since the launch of the original model in 2002.

The development goal for the All-New Mazda2 was to inspire a new group of Mazda fans by creating a vehicle capable of helping youthful, forward-thinking customers to express themselves, and support them as they grow and enjoy new experiences.

We aimed to create something that would "shatter all notions of the subcompact class". In other words, we set out to build a new subcompact that enhances all aspects of quality to overturn the conventional thinking that a car's value is proportionate to its size. In turn, this realises uncompromising levels of design, driving performance and functionality that deliver true pride of ownership.

To reach this goal, we strove to incorporate all the knowledge and technology developed in building the larger models in the new-generation lineup, while facing the challenge of condensing these merits into the compact body of the All-New Mazda2.

In terms of design, we aimed for a presence that surpasses the class and a form that is full of vitality. Features include a physique that exudes condensed energy to create an image of explosive forward momentum, a handsome and lively expression with finely crafted forms that breathe life into the overall appearance, and a finely detailed high-quality interior that boasts stylish coordination.

SKYACTIV Technology strikes the right balance between driving pleasure and excellent environmental and safety performance. While inheriting the design philosophy of the new-generation models already in the lineup, we re-thought the full range of these technologies in developing them for the B-segment class.

Available with the choice of two new 1.5-litre SKYACTIV-G petrol engines, our focus was to make the transmission more compact, lighter and more efficient. Attention to the body and chassis includes an uncompromising effort to design the ideal driving position and pedal layout, and also to deliver a high level of collision safety.

In pursuing the ultimate level of the *Jinba Ittai* experience in everyday use, we achieved highly responsive performance that all customers can enjoy with confidence, whether driving on city streets, in the suburbs, or on the highway.

The All-New Mazda2 also inherits other advanced technologies from the Mazda3 and other new-generation models to deliver value and functionality that shatter conventional notions of the class.

These include the human-centric design of i-ACTIVSENSE, Mazda's advanced safety technologies that give drivers confidence and peace of mind, as well as MZD Connect, Mazda's new generation connectivity system equipped with the Human-Machine Interface (HMI), which places the highest priority on safety.

The All-New Mazda2 condenses the essential DNA of Mazda's new-generation vehicles into a compact car that delivers true motoring value not constrained by conventional notions.

My greatest wish is that customers of varying lifestyles from around the world will choose it with pride and confidence, and that the All-New Mazda2 will bring further brightness into their daily lives.

Ayumu Doi
All-New Mazda2 Program Manager

ALL-NEW MAZDA2 FAST FACTS

- Fourth Mazda after CX-5, Mazda6, and Mazda3 to adopt KODO – Soul of Motion design language and SKYACTIV Technology
- For the first time i-ACTIVSENSE technology, in the form of Smart City Brake Support, is available on a sub-compact car
- Second Mazda model, behind Mazda3, to introduce a Head-up Active Driving Display
- Following Mazda3, Mazda2 includes the next-generation HMI with Commander control on the Genki grade. This allows safe access to navigation, communications and infotainment including social media
- Introduction of MZD Connect, Mazda's new connectivity system in Genki
- Pricing from $14,990 (MLP)
- Best ever Mazda2 fuel economy figures from 4.9L/100km for the high-spec SKYACTIV-G 1.5 litre petrol engine with 6-speed SKYACTIV-Drive automatic transmission. An improvement of 28 per cent over the outgoing petrol engine
- Best ever Mazda2 fuel economy figures from 5.4L/100km for the standard-spec SKYACTIV-G 1.5 litre petrol engine with 6-speed SKYACTIV-MT manual transmission. An improvement of 15 per cent over the outgoing petrol engine
- Each grade comes with its own unique interior colour scheme with the mid-spec Maxx offered with an alternative colour pack option
- NVH has been reduced by 15 per cent compared to the previous model

EXTERIOR DESIGN

A physique that conveys a sense of explosive forward momentum through its expression of condensing and releasing energy.

- Mazda's 'KODO—Soul of Motion' design language is re-engineered for its compact body
- A dynamic silhouette created by positioning the compact cabin toward the rear of the lower body's forward-inclined lines
- The look of condensed energy created by the line of the kicked-up rear shoulders is forcefully released as the character line travels toward the front of the body. The overall effect of this body design is that of explosive forward momentum
- Powerful stance with large tyres positioned as close as possible to the four corners of the body to create a short overhang and achieve a wide track

Presents a handsome and lively expression with contours that are full of vitality.

- The evolved signature wing presents an even more powerful, three-dimensional look
- The rear combination lamps continue well onto the liftgate to create a slim, sharp design with a horizontally long appearance
- The wheel lineup includes machined 16-inch aluminium wheels, 15-inch aluminium wheels featuring a bold and sporty three-dimensional form, and 15-inch steel wheels with full wheel caps expresses both toughness and elegance

INTERIOR DESIGN

Finely crafted interior quality that greatly surpasses notions of the class.

- High-quality components inherited from the Mazda3
- The high-quality and playful blend of materials includes satin chrome, high-gloss colour panels, carbon-fibre-finish grain, and stitched leather
- A new floor console provides versatile functionality and features a wide design with presence that surpasses other offerings in the class

The interior establishes a balanced contrast between a cockpit zone for enjoying driving and a passenger seat zone with a roomy, open-feeling space.

- The display and control systems are positioned in accordance with human-oriented design based on the Head-up Cockpit concept
- Designed to help drivers focus on driving, the cockpit zone peaks in height at the top of the meter hood and wraps symmetrically around the driver
- The passenger seat offers a feeling of greater space thanks to a lower positioned instrument panel and an audio centre stack that is not built into the dash
- The front seats are designed to provide excellent holding capability

COLOUR COORDINATION

- In the interior, different parts matched to the colour scheme are used for the instrument panel, floor console and door armrest. Varieties of colours and materials applied are combined with seat materials to offer four styles
- All-New Mazda2 offers eight different body colours. Newly developed Dynamic Blue Mica and Smoky Rose Mica are available in addition to six existing colours, which includes the stunning Soul Red Metallic

PACKAGING

Dimensions and driving comfort and luggage/storage space

- Overall length: 4,060mm (+160mm); Overall width: 1,695mm (±0mm); Overall height: 1,495mm (+20mm); Wheelbase: 2,570mm (+80mm)
- The interior features roomy comfortable space for front seat occupants. This is achieved in part by increasing the distance between the two front seats and the amount of shoulder room. The rearmost position of the seat's slide adjustment is also extended toward the rear by 20mm
- An open space for placing the customer's smartphone was introduced in front of the shift knob. Both front doors include door pockets as well as storage space for maps or other small items
- The luggage compartment capacity is 250 litres (VDA)

Driving position

- Finer adjustments for the driver's seat and steering wheel provide drivers of varying sizes with an optimum driving position. At 260mm, the seat's slide adjustment offers one of the longest fore-aft ranges available on a car in this class. It also allows height adjustment of 40mm in total range. The steering wheel delivers finer adjustment settings by adopting a new 50mm telescopic adjustment function in addition to its 50mm tilt range
- Repositioning the front wheels further forward and the improved shape and better positioning of the pedals allows the driver to extend their leg and reach them more naturally. A hinged organ type accelerator pedal is adopted
- Moving the shift knob from the lower part of the instrument panel to the top of the floor console allows the driver to transfer their hand smoothly between it and the steering wheel
- Larger seats, optimisation of the seatback structure and improved shape and firmness – along with the use of a newly developed vibration-absorbing urethane for the seat cushions – results in excellent fit, holding and ride comfort
- The height of the rear seatback is increased to enhance rear seat comfort and lend a sensation of greater roominess
- The A-pillars are repositioned further back to expand the driver's field of vision out the windshield. Mounting the outer mirrors on the body panel of the doors greatly increases the visibility range over the mirrors

Human-Machine Interface (HMI)

Mazda's next-generation HMI and cockpit design based on the Head-up Cockpit concept aim to help drivers process large amounts of information while maintaining a correct driving position and concentrating on driving safely.

A variety of information that pertains to the vehicle's current status is displayed on the large round meter in the centre and the wing-shaped displays that flank it.

The top spec Genki model also includes:

- **Active Driving Display:** Vehicle speed and other important driving information, such as that from the advanced safety systems, are displayed in real time
- **7-inch centre display:** An independent display mounted on the top of the dashboard for the audio and navigation systems contributes to minimising visual distraction time
- **Commander control:** It is optimally positioned for controlling the information that appears on the centre display without the driver taking their eyes off the road
- **Voice command operation:** The driver can control a number of functions by voice. This includes menu switching, zooming map displays in and out and setting destinations for the navigation system

MZD Connect car connectivity system

MZD Connect – available on the top spec Genki – works in tandem with the customer's smartphone to make functions including internet connectivity and access to communication services safer and easier to use, even when in transit.

- **Audio features:** The system is capable of receiving radio broadcasts, playing audio from CDs or mobile audio players, and accessing internet radio broadcast when connected to a smartphone
- **Communication features:** The system supports hands-free telephone operation and receives, displays and reads aloud short text messages. When using Aha™ by HARMAN, it can read aloud the latest tweets in the customer's Twitter timeline and Facebook news feed entries, and also allows the customer to post audio messages
- **Navigation features:** A navigation system with data provided on SD media cards is available on the top grade Genki

DRIVING DYNAMICS

SKYACTIV-Chassis

- The All-New Mazda2 adopts MacPherson struts in the front and a torsion beam suspension system in the rear that is light weight and offers advantages in terms of packaging. Including standard SKYACTIV-Chassis technology such as an increased caster trail and angle, and a repositioned rear suspension mounting point, the suspension adopts front and rear dampers with a friction control function and other refinements to achieve both nimble driving performance and ride comfort
- A quicker steering gear ratio makes the steering wheel on All-New Mazda2 more responsive. It also adopts a rigid steering mount for the first time on a Mazda passenger car to improve linearity as well as overall steering system rigidity
- The brake system employs ventilated discs in the front and drum brakes in the rear. They deliver more linear and precise control characteristics, along with greater operating ease and braking power

SKYACTIV-Body

- The SKYACTIV-Body for the All-New Mazda2 has an even simpler frame layout and optimised cross-section shapes while basically inheriting the same outstanding architecture used on other Mazda models. Measures implemented on every detail of the body, to increase rigidity and improve damping feel without increasing weight, result in a 22 per cent increase in torsional rigidity when compared to the previous model
- The simple, lightweight frame layout helps reduce "Body in White" weight by approximately 7 per cent over the previous model. The All-New Mazda2 greatly expands the usage ratio of high-tensile steel, which contributes to a reduction in weight while maintaining high strength

NVH performance and aerodynamics

- Controlling suspension resonance and tuning the engine mount position, as well as the shape and hardness of the mount rubber, achieves excellent quietness. Another contributing factor is the optimal positioning of sound insulation and sound-absorbing materials based on the concept of "path-blocking and concentrated sound absorption". This shuts out the various paths by which sound can enter the cabin and instead channels the sound into one place
- Advanced Computational Fluid Dynamics (CFD) analysis was used to strategically position aerodynamic parts where they can achieve the greatest level of efficiency. Because of this the aerodynamics are excellent and contribute greatly to improving driving performance and fuel economy

Powertrains

All powertrains for All-New Mazda2 use SKYACTIV Technology. The engine lineup includes two types of 1.5-litre SKYACTIV-G petrol engine.

The lineup of transmissions includes a 6-speed automatic SKYACTIV-DRIVE, which is newly developed for use with a small displacement engine, as well as a 6-speed manual SKYACTIV-MT transmission.

SKYACTIV-G 1.5: The 1.5-litre SKYACTIV-G, first introduced in the Mazda3 for some overseas markets, is a lightweight, compact and highly efficient direct-injection petrol engine that achieves excellent fuel economy while producing powerful torque. The All-New Mazda2 offers two types of this engine.

- **SKYACTIV-G 1.5L petrol engine (high-spec) with 4-2-1 exhaust system and i-stop**
  - Compression ratio: 13.0:1
  - Maximum power: 81kW, maximum torque: 141Nm
  - Maximum engine speed: 6,800rpm
  - Fuel economy: 5.2L/100km (man), 4.9L/100km (auto)
  - CO_2 emissions: 121g/km (man), 114g/km (auto)
- **SKYACTIV-G 1.5L petrol engine (standard-spec) with 4-1 exhaust system**
  - Compression ratio: 12.0:1
  - Maximum output: 79kW, maximum torque: 139Nm
  - Maximum engine speed: 6,800rpm
  - Fuel economy 5.4L/100km (man), 5.5L/100km (auto)
  - CO_2 emissions: 126g/km (man), 128g/km (auto)
- **SKYACTIV-DRIVE:** A newly developed, compact 6-speed automatic transmission that achieves excellent fuel economy, a direct feel similar to that of a manual transmission, as well as smooth and powerful acceleration
- **SKYACTIV-MT:** A newly developed, compact manual transmission that delivers a light and positive shift feeling, while also contributing to fuel economy
- **i-STOP:** Mazda's i-stop idling stop system delivers smooth stopping and starting along with excellent fuel economy. The system available for the All-New Mazda2 operates at lower water temperatures than on previous iterations, which improves real-world fuel economy

SAFETY

- Mazda Proactive Safety aims to minimise the possibilities of an accident occurring by identifying risks early on, while at the same time maximising the range of conditions in which the driver can operate the vehicle safely. The All-New Mazda2 fully embraces this philosophy for its safety performance

Active safety

- Mazda's i-ACTIVSENSE advanced safety technologies employ sensing devices to support the driver in recognising hazards, avoiding collisions, and minimizing damage in the event an accident does occur

The All-New Mazda2 offers Smart City Brake Support (SCBS) as an optional extra:

When driving at low speeds between 4km/h and 30km/h the SCBS system helps prevent colliding with the vehicle ahead, or reduces the amount of damage in the event an accident cannot be avoided.

Passive safety

- Mazda's high-rigidity SKYACTIV-Body, that effectively absorbs and disperses impact force from any direction to suppress cabin deformation, has been further evolved for use on a B-segment car. It delivers a level of collision safety performance capable of earning high-level ratings in the various collision safety tests performed by organisations in different regions
- Front airbags for the driver's and passenger's seat are standard equipment. Curtain airbags that protect the heads of occupants in the front and rear seats are also available, as are side airbags
- Additional safety equipment and mechanisms to protect occupants in the event a collision does occur include a front seat structure that firmly supports the occupant's head and door armrests that absorb impact energy

Model	Engine	Transmission	MLP
Mazda2 Neo	1.5L petrol (standard spec)	6MT	$14,990
Mazda2 Neo	1.5L petrol (standard spec)	6AT	$16,990
Mazda2 Maxx	1.5L petrol (high spec)	6MT	$16,990
Mazda2 Maxx	1.5L petrol (high spec)	6AT	$18,990
Mazda2 Genki	1.5L petrol (high spec)	6MT	$19,990
Mazda2 Genki	1.5L petrol (high spec)	6AT	$21,990

Smart City Brake Support option: $400

Colour Pack option available on Mazda2 Maxx models: $250

NEO

Manufacturer's List Price (MLP) from $14,990 (6-speed manual)

Manufacturer's List Price (MLP) from $16,990 (6-speed automatic)

Neo features include:

- 1.5 litre in-line 4 cylinder 16 valve DOHC S-VT petrol (SKYACTIV-G)
- Compression ratio: 12.0 : 1
- Maximum power: 79 kW @ 6,000 rpm
- Maximum torque: 139 Nm @ 4,000 rpm
- Fuel consumption (combined): 5.4 l/100km[1] (man) or 5.5 l/100km[1] (auto)
- 15-inch steel wheels
- Headlamps (Halogen)
- Power windows
- Wipers (front) 2-speed with variable intermittent function
- Seat colour: Black/Blue (unique pattern for Neo)
- Seat trim: Cloth
- Front seats with: height adjustment (driver) and seat back pocket (passenger)
- Rear seats with: 60/40 split fold backrest
- Air-conditioning
- Centre console side panels: Matte black
- Front door armrest: Soft-touch black
- Front door armrest panels: Matte black
- I/P decoration panel: Matte black
- Ventilation louvre surrounds: High-gloss black
- Tilt and telescopic adjustable steering wheel
- Trip computer
- Vanity mirrors (front)
- Audio system with: AM/FM tuner, single disc CD player (MP3 compatible) and 4 speakers
- Auxiliary-audio input jack (3.5mm mini-stereo)
- Bluetooth® hands-free phone and audio capability
- Steering wheel-mounted audio controls
- USB-audio input port (iPod® compatible)
- Advanced keyless push-button engine start
- Airbags SRS: front (driver and passenger), side (front) and curtain (front and rear)
- Anti-lock Braking System (ABS)
- Dynamic Stability Control (DSC)
- Emergency Stop Signal (ESS)
- Hill Launch Assist (HLA)

SCBS option:

- Smart City Brake Support (SCBS)[2]

1 Fuel consumption figures are based on ADR 81/02 test results. They are useful in comparing the fuel consumption of different vehicles. They may not be the fuel consumption achieved in practice. This will depend on traffic and road conditions and how the vehicle is driven.

2 i-ACTIVESENSE safety technologies are driver assist technologies only and should not be used in place of skilled and safe driving practices. It is the driver's sole responsibility to constantly monitor vehicle surroundings and conditions at all times.

MAXX

Manufacturer's List Price (MLP) from $16,990 (6-speed manual)

Manufacturer's List Price (MLP) from $18,990 (6-speed automatic)

Maxx features additional to Neo include:

- 1.5 litre in-line 4 cylinder 16 valve DOHC S-VT petrol (SKYACTIV-G) with i-stop
- Compression ratio: 13.0 : 1
- Maximum power: 81 kW @ 6,000 rpm
- Maximum torque: 141 Nm @ 4,000 rpm
- Fuel consumption (combined): 5.2 l/100km[1] (man) or 4.9 l/100km[1] (auto)
- 15-inch alloy wheels
- Seat colour: Black/Blue (unique pattern for Maxx)
- Centre console side panels: High-gloss black
- Front door armrest panels: High-gloss black
- I/P decoration panel: High-gloss black
- Cruise control
- Leather-wrapped: gear shift knob, handbrake handle and steering wheel

SCBS option:

- Smart City Brake Support (SCBS)[2]

Colour Pack option:

While this is only available with three exterior colours (Snowflake White Pearl, Aluminium Metallic and Black Mica) it includes:

- Centre console side panels: High-gloss red
- Front door armrest: Soft-touch red
- Front door armrest panels: High-gloss red
- I/P decoration panel: High-gloss white
- Ventilation louvre surrounds: High-gloss red
- Seat colour: Red
- Seat trim: Cloth

GENKI

Manufacturer's List Price (MLP) from $19,990 (6-speed manual)

Manufacturer's List Price (MLP) from $21,990 (6-speed automatic)

Genki features additional to Maxx include:

- 16-inch alloy wheels
- Exhaust extension (chrome)
- Front fog-lamps (Halogen)
- Front upper grille decoration (body coloured)
- Headlamps auto on/off function
- Wipers (front) 2-speed with rain-sensing function
- Seat colour: Black
- Active Driving Display
- Air-conditioning (climate control)
- Centre console side panels: Soft-touch black with red stitch
- Front door armrest: Soft-touch black with red stitch
- I/P decoration panel: Soft-touch black with red stitch
- 7-inch full colour touch screen display (MZD Connect)
- Audio system: 6 speakers
- Internet radio integration (Pandora®, Sticher™ and Aha™)
- Multi-function commander control
- Radio Data System (RDS) program information
- Satellite navigation

SCBS option:

- Smart City Brake Support (SCBS)[2]

MODEL MIX

The third generation Mazda2 has sold almost 100,000 units since its launch in September 2007, equating to almost 1,200 sales per month. In the last year, with limited stock available and in run out, average monthly sales have almost reached 1,100.

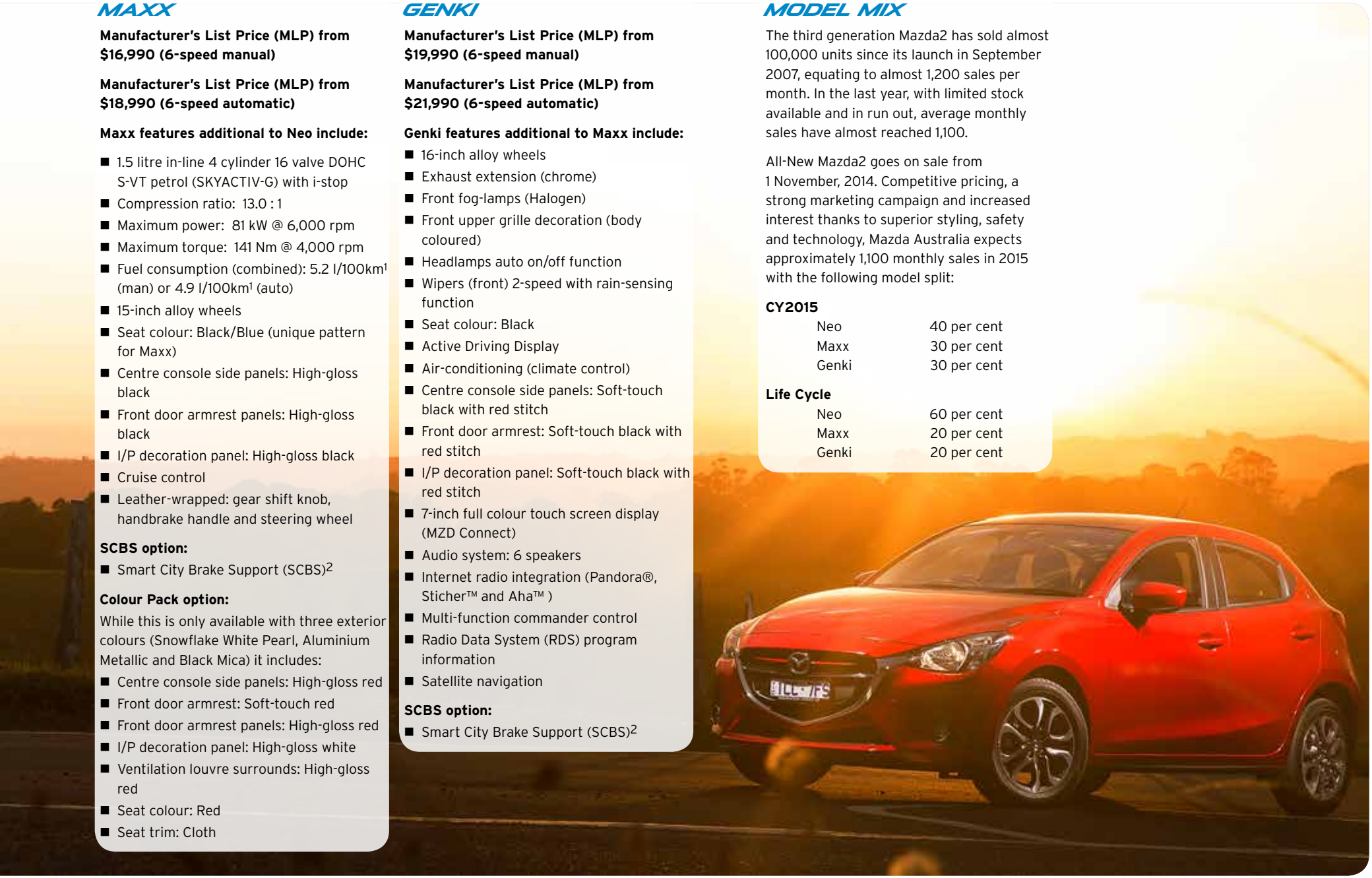
All-New Mazda2 goes on sale from 1 November, 2014. Competitive pricing, a strong marketing campaign and increased interest thanks to superior styling, safety and technology, Mazda Australia expects approximately 1,100 monthly sales in 2015 with the following model split:

CY2015

Neo	40 per cent
Maxx	30 per cent
Genki	30 per cent

Life Cycle

Neo	60 per cent
Maxx	20 per cent
Genki	20 per cent



4 MESSAGE FROM THE CHIEF DESIGNER

EMBODYING THE MAZDA BRAND

The goal we envisioned as we designed the All-New Mazda2 was the smiling faces of totally satisfied customers.

Our vision focused on making each moment customers spend with the All-New Mazda2 so rich and fulfilling that it will put a big smile on their faces; every time they step into the car, grip the steering wheel, admire it from a distance, or head out in it to have fun with good friends.

This is why we set out to build a car that would engender a lasting sense of attachment, one that would make customers want to continue driving the car for as long as possible.

To achieve our goal, we needed to pursue a design capable of creating an emotional connection that would transcend mere functional appeal. In other words, we needed a design that would make customers fall in love with the car again and again, every time they view it and the more they use it.

It also had to instill customers with a feeling that they had bought a truly fine machine. As the fourth model in the Mazda lineup to adopt the 'KODO—Soul of Motion' design language, the All-New Mazda2 aims to deliver a dynamic form that surpasses the class in terms of presence and vitality.

I am confident that the fine craftsmanship we dedicated to its body, expression, form, texture and colour coordination gives the car a one-of-a-kind presence that customers will want to make part of their daily life and activities.

While this may be our smallest production model, it fully embodies the Mazda brand in a very big way.

The All-New Mazda2 takes the essence of KODO design and condenses it. My greatest wish is that this car will bring more smiles and even greater pleasure to our customers' lives.

Ryo Yanagisawa
All-New Mazda2 Chief Designer

A DESIGN WITH PRESENCE AND VITALITY THAT SURPASSES THE CLASS

With the All-New Mazda2, Mazda aimed to create a new image of the subcompact car; one with outstanding presence and vitality that would surpass all generally-accepted notions about what might be offered in this class.

Though Mazda's 'KODO—Soul of Motion' design language was cultivated through its application to much larger cars, it is re-engineered to adapt to the small body of the All-New Mazda2.

The exterior design creates an explosive sense of forward momentum engendered by concentrating energy into its compact body and presents a physique with a powerful stance.

Fine craftsmanship creates a handsome and lively expression, while giving birth to a dynamic form full of vitality.

The interior establishes a balanced contrast between a cockpit zone that enables the driver to concentrate on driving and a passenger seat zone that provides an open-feeling space.

Every detail of the interior benefits from careful selection of all the materials and forms used within, creating a high-quality, crafted feel.

In addition, a stylish lineup of internal and external colours make personalising the car as easy and enjoyable as choosing what clothes to wear.

EXTERIOR DESIGN: A POWERFUL STANCE AND SENSE OF FORWARD MOMENTUM

The All-New Mazda2 features a re-engineered physique that creates a look of dynamism and outstanding presence that surpasses the class.

Moving the front tyres approximately 80mm forward and the A-pillars approximately 80mm rearward, compared to the previous model, shifts the cabin toward the rear.

Positioning the compact cabin atop and toward the rear of the lower body's forward-inclined lines creates a silhouette of the car driving with the load placed on the rear tyres.

The exterior design also presents a different image of movement at the front and rear of the body.

Kicked-up rear shoulders raise the rear end high to create a look of stored energy and concentrated tension, while the front presents a look of energy being released in one speedy instant. The overall effect is an expression of explosive forward momentum.

One characteristic feature of KODO design is a powerful stance. We achieved this on All-New Mazda2 by positioning the tyres as close as possible to the four corners of the body to create short overhangs and a wide track.

The bold contours of the flared front and rear fenders create a trapezoidal silhouette rising from the tyres, which in turn emphasises the car's powerful stance and nimble handling.

The sleek form of the resulting physique, reminiscent of well-toned muscles, was realised through the skill of talented craftspeople who challenged the limits of metal fabrication.

Front view

Positioning the headlamps and radiator grille as low as possible with a forward-inclined posture creates a bold expression that is both handsome and full of vitality.

It conveys the image of a predator staying low to the ground as it stalks its prey.

The distinctive chromed signature wing, a defining feature of Mazda's new-generation lineup, has been further evolved to present an even more powerful, three-dimensional look.

The wing is bold and appears to be chiseled from solid metal, giving it a sculpted finish that suggests quality and a sense of dignity. The tip of the wing runs through the centre of the headlamp in a design that appears to continue on toward the rear of the body.

This enhances the sense that the wing and headlamp are integrated into a single design element and heightens the feeling of dynamic motion across the body, from the front through to the rear.

The inside of the radiator grille adopts a two-tier design that clearly divides the cooling intake area and the licence plate holder.

Rear view

The rear end is built to present a three-dimensional view that appears to be lifting strongly upward and forward.

Design elements that help create this effect include rear shoulder character lines that kick up dramatically from the sides of the body, high-positioned rear combination lamps, and a rear window with a steep forward incline.

All these sit firmly atop the bold flare of the rear fenders and large diameter tyres that support them to convey a strong sense of stability.

Overall, it creates a powerful look that suggests a sudden release of stored energy creating forward momentum.

The rear combination lamps continue well onto the liftgate to create a slim, sharp design with a horizontally long appearance. They lead the eyes to follow a perceived motion of flow straight from the body's front, along its sides, and on toward the brand symbol in the rear, and thereby bring together the tight look of the rear end.

Effort also went into realising the same spirited expression in the rear as featured on the front face by creating a U-shaped pattern for the tail and brake lamp illumination as a lighting signature.

The spoiler incorporated into the top of the liftgate combines a high level of aerodynamic performance with sporty good looks.

Wheel design

With the large diameter tyres instilling an expectation of a dynamic driving experience, the lineup includes 16-inch aluminium wheels, 15-inch aluminium wheels, and 15-inch steel wheels with full wheel caps. Expressing dynamic motion from hub to rim, each of the wheels conveys a sense of strength and toughness.

Highlighting the special nature of the machined 16-inch wheels is the sharp contrast between the authentic metallic brilliance that comes from machining and the tough look of the gun metallic paint on the spokes.

Five pairs of accents on the outer edges of the 15-inch aluminium wheels create a bold form that speaks of high quality and sportiness. The design of the full wheel caps for the 15-inch steel wheels overlays thick and thin spokes to create a three-dimensional form suggesting both strength and suppleness.

INTERIOR DESIGN: *A JOY TO DRIVE, A JOY TO OWN*

With the aim of becoming a new global benchmark for interior design, every detail has been dramatically evolved, including the beauty of finely crafted forms, a feeling of quality that surpasses the class, the driver-centric cockpit environment and the colour coordination offerings.

It is an interior that heightens the joy of ownership every time the driver sits in the driver's seat, and will make them want to get behind the wheel as often as possible.

The interior takes some design cues from small airplanes. The instrument panel spreads out from the meter hood like the wing of a plane. The round air-conditioning louvres resemble jet engines. The radiating lines of the door trim convey the image of air flowing from a jet engine.

Two zone front seat environment

The front seat area is comprised of two distinct zones.

First is the cockpit zone, which enables the driver to concentrate on enjoying the driving experience.

Peaking at the top of the meter hood and wrapping symmetrically around the driver, the design creates a strong sense of oneness with the car by allowing the driver to sit straight and maintain a naturally centered seating position. The movement of the lines from the meter hood to the door trim and floor console's knee rest panels emphasise the sense of forward momentum.

The other is the passenger seat zone, which features a feeling of expansive side-to-side breadth that maximises comfort. The instrument panel extends laterally from the meter hood to provide a sense of stability and reassurance for the passenger's lower body, while at the same time creating a roomy and open environment for the upper body.

Accentuating the two distinct zones in the front is the positioning of the three round air-conditioning louvres and single slim louvre. The unique round louvres greatly evolve the look of quality. Positioning one on each of the driver's left and right sides clearly delineates the centre axis of the cockpit zone.

Without any sacrifice in performance, the slim louvre on the passenger side measures approximately 30mm in height, less than half that of a conventional louvre. Integrated into the long slit in the instrument panel, it goes almost unnoticed to the eye.

This innovative design – in which the driver and passenger seats do not appear to be divided by a centre stack – create a feeling of greater space in the passenger seat.

HMI design

For display and operation systems, All-New Mazda2 adopts Mazda's HMI-based Head-up Cockpit concept, the same system that was first employed on selected Mazda3 models.

Available on high-grade models, the Active Driving Display is positioned on top of the meter hood, a seven-inch center display is mounted on the dashboard, and the commander control is positioned atop the floor console.

The new meter cluster design features a round analog meter in the center, flanked on the right and left by a pair of wing-shaped digital displays.

Also available on high-grade Mazda2s sits a tachometer with an integrated digital speedometer. The other grades place a speedometer in the centre with a digital tachometer positioned in the display wing on the left. Surrounded by a metallic ring and featuring an elaborate three-dimensional dial face, the centre meter creates a sporty, high-quality design.

Floor console

Increasing the amount of space between the front seats allowed for the introduction of a wider new floor console.

It can therefore offer a range of versatile functions, such as a large front tray, commander control, two cupholders and flexible rear tray, while also delivering the ambience of a car from a class above.

The commander control also features a palm rest that supports the driver's palm to promote operating stability.

Seat design

Seat development followed an unconventional process in deciding on the colour styles to be offered and then matching the design of the seats to each of the colour schemes.

The front seats are designed to provide excellent holding capability, while at the same time conveying a strong sense of a fore-aft centre axis as well as a sense of speed.

The shoulder areas are also tucked in as much as possible to provide rear seat occupants with a feeling of openness, while the shoulder sections on the front seats on high-grade Mazda2s are given a three-dimensional form that emphasises the car's sporty image.

Dedication to finely crafted forms and quality textures

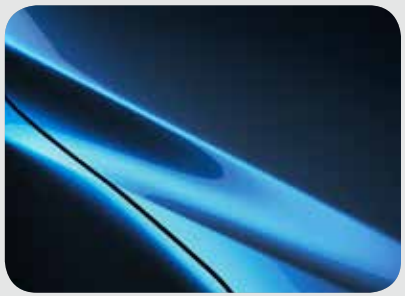
Mazda's dedication to fine craftsmanship can be found in the rich surface contours and attention to every detail when it comes to textures.

From the curved swell in the instrument panel's top surface to the expression of the door trim shoulder sections, light and shadow play off against one another to create a sculpted look of high quality.

Parts with a metallic finish present fine variations in their expressions, whether it is an elaborate face that looks like a machined part or the tough look of a carefully forged item.

Effective blending of the grain and textures of the materials used also creates a sporty interior environment. This includes the use of satin chrome, piano black, high-gloss colour panels with honeycomb or carbon-fibre-finish grain, and leather and stitching for surface finishes.

A change to white as the colour for night time illumination throughout the cabin creates a sophisticated expression of quality.


Dynamic Blue Mica


Smoky Rose Mica


Soul Red Metallic


Aluminium Metallic


Black Mica


Snowflake White Pearl Mica


Gunmetal Blue Mica


Metropolitan Grey Mica

The lineup of eight available body colours includes six current high-quality colours, along with two colours newly developed for the All-New Mazda2 that are aimed at a yet-broader range of customers.

Developed in the pursuit of a thoroughly sporty look, new Dynamic Blue Mica is a bright, pure blue colour that emphasises the car's tough appearance.

The other new colour, Smoky Rose Mica, combines a glossy tint and hard shine to create a stylish, high-quality colour that will appeal to mature tastes.

The other colours that round out the lineup are Soul Red Metallic, Aluminium Metallic, Black Mica, Snowflake White Pearl Mica, Gunmetal Blue Mica, and Metropolitan Grey Mica.

INTERIOR COLOUR COORDINATION

With more people looking wanting to personalise their All-New Mazda2, four different interior colour options have been made available. The Neo, Maxx and Genki each has its own unique look and feel, with a further colour pack option available on the Maxx.


Neo


Maxx


Maxx Option


Genki

INTERIOR COLOURS

Neo

It combines a black base colour with blue stripes on the fabric seats and lustrous black rings on the air-conditioning louvers as accents to create a refined look of sportiness and quality. Decorative panels are covered with a resin material that features a leather grain pattern.


Neo


Maxx


Maxx Option


Genki

Maxx

This is a unisex style that expresses a sporty presence that is both chic and sophisticated. The piano black base color is coordinated with navy blue fabric and silver chrome ornamentation. Distinctive embossing on the centre sections of the seats adds an extra accent. The decorative panels are formed from a newly developed resin with a high-gloss colour finish.

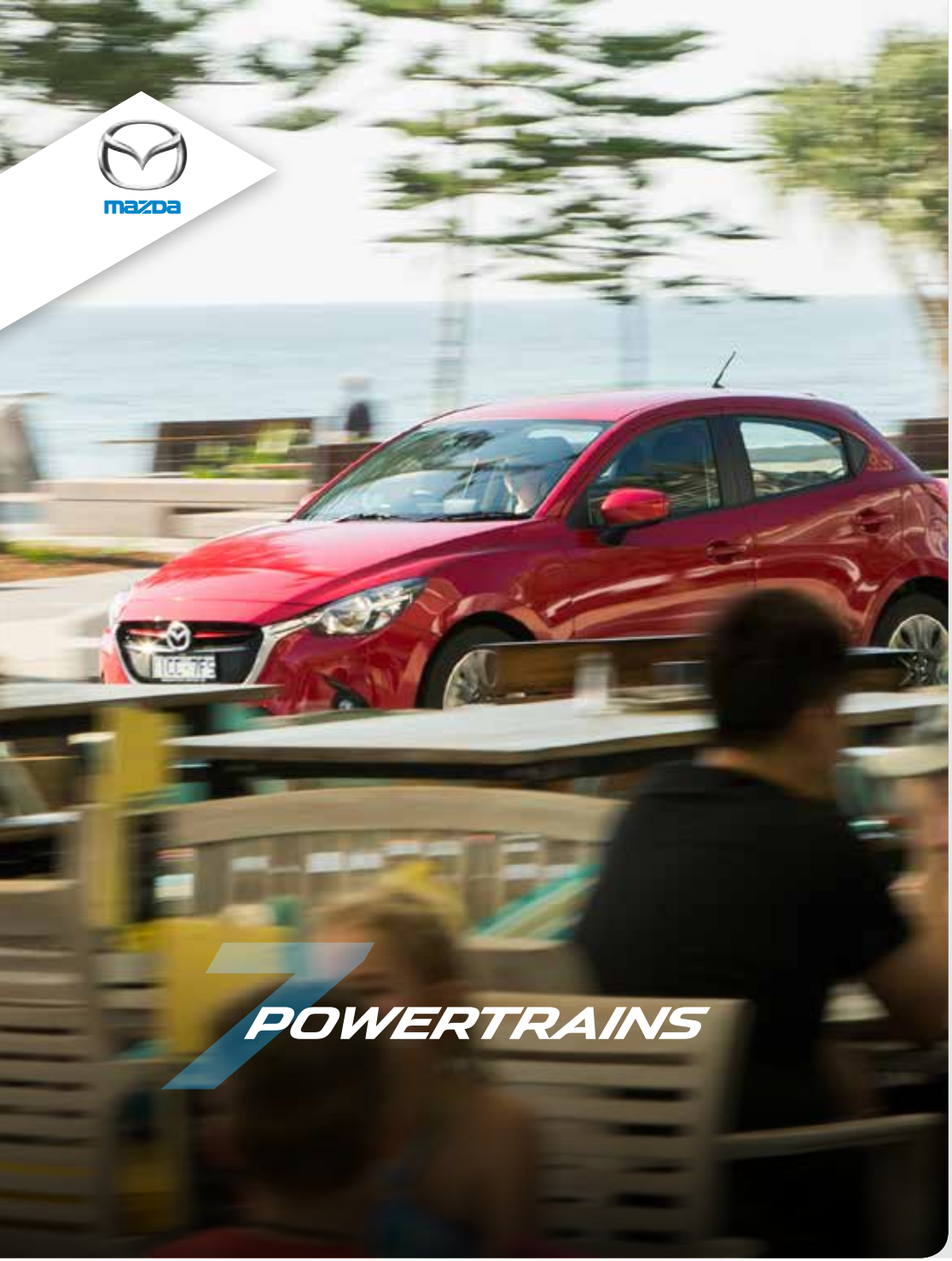
Maxx Colour Pack option

This style reflects the world of modern furniture design that began in the 1950s and blends this with sporty good looks. The bright red fabric seats boldly emphasise the presence of the interior's vivid red, white and black resin material. Distinctive embossing is applied to the centre section of each seat. The decorative panels are made of a newly developed resin with a high-gloss colour finish.

Based on the concept of bringing out the most the resin material for the high-gloss colour panels has to offer, development proceeded by closely examining every detail. The process involved careful consideration of everything from the raw materials employed to the paints and grain patterns with which they are finished, and the results give the panels a distinguishing characteristic. The high-gloss colour panels also effectively highlight a unique character trait of this style.

Genki

This style aims for a look of quality and energetic sports-minded styling for the high-grade option. The interior features a black base colour with seats that have a fabric part in the center sections with a geometric weave pattern and red stripes that stir the heart of any sports-minded individual. Soft panels with red stitching and satin chrome highlights further emphasise the look of quality and craftsmanship. Depending on the destination market, the seats are covered in fabric or a half leather combination.



SKYACTIV POWERTRAINS

The All-New Mazda2 adopts SKYACTIV Technology on all powertrains to deliver excellent environmental performance without compromising on the fun-to-drive performance for which the Mazda brand is renowned.

The engine lineup includes two types of 1.5-litre SKYACTIV-G petrol engine and a new 6-speed automatic SKYACTIV-Drive transmission, as well as a 6-speed manual SKYACTIV-MT transmission.

Also available on some configurations is Mazda's "i-stop" idling stop system which works in conjunction with the SKYACTIV powertrain to deliver excellent fuel economy.

SKYACTIV-G 1.5

The 1.5-litre SKYACTIV-G first introduced on the Mazda3 is a lightweight, compact and highly efficient direct-injection petrol engine that achieves excellent fuel economy while producing powerful torque.

The All-New Mazda2 offers two types of this engine – the V-P5 and F-P5.

The F-P5 engine comes with i-stop, it employs a 4-2-1 exhaust system and a high compression ratio of 13.0:1 to produce 81kW maximum power and 141Nm maximum torque. It also has an electric intake SVT, an oil exhaust SVT and an electric oil pump.

When compared to the previous model's MZR 1.5-litre engine, it produces approximately 2 to 11 per cent more torque throughout its rev range.

The V-P5 version features a simpler structure that employs a 4-1 exhaust, a compression ratio of 12.0:1, it has an oil intake SVT, a belt operated oil pump and the engine produces 79kW or power and 139Nm of torque.

When compared to the previous model's MZR 1.5-litre engine, it produces approximately 2 to 5 per cent more torque throughout its rev range.

Technologies that distinguish SKYACTIV-G from conventional engines

High tumble port: Generating a powerful tumble (vortex) within the combustion chamber distributes the flame more evenly throughout the combustion chamber. This improves the speed of combustion, which contributes to suppress knocking and improve torque production.

Multi-hole injectors: The injectors employ six holes on each nozzle. A two-stage injection process used when injecting gasoline directly into the cylinder promotes mixing to maximise the homogeneity and flow strength. Its latent heat vaporization improves the in-cylinder cooling effect and suppresses knocking.

Cavity pistons: The aluminium pistons incorporate a cavity in the crown of each that reduces cooling loss. Efforts to reduce their weight include removing all material possible from each piston's underside. The cylinder block is also designed to maintain circularity when the engine is running. This allows lower tension to be applied to the piston rings without increasing oil consumption.

Dual S-VT: Controls intake and exhaust valve timing, instantly optimising them in response to the engine operating conditions of the moment. The advantages include maximising fuel economy under light loads, and suppressing knocking when starting the engine in cold weather or under heavy loads. The system reduces pumping loss under light loads by greatly delaying intake valve closing to the timing of 110°, while at the same time delaying exhaust valve closing to increase internal Exhaust Gas Recirculation (EGR) volume for maximum effectiveness. Under heavy loads, the electric-powered intake valve S-VT advances the timing of valve opening and closes each valve early, which increases the amount of air intake and torque output.

4-2-1 exhaust system: The four exhaust pipes running from the engine first collect into pairs and then into a single pipe. Ensuring ample distance for the exhaust gases from individual cylinders to travel before merging lessens the effect of reflected waves reaching another combustion chamber, and the combustion gas scavenging effect reduces exhaust resistance to enable efficient combustion. The loop design of the exhaust pipe also reaps space savings. This allows the large-capacity catalytic converter to be positioned near the engine, which improves vibration characteristics.

Dedicated exhaust system: A pre-silencer positioned between the catalytic converter and low back pressure main silencer efficiently reduces exhaust gas pressure, which contributes to ensuring powerful torque output at low speeds.

Lighter weight and reduced mechanical resistance: Efforts aimed at thoroughly reducing weight include the introduction of lighter pistons, connecting rods and crankshaft. Other design details aimed at reducing mechanical resistance include a reduced valve spring load and the use of a high-efficiency water pump.

Oil lubrication system: Lessening resistance in the oil passages reduces pressure loss and lowers the amount of pressure required to enable the use of a smaller size oil pump. The system provides optimised control over the amount of oil pump discharge, and uses two-stage electronic control to switch discharge pressure in response to the driving conditions.

SKYACTIV-DRIVE AUTOMATIC TRANSMISSION

SKYACTIV-Drive is an automatic transmission that achieves excellent fuel economy, a direct feel similar to that of a manual transmission, as well as smooth and powerful acceleration from a standing start or when under way.

The SKYACTIV-Drive transmission improves fuel economy and strengthens direct shift feel by reducing weight and mechanical resistance, while also expanding lock-up range.

The lightweight SKYACTIV-Drive transmission is highly efficient and assists in improving fuel economy figures compared to the outgoing model.

Specifically, it eliminates the one-way clutch, while adopting a newly developed compact shaft that shrinks the planetary carrier size and a lightweight transmission case.

This thorough revision of the transmission structure itself reduces the number of parts used and optimises the shapes of those used, offering significant reduction in weight and mechanical resistance.

A divider introduced between the lock-up piston and torus keeps changes in pressure within the torus from affecting piston operation while driving.

Finer control over the hydraulic pressure of the lock-up clutch to improve response realises lock-up immediately after accelerating from a standing start, and this makes it possible to deliver smoother, more natural starts. The result is a lock-up range of 86 per cent. This creates a more direct feeling to the transmission's performance and also improves fuel economy.

Drive Selection

The SKYACTIV-Drive transmission adopts Drive Selection, which allows drivers to press a switch on the transmission's shift gate to switch to the Sport drive mode.

When in Sport mode, the transmission is automatically set to start out in a low gear. It also increases the amount of torque output when the accelerator pedal is pressed down further to deliver powerful acceleration and a sense of linear response with a minimum of pedal action.

Ensuring easy-to-handle drive power and improving responsiveness by enabling the driver to convey their intentions to the car in response to traffic conditions, Drive Selection supports a reassuring driving experience when, for example, merging onto a crowded highway.

SKYACTIV-MT *MANUAL TRANSMISSION*

The 6-speed SKYACTIV-MT is a lightweight, compact new-generation manual transmission that delivers a light and positive shift feeling, while also contributing to reduced fuel economy.

In addition, the SKYACTIV-MT transmission further reduces weight, features a more compact design, and lowers resistance.

When compared to the 5-speed manual transmission of the previous Mazda2, a number of technologies applied to reduce the weight of the SKYACTIV-MT for the All-New Mazda2 result in a 5 per cent reduction in weight for the 6-speed version.

In specific terms, the new SKYACTIV-MT transmission employs a two-part structure comprised of only a transmission case and clutch housing.

It replaces the three-part structure used on the manual transmission of the previous Mazda2 that included a rear cover.

At the same time, the unit's casing is made as thin as possible. In addition, the shift linkage is kept compact by thoroughly aggregating the functions of the parts used to operate it.

The result is an operating system that is 34 per cent lighter in weight than the manual transmission of the previous Mazda2 and it retains the 45mm short stroke and the crisp shift feel that is distinctive to SKYACTIV-MT.

In terms of fuel economy, open-type ball bearings are used throughout, including on the differential shaft, to minimise the rotational resistance of the bearing points.

A pipe placed within the gear shaft supplies oil to the inside of the shaft, making it possible to deliver an optimal amount of oil where it is required and reduce the amount of oil the unit needs by approximately 45 per cent compared to the 5-speed manual transmission on the previous Mazda2.

Also, combining the synchromesh used for reverse and fifth gears reduces drag resistance.

i-STOP
IDLING STOP SYSTEM

The All-New Mazda2 is equipped with Mazda's i-stop idling stop system (grade dependent) which helps deliver smooth stopping and starting along with excellent fuel economy.

The system automatically stops the engine when the driver presses the brake pedal and stops the car.

When subsequently releasing the brake or engaging the clutch to move off again, fuel is injected directly into the engine's cylinder and combusted to automatically restart the car in approximately 0.35 seconds.

The further evolution of the All-New Mazda2 allows the system to operate at lower water temperatures after the engine is started than on previous iterations. This makes it possible to use the idling stop system sooner after starting the engine and improves real-world fuel economy numbers.

8 PACKAGING

EVERY DETAIL IS A MASTERPIECE OF HUMAN-CENTRIC PACKAGING

While condensing the dynamic styling of the KODO design language to match its compact size, the packaging for the All-New Mazda2 is carefully designed to provide driving pleasure, a comfortable cabin environment and easy-to-use features.

Designing every function from a human-centered perspective included offering a cockpit environment that provides drivers, large or small, with a proper driving posture, enabling them to concentrate on driving.

Related details cover everything from seat and pedal positioning to the Head-up Cockpit concept with the revised positioning of Mazda's HMI instruments and controls.

It also includes ensuring roomy comfort in the rear seats, providing practical storage space, and introducing the MZD Connect car connectivity system.

Exterior dimensions

The All-New Mazda2's packaging secures adequate space within its compact form, while at the same time achieves the dynamic lines of KODO design.

As is the KODO characteristic, the wheels have been positioned on the four corners of the vehicle. Repositioning the wheels forward by approximately 80mm has lengthened the wheelbase by 80mm to measure 2,570mm, and All-New Mazda2 has a larger 185/60R16 tyre – up from the previous model's 15-inch tyre.

Overall dimensions are 1,495mm (height) x 4,060mm (length) x 1,695mm (width). The front and rear track have increased by 30mm and 25mm respectively (over the previous model) to 1,495mm in the front and 1,480mm in the rear (when equipped with 16-inch tyres). These measurements have created a wider, more powerful looking stance.

With a minimum turning radius of 4.7m on 15-inch tyres and 4.9m on 16-inch tyres, the All-New Mazda2 handles as well and as easily as the previous model, despite its larger tyre size.

Interior dimensions

One design prerequisite for the front seats was to comfortably seat occupants up to 190cm in height. As such, every dimension of front seat space was scrutinised to optimise the seating position and provide ample headroom and shoulder space.

The result is a 20mm increase in the distance between the two front seats, which now measures 690mm, as well as wider shoulder room. The rearmost position of the seat's slide adjustment is also extended toward the rear by 20mm. As a result the All-New Mazda2 provides a roomy, comfortable space for front seat occupants that defies the visual image of the All-New Mazda2's compact proportions.

The rear seats also offer comfortable seating space together with thinner new front seat headrests and seatbacks for easier communication between the front and rear seats. This combines with the increased distance between the front seats to create a comfortable environment that makes conversation between cabin occupants easier and more enjoyable.

Comparison of exterior dimensions

	All-New Mazda2	Previous Mazda2
Overall length	4,060mm	3,900mm
Overall width	1,695mm	1,695mm
Overall height	1,495mm	1,475mm
Wheelbase	2,570mm	2,490mm
Front overhang	815mm	800mm
Rear overhang	675mm	610mm
Tyre size	185/65R15	185/55R15
	185/60R16	
Turning circle diameter (kerb-to-kerb)	9.4m (15-inch)	9.8 (15-inch)
	9.8m (16-inch)	

Comparison of interior dimensions

	All-New Mazda2	Previous Mazda2
Front headroom*	984mm	1,004mm
Front shoulder room	1,351mm	1,340mm
Front legroom	1,063mm	1,068mm
Rear headroom	944mm	959mm
Rear shoulder room	1,270mm	1,300mm
Rear legroom	874mm	878mm
Rear knee clearance	-7mm	-25mm

*Without sunroof

COCKPIT ENABLES CORRECT POSTURE
FOR CONCENTRATING ON DRIVING SAFELY

Seat adjustment and tilt and telescopic steering functions

The All-New Mazda2 offers finer adjustments for the driver's seat and steering wheel.

The slide adjustment for the driver's seat is increased by 10mm over the previous model to 260mm for the All-New Mazda2, resulting in one of the longest fore-aft adjustment ranges available on a car in this class.

The seat allows height adjustment of 40mm in total range. The steering wheel also delivers finer adjustment settings by newly adding a 50mm telescopic adjustment function in addition to its 50mm tilt range.

As a result, the All-New Mazda2 enables drivers of varying sizes to set their ideal driving position.

Ideal pedal layout

Moving the front wheels forward by approximately 80mm makes it possible to position the accelerator and brake pedals approximately 20mm toward the outside of the driver's centre axis.

Optimisation of the pedal shapes, and the distance between them, realises a layout that enables the driver to extend their leg and reach the pedals more naturally, despite the car's compact size.

The All-New Mazda2 also adopts the hinged organ type accelerator pedal used on the Mazda3 and Mazda6. This helps enable finer pedal control and smooth foot transfer to the brake pedal.

It is an ideal pedal layout that allows comfortable operation, even on long drives, and contributes to error-free operation, even when braking in an emergency.

Optimal positioning of control devices

Each control device is positioned in accordance with ergonomic studies of the bone structure of the human body aimed at finding the angle that delivers the greatest amount of comfort, ease and precision.

Moving the shift knob from the lower part of the instrument panel to the top of the floor console allows the driver to transfer their hand smoothly between it and the steering wheel, and to operate it smoothly and easily without applying excessive force.

The commander control is positioned where the driver can reach it simply by lowering his or her hand to the floor console, and it employs a palmrest that promotes operating stability.

The above are examples of how each control device is positioned and optimised, giving a cockpit design that fits the driver perfectly.

MORE COMFORTABLE AND MORE ENGAGED WITH THE CAR *— NEW SEAT DESIGN MEANS LESS FATIGUE EVEN ON LONG DRIVES*

The front seats use the same structure as those on the All-New Mazda3.

The seatbacks are 30mm larger than those in the previous Mazda2 and include a suspension mat, while the seat cushion employs a suspension-type cushion with a spring wire.

The structure allows the seat cushions to flex and hold the occupant's body well while dispersing the weight of the body across a wider area.

Optimising the balance between the support of the seat cushion and seatback offers positive support for maintaining the proper driving position, even when driving for long periods.

The shape and firmness of the seats are designed to properly support the driver's body (the hips, waist and up the sides of the torso) to deliver linear holding for everything from urban driving to winding roads.

The seat cushions employ a newly developed vibration-absorbing urethane foam material that excels at delivering necessary vibration feedback to a driver while dampening uncomfortable vibration. This works together with the suspension mats in the seatbacks to properly control vibration and deliver a comfortable ride.

The front seat design contributes to the comfort of rear seat occupants and to a feeling of increased space. The headrests narrow towards the top and feature rounded backs. The flare in the shoulder section is kept to a minimum and the design of the lower section maintains an open space into which rear-seat occupants can insert their feet.

The seatback length of the rear seat is increased 20mm (compared to the previous model) to measure 550mm. This makes the seats feel roomier and more comfortable.

EXCELLENT VISIBILITY FROM THE DRIVER'S SEAT

Positioning the A-pillars approximately 80mm farther back expands the driver's field of vision out the windscreen by two degrees compared to the previous model. This enables the driver to more precisely determine the road conditions ahead when cornering.

In addition, fine tuning of the pillar surfaces, the angle of inclination and their spread, along with their thickness and cross-sectional shape also helps realise a design by which the pillars do not feel constraining from the perspective of the cabin occupants.

Mounting the outer mirrors on the body panel of the doors reduces the obstruction to the driver's field of vision caused by the width of the mirror garnish by half.

It greatly increases the visibility range over the mirrors, which makes it easier to spot pedestrians and obstacles.

THE HMI PLACES TOP PRIORITY ON DRIVING SAFETY

Along with the MZD Connect car connectivity system, the All-New Mazda2 adopts the next-generation HMI – introduced on the Mazda3 – on selected grades.

The cockpit design is based on the Head-up Cockpit concept, which aims to help driver's process large amounts of information, while maintaining driver concentration and correct driving position.

It is designed to be simple and easy to use, while at the same time aims to minimise cognitive, visual and manual distractions.

The cockpit is divided into two zones, one for information that is necessary for the safe operation of the vehicle, and the other for communication-related information.

The display of information the driver requires and the devices for controlling those are positioned accordingly.

Active Driving Display

Information from a display panel is reflected by a mirror and projected as a virtual image on a combiner; a clear display panel vertically mounted atop the meter hood (on selected grades).

To minimise the required eye movement and the burden of adjusting focus, the image is set to be in focus approximately 1.5m away from the driver's eye point.

Vehicle speed, turn-by-turn directions from the navigation system and other important driving information, such as that from the advanced safety systems, are displayed in real time.

Meters

A variety of information is displayed, including that pertaining to the vehicle's current status.

This information is divided between the large round meter in the centre and wing-shaped displays that flank it. The content displayed depends on the level of importance, required frequency of viewing, and its relationship with the other information on show.

The high-grade specification Mazda2 equipped with Active Driving Display employs an analog tachometer in the center with a digital speedometer incorporated in the bottom right corner.

Other grades place a speedometer in the centre and a tachometer in the digital display wing on the left.

On all grades, the wing on the right displays the external temperature, fuel level, as well as various indicators related to safety equipment.

7-inch centre display

On selected models only, an independent 7-inch display mounted on the top of the dashboard is viewable with only a 15.6 degrees downward movement of the eyes.

Positioning the displayed information at the right height and distance minimises visual distraction time.

The display is positioned such that any movement in the peripheral field of vision will catch the driver's eye, even if the driver remains focused on one spot on the display.

Positioning the display where the tail lamps of the vehicle ahead fall within the driver's field of vision, even when viewing the display while driving, contributes to safer driving.

Character height, line spacing and the number of lines of text displayed are all defined according to ergonomic studies.

Commander control

The commander control is a device the driver can operate by touch alone to control information shown on the centre display.

The switches are positioned where the driver can access them simply by lowering one hand from the steering wheel to the floor console in a natural motion. This allows the driver to operate them without taking their eyes off the road.

To further enhance the ease of operating the commander control on the All-New Mazda2, which does not have a centre armrest, a rubber palmrest measuring 16mm in height and 43mm in width has been added to the floor console.

The palmrest supports the driver's wrist to facilitate stable operation of the commander control.

The angle of movement for each click of the rotary switch is also reduced from 20 degrees to 15 degrees. This is the same level of operating ease as found on the Mazda3, even when using the palmrest to support the wrist as opposed to moving the entire hand to operate the switch.

Voice command operation

The driver can control a number of functions simply by speaking into the microphone. This includes menu switching, the audio system's play, stop and skip functions, radio station selection, as well as zoom in and out for the navigation system's map displays.

When a mobile music player or smartphone is connected to the onboard head unit via USB, voice commands can also be used to search for songs by artist name, or to call phone numbers stored in the smartphone's contact list.

MZD CONNECT — ADVANCED CAR CONNECTIVITY SYSTEM

The All-New Mazda2 adopts MZD Connect on selected grades, the new-car connectivity system that was first introduced on the new-generation Mazda3.

This system is safe and simple to operate and allows easy access to internet connectivity and social networking services that today's customers consider essential, even when in transit.

It responds to a wider variety of needs by greatly improving the convenience of functions that require Bluetooth® connectivity, such as hands-free phone operation, the delivery of short text messages, and internet radio including Aha™ by HARMAN.

By supporting the ongoing evolution of communications equipment on both the hardware and software levels, this innovative platform ensures that customers always have access to the latest services without swapping out any hardware.

Audio features

Depending on the grade, the audio system for the All-New Mazda2 is equipped with either four or six speakers.

When connected to a smartphone, the system also allows access to web content such as Aha™.

Aha™ is a cloud-based platform operated by HARMAN, USA, that allows customers to access more than 100,000 broadcasts from around the world, including BBC and CNN, specialised programming of various genres and broadcasts from distant locations. In addition, the service offers downloads of free audiobooks.

When using Aha™, the system can read aloud the latest tweets in the customer's Twitter timeline. It can also read aloud the latest Facebook news feed entries, and allows the customer to "like" entries or post audio messages using the Shout function.

The web content offerings also include Stitcher™. This on-demand service provides more than 15,000 talk shows, music programs and podcasts from around the world. Users can enjoy listening to their favourite content whenever they please.

The Pandora® radio service is also available. Subscribed users can create up to 100 personalised stations and listen to continuous music, or search for similar songs for automatic playback. As a result, they can enjoy listening only to music that matches their preferences while driving.

Communication features

In addition to providing hands-free telephone operation and access to one's contact list, the All-New Mazda2 can also receive short text messages and display a list of sender IDs.

When the car is in motion, the text-to-voice function can read the content of emails aloud. In addition, it is possible to reply to the sender by choosing from a selection of preset messages.

Navigation features

The navigation system uses data from SD cards and can display the current location on a map, or display routes.

The system can set the target destination based on the contact list in the customer's phone, making it easy to set a family member or friend's house as a destination. When a smartphone is connected, the customer can also search the internet for places they want to go, or use content on Aha™, and set those locations as destinations.

The navigation software can also use the smartphone's tethering capabilities to display the distance to nearby petrol stations.

EASY ENTRY AND EXIT DESIGNED FOR COMPACT CAR USAGE PATTERNS

The front door trim of the All-New Mazda2 is shaped to allow easier entry and exit in tight spaces.

While still capable of holding a one-litre plastic bottle, the lower section of the door pocket adopts a concave shape designed to match the course the occupant's legs takes when entering and exiting the car.

This makes it easier to move one's legs into or out of the car, even when the door cannot be fully opened. The result is excellent ease of entry and exit to the vehicle in any situation.

STORAGE SPACE DESIGNED TO BE EVEN EASIER TO USE

Storage space is optimally located to meet the various needs of customers.

Locating the shift knob on the floor console opens a convenient space in front of it which is ideal for a smartphone.

The space includes a 12V power socket that makes it easy for the customer to charge their smartphone.

While the previous model had only a single medium-size cupholder in the floor console, the All-New Mazda2 houses a pair of large cupholders.

Each of its front door pockets can also hold a larger bottle, such as a thermos or one-litre plastic bottle, as well as store maps or other small items.

Rear seat storage includes seatback pockets on the back of the driver's and passenger seats. The rear part of the floor console houses a compact tray.

PRACTICAL, EASY TO ACCESS LUGGAGE COMPARTMENT

The design goal for the luggage compartment was to deliver practical storage space in a compact car that strikes the right balance between offering ample capacity for the items the customer needs to carry and making it easy to load and unload those items.

Luggage compartment

While achieving stylish proportions, the All-New Mazda2 also secures sufficient luggage space and a wide opening in the rear.

The luggage compartment when the car is fully occupied measures approximately 1,000mm in width, approximately 665mm in length and has a capacity of 250 litres (VDA) – measured with the rear seats up and to the top of the tonneau cover.

This is enough space to carry a large (72cm) suitcase or an average-size baby stroller.

With one of the rear seats folded down, it is possible to load a standard-size golf bag.

With both rear seats folded down, the luggage compartment measures 1,332mm in length. Folding down one of the 6:4 split folding rear seatbacks makes it possible to stow long items.

Easy loading and unloading

When loading suitcases or other large luggage items, the customer first rests the front edge of the item on the floor near the opening and then, with the next action, slides the entire item into the luggage compartment.

Unloading follows the same pattern in reverse. To make this as easy as possible, the liftgate opening on the All-New Mazda2 is wide enough to easily accommodate a suitcase or other large items.

The height of the luggage compartment floor is also designed to help ease the burden of loading heavy items, such as beverage bottle cases, in one go.

Easier liftgate operation

Optimisation of the damper position reduces the amount of power required to open and close the liftgate, which improves the ease of its operation.

The previous Mazda2 required two actions: first pushing a button and then moving one's hand to raise the liftgate.

In contrast, the All-New Mazda2 adopts a button positioned on the inside lip of the liftgate. This allows the customer to reach a hand in, push the switch, and raise the liftgate in a single motion.

INHERITING AND EVOLVING RESPONSIVE, SATISFYING DRIVING

The All-New Mazda2 renews the powertrain and platform from the previous model by fully adopting SKYACTIV Technology.

Based on the engineering philosophy applied to the Mazda CX-5, Mazda6 and Mazda3, the related technologies were newly developed for implementation in the B-segment.

In terms of dynamic performance, the All-New Mazda2 carries on the characteristic of the other new-generation models in responding faithfully to the driver's will, while also further evolving aspects related to ease of in-town handling.

Whether driving on city streets, in the suburbs, or on the highway, the All-New Mazda2 aims to deliver a reassuring driving experience that all can enjoy.

Its newly developed SKYACTIV-Body and SKYACTIV-Chassis deliver crisp, light handling characteristics, a high level of straight-line stability for a drive with confidence, as well as an extremely comfortable ride that minimises fatigue, even on long drives.

In addition, major revisions to the SKYACTIV powertrain strike the right balance between a liberating feeling of powerful performance and outstanding environmental performance.

High-performance, lightweight SKYACTIV-Chassis

Thoroughly revising the suspension and steering systems on the All-New Mazda2's SKYACTIV-Chassis delivers the responsive driving experience befitting a Mazda product, while also offering a far more comfortable and reassuring ride.

It adopts a torsion beam rear suspension system that is light in weight and offers advantages in terms of packaging.

In addition to being the first Mazda car fitted with front and rear dampers with a friction control function, it also adopts a rigid steering gear mount that does not use rubber bushings to achieve both the nimble driving performance desired of a B-segment car and ride comfort.

Suspension delivers nimble performance, ride comfort, and a confident driving feel

The basic suspension scheme is the same as on the previous model, with MacPherson struts in the front and a torsion beam suspension in the rear.

The front suspension caster trail now measures 29mm, an 11mm increase over the previous model, and the caster angle is also increased by 1.7 degrees to a new setting of 5.0 degrees.

These changes further enhance the feeling of steering operations and responsiveness of the car. They also help achieve both a pleasant sense of nimble performance when driving around town or on winding roads and excellent straight-line stability when driving at highway speeds.

The front suspension layout aims to improve ride comfort by minimising the difference

in the stroke of the front dampers and the movement of the front wheels.

The rear suspension follows the same SKYACTIV-Chassis thinking used to date in mounting the torsion beam 36mm higher than on the previous model.

This reduces the amount of vibration input transmitted from the road surface to the vehicle body and improves straight-line stability at highway speeds to achieve a more comfortable ride and a driving experience with a confident feel.

To achieve this ideal geometry, the All-New Mazda2 adopts a layout in which the exhaust pipe passes below the torsion beam.

A comprehensive analysis of the spring and damping characteristics of the rear suspension's bushings in conjunction with vehicle rigidity also leads to reducing unsprung weight by 2kg over the previous model and to greatly reducing rear impact shock.

The All-New Mazda2 is also the first Mazda product to use dampers with a friction control function on both the front and rear suspension.

Controlling fluctuations in damper friction such that the dampers respond well to even minute stroke action achieves a comfortably flat ride and improves the initial response of the steering system.

Quick and easy steering system

The All-New Mazda2 builds on the model's tradition of top-level nimble handling and furthers it, heightening the feeling that the steering system responds faithfully to the driver's will.

This ensures a thoroughly satisfying, reassuring and nimble driving experience, whether driving in town, on winding roads, or on the highway.

In specific terms, the new steering gear ratio is 14.8 which is 1.3 per cent quicker than on the previous model, which makes that car more responsive to steering wheel action.

At the same time, adopting a rigid steering mount for the first time on a Mazda passenger car improves linearity as well as the rigidity of the steering system.

To address the issue of steering resonance caused by the use of a rigid mount, a suspension cross member structure based on an analysis of chassis vibration transmission characteristics successfully minimises the occurrence of displeasing vibration.

Brake system that provides excellent control

The brake system employs ventilated discs in the front and drum brakes in the rear, as did the previous model, but also delivers more linear and precise control characteristics, along with greater operating ease and braking power.

The updated system supports the All-New Mazda2's dynamic performance and provides an enjoyable driving experience with a safe, comfortable ride, whether driving in town or on long outings.

Extra attention went into providing responsive and faithful control when driving at low- to mid-range speeds.

The booster's characteristics are tuned to best match a variety of driving scenes, whether controlling vehicle speed in a parking lot with very light braking pressure, responding to road signs while driving around town, or slowing the vehicle when approaching an intersection.

The resulting pedal feel offers both greater ease of control and quicker operation.

Attention also concentrated on realising a unified feeling to the powerful G forces generated during cornering.

For example: When a driver prepares to brake as he enters a bend on a winding road – and goes through the process of deceleration, cornering and acceleration – to optimise performance, pedal feel is tuned to provide smooth operation when first applying the brakes, and a positively rigid feeling as the powerful G force is experienced.

Lightweight, high-rigidity SKYACTIV-Body

The All-New Mazda2 adopts the SKYACTIV-Body.

It introduces innovations in structure, construction method and materials that achieve high levels of performance in three seemingly contradictory areas: collision safety, light bodyweight, and rigidity.

The SKYACTIV-Body for the All-New Mazda2 basically inherits the same architecture as implemented on other Mazda models.

It uses straight beams wherever possible, continuous framework that makes the individual sections function in harmony, and effective positioning of high-tensile steel.

At the same time, revisions to the frame and to the manner in which body panels are employed realise an even simpler frame layout and optimised cross-section shapes. What results is a newly developed SKYACTIV-Body that is evolved to best suit its use on a B-segment car.

Thorough attention to rigidity and damping feel

Measures implemented on every detail of the body to increase rigidity and improve damping feel without increasing weight result in a 22 per cent increase in torsional rigidity when compared to the previous model.

Specific examples of measures implemented to increase the level of body rigidity include the creation of a strong joint between the mounts for the front suspension dampers and the front frame and hinge pillars.

In contrast to the rear suspension damper mounts on the previous model, which were reinforced in only one direction, a new forked structure establishes a connection in three directions by joining the damper top mount to the cross member as well as the upper and lower sections of the liftgate opening.

In addition, the rear header on the liftgate opening is spot welded to create a closed section. Making the cross-section structure more compact at the same time increases rigidity while reducing weight.

Existing parts serve together as dynamic dampers that strengthen the vehicle's overall damping feel while suppressing any weight gain.

The rear seat mounts serve as one noticeable example. Optimising the rigidity of the rear seat brackets cancels out body deformation resulting from road surface input by moving the seats in the opposite direction.

Lightweight and strong frame structure

Using a simple, lightweight frame layout to help evolve the SKYACTIV-Body for use in a compact car reduces "Body in White" weight by approximately 7 per cent.

The new frame layout consolidates the No.2 and No.2.5 crossmembers used on previous iterations of the SKYACTIV-Body, and positions this single new crossmember at the base of the B-pillars.

This change creates a simple layout that also allows the crossmember to effectively handle impact force received by one of the B-pillars in the event of a side collision.

As an additional measure to achieve a simple, lightweight layout, the new frame intentionally foregoes the use of the No.4 crossmember of the SKYACTIV-Body for C-segment or larger cars.

The cross-shaped crush cans and front frame members that are characteristic of previous iterations of the SKYACTIV-Body are also used on the All-New Mazda2.

Further evolution of the SKYACTIV-Body's structure for use on the All-New Mazda2 includes the adoption of constricted curves with high yield strength on the cross-section of the front bumper beam, side sill reinforcements and B-pillars.

It also includes the use of a polygonal cross-section with numerous ridges for the No.3 crossmember, but an overall straight design for the part itself.

Revising the materials and structures of each of the body's panels increases the strength of the actual panels and allows them to function as structural parts.

This helps reduce the amount of required framework, which in turn lightens the weight of the overall frame.

Detailed attention to shapes throughout, including the use of high-tensile steel to increase strength and the addition of a variety of bead patterns used on the panels, provides great improvements in the rigidity of the respective panels.

Expanded use of high-tensile and ultra-high-tensile steel

The All-New Mazda2 greatly increases the usage ratio of high-tensile and ultra-high-tensile steel.

When compared to the previous model, high-tensile steel usage is increased from 53 to 65 per cent, and ultra-high-tensile usage is increased from 10 to 30 per cent.

1,180MPa ultra-high-tensile steel is adopted on the body shell for the first time on a Mazda product, and accounts for 2.4 per cent of the entire body shell. Its use on the roof rails, inner roof rail members, No.2 crossmember and part of the side sill reinforcements contributes to a reduction in weight.

In addition, hot-stamped 1,800MPa steel is used on the front bumper beam, and high-strength filler is used on the B-pillars.

High-strength filler

This lightweight reinforcing material is heated until it foams and fills in the spaces in parts to enhance their strength.

The use of this lightweight material in the B-pillars reduces weight by approximately 1kg per vehicle when compared to the use of steel reinforcements.

Instead of completely filling all space in the pillars, as was the practice with past Mazda vehicles, only the corners of the cross-sectional inner structure's ridges are filled on the All-New Mazda2.

This makes it possible to increase the strength of the pillars using a minimum of filler, which in turn allows for a reduction in the panel thickness used on the pillars.

Lighter front and rear doors

The All-New Mazda2 employs a press door structure comprised of a single sheet of steel that extends right to the front door sash to reduce the number of parts used.

At the same time, efficiently using the cross-section of the door sash to increase rigidity made reinforcements unnecessary.

High-tensile steel used in the door panel's beltline section achieves both strength and a reduction in weight.

The number of parts used on the rear doors is also reduced, and the beltline reinforcements are incorporated into the outer panels.

The result is doors with a larger surface area that are at the same time lighter in weight than those on the previous model.

The front and rear doors constitute some of the car's larger structures outside the body shell proper, and efforts to reduce their weight result in a 1.5kg per vehicle reduction for the front doors and a 0.65kg reduction for the rear doors.

GREATLY IMPROVED NVH PERFORMANCE

Aiming to provide a quiet and comfortable cabin environment, careful effort went into suppressing the transmission of noise and vibration.

New CAE analysis technology was used in designing the car body and over 1,000 case simulations performed in adjusting the shape of every bead on the panels in millimetre increments to offer a quieter interior.

Attention to all design details went as far as considering the driving conditions to which the car will be exposed, including the travelling time and speed, the ambient temperature and altitude, as well as its interaction with the equipment features.

Reduced road noise

Based on the proven accomplishments of the SKYACTIV-Chassis to date, the development team identified the parts that can easily generate noise or vibration.

Controlling suspension resonance and separating it from the body cavity resonance achieves a 15 per cent reduction in road noise over the previous model when driving on unpaved roads with rough surfaces.

Reduced NVH from the powertrain

To minimise vibration from the powertrain when the engine is started, the No.1 engine mount is leveled horizontally and the shape and hardness of the mount rubber are tuned to match each powertrain configuration.

This makes it possible to control the rotational behaviour caused by the powertrain swinging back and forth, and up and down, and change it into only small movements in the vertical direction.

This diminishes large vibrations generated when the engine is started and at the same time improves ride comfort by minimising the amount of unpleasant vibration transmitted to the floor and seats while driving.

In addition to adopting a further evolved transmission that is lighter and more compact than on the previous model, revisions to the parts used to join items such as the engine mounts and shift cables to the body reduce the amount of unpleasant gear noise.

The SKYACTIV-Drive transmission for the All-New Mazda2 has evolved to suppress vibration and noise, even when lock-up operates at the low engine speed of 1,000rpm.

Sound insulation measures

Measures to control the level and quality of sound in the cabin do not end with suppressing the sources of noise generation.

Based on the concept of "path-blocking and concentrated sound absorption," sound insulation and sound-absorbing materials are optimally positioned within the engine to shut out the various paths by which sound can enter the cabin and instead channels the sound into one place.

Moreover, the use of new sound insulation materials, including seals in the front wheel arches and foam filler in the C-pillar outer panels, aims to achieve an even better level of quietness in the cabin.

Reduced wind noise

A smooth cross-section shape used on the A-pillars combines with outer mirrors that mount on the front doors and windshield wipers that protrude less to suppress the generation of wind noise.

Smoothly passing air over the body as it flows toward the rear improves aerodynamic performance while also reducing the amount of noise it generates.

To shut out wind noise and prevent it from entering the cabin, insulating material is used in the A-pillars and a plastic lip is added to the inner weather stripping for the front and rear windows and for the trailing edge of the rear door beltline molding.

Also, Thinsulate™ Acoustic Insulation is applied to a 10 per cent greater surface area between the roof and ceiling when compared to the previous model.

PLEASING ENGINE SOUND THAT ADDS GREATER JOY TO DRIVING

Tuning for the All-New Mazda2 suppresses the amount of low-frequency rattle and harsh high-frequency sound produced by the engine, while at the same time accentuating the mid-range frequencies that are the heart of a good engine sound.

The aim was to produce a pleasing engine note that responds in linear fashion to the amount of accelerator pedal action.

Delivering a refreshing sound with quality tone from engine speeds of approximately 3,000rpm, makes All-New Mazda2 more enjoyable to drive.

AERODYNAMICS CONTRIBUTE TO DRIVING PERFORMANCE AND FUEL ECONOMY

Development of aerodynamic performance for the All-New Mazda2 adhered to Mazda's "aerodynamically efficient ground line" concept, which calls for streamlining the flow of air along the underbody and enhancing aerodynamics by improving the balance of the upward and downward flows that converge at the rear of the body.

The development team took full advantage of advanced Computational Fluid Dynamics (CFD) analysis as they ran simulations and worked to strategically position aerodynamic parts where they can achieve the greatest level of efficiency.

This made it possible to use the dynamic lines of KODO design while attaining a high level of aerodynamics. It is a result that contributes greatly to improving both driving performance and fuel economy.

Measures taken on the upper body

The detailed attention paid to the shape of every upper body part helped to reduce turbulence.

On the front end, this includes the duct shape used within the front grille, the flared shape of the trailing edge on the corners of the front bumper and the smooth lines of the A-pillar cross-section.

The rear of the hatchback introduces a spoiler-like shape at the back of the roof – which suppresses turbulence – and adds rear side spoilers.

Measures taken on the underbody

Streamlining airflow along the underbody is an engine undercover, a tunnel cover, front and rear tyre deflectors, and a spare tyre pan undercover.

Rather than using a design that covers the entire floor, the floor undercover is positioned only under the rear section of the floor for maximum efficiency. There is also a small cover positioned on the side of the fuel tank.

Designing the tank surface to effectively streamline the flow of air helps maintain a smooth and steady flow at constant speed from the front through to the rear.

10 SAFETY

COMPREHENSIVE SAFETY OF A CLASS ABOVE

Mazda Proactive Safety aims to minimise the chances of an accident occurring by maximising the range of conditions in which the driver can operate the vehicle safely and helps to identify potential risks early.

The All-New Mazda2 has fully embraced this safety philosophy. Development included enhancing basic performance to deliver ease of driving and a good field of vision from the driver's seat.

Added to this is the deployment of new HMI devices for minimising movement of the driver's line of sight, as well as the adoption of i-ACTIVSENSE advanced safety technologies.

This technology offers appropriate support for the driver through all driving processes, including cognition, judgment, and operation, to help avoid hazardous situations and minimise damage.

While inheriting the design concepts behind the excellent passive safety of the Mazda CX-5, Mazda6 and Mazda3, the SKYACTIV-Body and other related features have been further evolved to best protect the cabin occupants of a B-segment car.

As a result, the All-New Mazda2 delivers a level of collision safety performance capable of earning high-level ratings in various collision safety tests in countries around the world.

Active safety

i-ACTIVSENSE is the name for Mazda's advanced safety technologies that employ sensing devices such as milliwave radar units and cameras to support the driver in recognising hazards, avoiding collisions, and minimising damage in the event that an accident occurs.

Notwithstanding its subcompact car status, Mazda has made its cutting-edge i-ACTIVSENSE technologies available in the All-New Mazda2 in order to provide a high level of safety whether around town or on the highway.

Available across the All-New Mazda2 range is the Smart City Brake Support option.

Smart City Brake Support (SCBS)

When driving at low speeds (4-30km/h) around town, the SCBS system automatically applies the brakes to prevent colliding with the vehicle ahead, or reduce the amount of damage in the event an accident cannot be avoided.

When the near-infrared sensor mounted on the windshield detects a vehicle ahead and determines that a high risk of collision exists, it begins to pressurise the brakes so they can provide strong stopping power the instant the driver applies them.

If the driver fails to take evasive action at this point, the system automatically applies the brakes to slow the vehicle and prevent or soften impact.

Note: The system's ability to prevent a collision is limited by road conditions and other environmental factors.

Passive safety

High-rigidity SKYACTIV-Body

While inheriting the outstanding collision safety of the SKYACTIV-Body, which has earned high praise on Mazda6 and Mazda3, it was further developed for use on the B-segment car.

A range of measures was adopted to effectively absorb and disperse impact force from the front, sides or rear to suppress cabin deformation.

The All-New Mazda2 adopts materials and structures that compensate for its reduced crush space and make the cabin itself stronger.

Overcoming the challenges posed by the small size of a subcompact car, the new body reduces weight by 7 per cent over the previous model, and at the same time delivers a level of collision safety performance that is capable of earning high-level ratings in various collision safety tests performed by organisations in different regions.

Measures to protect against frontal impact

The SKYACTIV-Body employs a multi-load path structure that absorbs and disperses impact force.

The upper path uses the fender aprons to absorb impact force, cross-shaped crush cans and front frame members form the middle path, and the lower path incorporates an impact-absorbing extension on the front suspension crossmember.

In addition, straight front frame members are firmly supported by the side sills and B-frames to form an uninterrupted architecture that reduces the chances of cabin deformation.

The suspension crossmember that forms part of the lower load path is highly energy absorbent and designed to separate from the body in the event of a collision. As such, it secures sufficient crush space in the engine compartment should a collision occur.

The cabin uses 980MPa ultra-high-tensile steel for its inner B-frames and 440MPa high-tensile steel on the floor. In addition, 1,180MPa ultra-high-tensile steel is used on part of the side sills, as well as the inner part of the A-pillars and roof rails.

Measures to protect against side impact

A solid H-shaped ring structure joining the roof and B-pillars to underbody combines with the adoption of high-tensile steel on key frame members and a part of the floor to form a robust body structure.

These changes increase the strength of the underbody and sides of the cabin by approximately 15 per cent over the previous model.

By optimising the position of the crossmember, a single crossmember now replaces the two on the previous model to produce a lighter body structure.

The strengthened impact bars inside the doors minimise deformation in the event of a side impact.

440MPa high-tensile steel shaped to deliver greater flexural strength replaces the pipe material previously used for the upper impact bars in the front doors. The lower impact bars in the front and rear doors use double-hat shaped members made of 1,500MPa ultra-high-tensile steel.

Measures to protect against rear impact

Crushable zones designed to effectively absorb impact energy from the rear protect the cabin in a wide variety of rear-end collisions.

The same cross-shaped rear bumper reinforcing material as used on the Mazda CX-5 and Mazda6 promotes highly efficient energy absorption that protects the body in the event of a light rear collision.

Two types of bead added to the rear side frames control the protection range and crushable range in the event of rear impact at high speed.

By controlling frame deformation, the All-New Mazda2 aims to satisfy the regulatory requirements for an offset rear impact at 80km/h, despite the reduced amount of crushable space available on a subcompact.

Seatbelts

The front seatbelts are equipped with a pre-tensioner that tightens the seatbelts in the initial moment of a collision and a load limiter that subsequently loosens the belt in a controlled manner to prevent excessive pressure from being applied to the occupant's chest.

The left- and right-hand rear seatbelts each have a load limiter, while the left- and right-hand rear seatbelts each have a single pretensioner.

SRS airbag system

All-New Mazda2 is fitted with front airbags for the driver's and passenger seats, curtain airbags that help protect the heads of occupants in the front and rear seats, as well as front side airbags.

The side airbags are specially tuned to provide ample protection within the relatively short occupant-to-door distances of a subcompact car and to reduce the possibility of contact with the door.

Additional safety equipment and mechanisms

Steering shaft designed to mitigate impact force

The steering shaft is built to soften the blow to the driver in the event of a frontal impact.

If the collision is severe, it moves forward, away from the driver, to ensure enough space to accommodate the driver's forward motion.

Front seat structure

The front seats employ a structure that suppresses displacement of the occupant's head and upper body for firm support during initial impact that mitigates shock to the neck.

This was accomplished by improving the structure of the cushion frame and seatback, optimising the headrest shape and positioning, and by making it easier for the occupant's body to sink into the backrest in the event of impact from the rear.

In addition, the metal side frames of the front seats adopt a shorter front-to-rear design to prevent them from making contact with the occupant's chest in the event of a side impact.

Rear seat structure

In the event of a frontal impact, the anti-submarine structure of the rear seats helps prevent excess hip movement, and it is also equipped with a mechanism that helps prevent items in the luggage area from intruding into the cabin and harming occupants.

Door armrests that absorb impact energy

The centre sections of the front and rear door armrests are designed to collapse and minimise shock to the occupant's ribs in the event of a side impact.

Shock-absorbing interior trim

The interior incorporates trim that absorbs impact shock, with particular attention paid to the structure of the trim for the A-pillars and B-pillars.

The goal is to protect the heads of cabin occupants in the event they suffer secondary head impact with the pillars in a side or oblique impact that does not cause airbag deployment.

ISOFIX child seat anchor points

The left and right rear seats are each fitted with ISOFIX anchors and a top tether anchor that promote easy, secure fitting of an ISOFIX child seat.

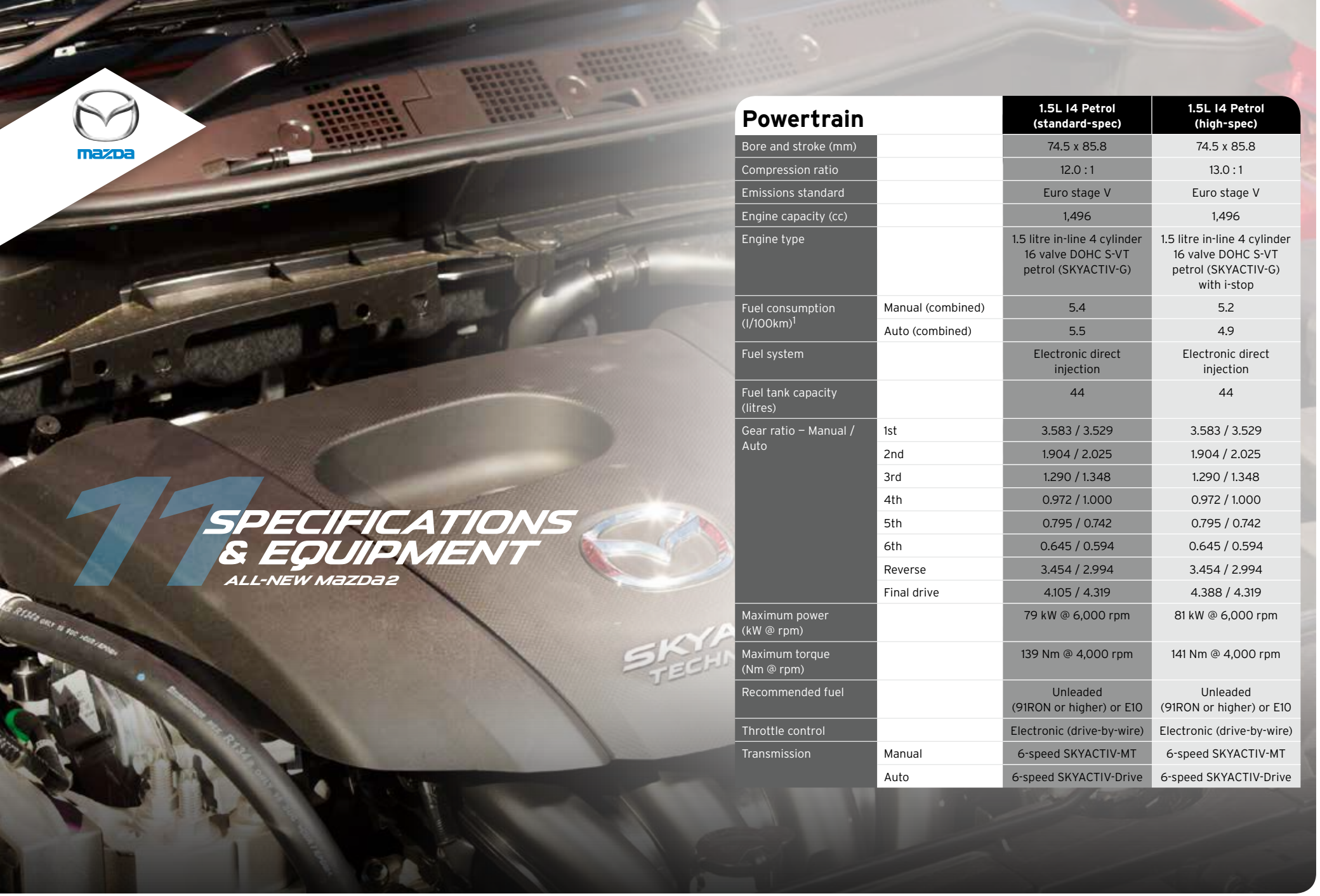
The top tether anchor reduces the risk of the child seat tipping forward and bringing the child's head into contact with a B-pillar or the seat in front in the event of a collision.

Pedestrian protection

Holes and cutout sections in the bonnet's reinforcement materials help soften the impact if a pedestrian's head should strike the bonnet. The angle of the front of the bonnet is also optimised for this purpose.

In addition, the cowl panel uses an S-shape for its structural cross section that acts like a spring to help better absorb energy.

To help limit the degree of injury to a pedestrian's legs, energy absorbing foam is placed in the front bumper, while a lower stiffener added to the bumper helps prevent the pedestrian's legs from sliding under the front of the car.



11 SPECIFICATIONS & EQUIPMENT

ALL-NEW MAZDA2

Powertrain		1.5L I4 Petrol (standard-spec)	1.5L I4 Petrol (high-spec)
Bore and stroke (mm)		74.5 x 85.8	74.5 x 85.8
Compression ratio		12.0 : 1	13.0 : 1
Emissions standard		Euro stage V	Euro stage V
Engine capacity (cc)		1,496	1,496
Engine type		1.5 litre in-line 4 cylinder 16 valve DOHC S-VT petrol (SKYACTIV-G)	1.5 litre in-line 4 cylinder 16 valve DOHC S-VT petrol (SKYACTIV-G) with i-stop
Fuel consumption (l/100km)[1]	Manual (combined)	5.4	5.2
	Auto (combined)	5.5	4.9
Fuel system		Electronic direct injection	Electronic direct injection
Fuel tank capacity (litres)		44	44
Gear ratio – Manual / Auto	1st	3.583 / 3.529	3.583 / 3.529
	2nd	1.904 / 2.025	1.904 / 2.025
	3rd	1.290 / 1.348	1.290 / 1.348
	4th	0.972 / 1.000	0.972 / 1.000
	5th	0.795 / 0.742	0.795 / 0.742
	6th	0.645 / 0.594	0.645 / 0.594
	Reverse	3.454 / 2.994	3.454 / 2.994
	Final drive	4.105 / 4.319	4.388 / 4.319
Maximum power (kW @ rpm)		79 kW @ 6,000 rpm	81 kW @ 6,000 rpm
Maximum torque (Nm @ rpm)		139 Nm @ 4,000 rpm	141 Nm @ 4,000 rpm
Recommended fuel		Unleaded (91RON or higher) or E10	Unleaded (91RON or higher) or E10
Throttle control		Electronic (drive-by-wire)	Electronic (drive-by-wire)
Transmission	Manual	6-speed SKYACTIV-MT	6-speed SKYACTIV-MT
	Auto	6-speed SKYACTIV-Drive	6-speed SKYACTIV-Drive

1 Fuel consumption figures are based on ADR 81/02 test results. They are useful in comparing the fuel consumption of different vehicles. They may not be the fuel consumption achieved in practice. This will depend on traffic and road conditions and how the vehicle is driven.

Model Availability

		Neo	Maxx	Genki
Hatch	1.5L I4 Petrol (standard-spec) 6-speed Manual	•	-	-
	1.5L I4 Petrol (standard-spec) 6-speed Auto	•	-	-
	1.5L I4 Petrol (high-spec) 6-speed Manual	-	•	•
	1.5L I4 Petrol (high-spec) 6-speed Auto	-	•	•

Options

			Neo	Maxx	Genki
SCBS	Smart City Brake Support (SCBS)[2]		•	•	•
Colour Pack (only available with three exterior colours: Snowflake White Pearl, Aluminium Metallic and Black Mica)	Centre console side panels	High-gloss red	-	•	-
	Front door armrest	Soft-touch red			
	Front door armrest panels	High-gloss red			
	Front decoration panel	High-gloss white			
	Ventilation louvre surrounds	High-gloss red			
	Seat colour	Red			
	Seat type	Cloth			

• Option available with the purchase of SCBS and/or Colour pack

Chassis

		Neo	Maxx	Genki
Brake diameter (mm)	Front	258	258	258
	Rear	200	200	200
Brake type	Front	Ventilated disc	Ventilated disc	Ventilated disc
	Rear	Drum	Drum	Drum
Steering type		Electric power assist steering	Electric power assist steering	Electric power assist steering
Suspension	Front	MacPherson strut	MacPherson strut	MacPherson strut
	Rear	Torsion beam	Torsion beam	Torsion beam
Turning circle kerb-to-kerb (m)		9.4	9.4	9.8
Tyre size		185/65 R15	185/65 R15	185/60 R16
Tyre index		88T	88T	86H
Wheel size		15 x 5.5 J	15 x 5.5 J	16 x 5.5 J
Wheel type		Steel	Alloy	Alloy
Tyre size (spare)		T125/70 D15	T125/70 D15	T125/70 D15
Wheel size (spare)		15 x 4.0T	15 x 4.0T	15 x 4.0T
Wheel type (spare)		Temporary (Steel)	Temporary (Steel)	Temporary (Steel)

Weights and Capacities

		Neo	Maxx	Genki
Cargo room volume VDA (litres*)		250	250	250
Kerb weight (kg)	Manual	1,027	1,037	1,046
	Auto	1,045	1,049	1,058
Towing capacity[3] (kg)	Braked	900	900	900
	Unbraked	500	500	500
Tow ball download maximum (kg)		50	50	50

*Cargo volume VDA (litres) measured with rear seats folded down and up to roof

Dimensions

		Neo	Maxx	Genki
Ground clearance laden (mm)		126	126	126
Overall length (mm)		4,060	4,060	4,060
Overall width (mm)		1,695	1,695	1,695
Overall height (mm)		1,495	1,495	1,495
Track (mm)	Front	1,495	1,495	1,495
	Rear	1,485	1,485	1,485
Wheelbase (mm)		2,570	2,570	2,570

Exterior

	Neo	Maxx	Genki
Door handles (body coloured)	•	•	•
Exhaust extension (chrome)	-	-	•
Front and rear bumpers (body coloured)	•	•	•
Front fog-lamps (Halogen)	-	-	•
Front upper grille decoration (body coloured)	-	-	•
Green-tinted windscreen, side and rear windows	•	•	•
Headlamps (Halogen)	•	•	•
Headlamps auto on/off function	-	-	•
Power mirrors (body coloured)	•	•	•
Power windows	•	•	•
Window demister (rear)	•	•	•
Wipers (front) 2-speed with rain-sensing function	-	-	•
Wipers (front) 2-speed with variable intermittent function	•	•	-
Wiper (rear) with intermittent function	•	•	•

2 i-ACTIVESENSE safety technologies are driver assist technologies only and should not be used in place of skilled and safe driving practices. It is the driver's sole responsibility to constantly monitor vehicle surroundings and conditions at all times.

3 Subject to State or Territory regulations.

Seats

		Neo	Maxx	Genki
Seat colour	Black/Blue	•	•	-
	Red (option)	-	•	-
	Black	-	-	•
Seat trim	Cloth	•	•	•
Front seats with	Adjustable head restraints	•	•	•
	Height adjustment (driver)	•	•	•
	Rake and slide adjustment	•	•	•
	Seat back pocket (passenger)	•	•	•
Rear seats with	60/40 split fold backrest	•	•	•
	Adjustable head restraints	•	•	•

Interior

		Neo	Maxx	Genki
Active Driving Display		-	-	•
Air-conditioning		•	•	-
Air-conditioning (climate control)		-	-	•
Ambient temperature display		•	•	•
Centre console side panels	Matte black	•	-	-
	High-gloss black	-	•	-
	High-gloss red (option)	-	•	-
	Soft-touch black with red stitch	-	-	•
Critical function warning lights/chimes		•	•	•
Cruise control		-	•	•
Cupholders		•	•	•
Door bottle holders (front)		•	•	•
Front door armrest	Soft-touch black	•	•	-
	Soft-touch red (option)	-	•	-
	Soft-touch black with red stitch	-	-	•
Front door armrest panels	Matte black	•	-	-
	High-gloss black	-	•	•
	High-gloss red (option)	-	•	-
Glove box		•	•	•
Front decoration panel	Matte black	•	-	-
	High-gloss black	-	•	-
	High-gloss white (option)	-	•	-
	Soft-touch black with red stitch	-	-	•

Interior (continued)

		Neo	Maxx	Genki
Instrument panel light dimmer		•	•	•
Interior illumination	Cargo room lamp	•	•	•
	Entry system with delayed fade	•	•	•
	Map reading spot lamps	•	•	•
Interior release for fuel filler door		•	•	•
Leather-wrapped	Gear shift knob	-	•	•
	Handbrake handle	-	•	•
	Steering wheel	-	•	•
One touch (up and down) power window (driver)		•	•	•
Tachometer and electronic odometer/ tripmeter		•	•	•
Tilt and telescopic adjustable steering wheel		•	•	•
Trip computer[4]		•	•	•
Vanity mirrors (front)		•	•	•
Ventilation louvre surrounds	High-gloss black	•	•	•
	High-gloss red (option)	-	•	-

Infotainment

	Neo	Maxx	Genki
7-inch full colour touch screen display (MZD Connect)	-	-	•
AM/FM tuner	•	•	•
Auxiliary-audio input jack (3.5mm mini-stereo)	•	•	•
Bluetooth® hands-free phone and audio capability[5]	•	•	•
CD player, single disc (MP3 compatible)	•	•	•
Internet radio integration (Pandora®, Stitcher™ and Aha™)	-	-	•
Multi-function commander control	-	-	•
Radio Data System (RDS) program information	-	-	•
Satellite navigation	-	-	•
Speakers (4)	•	•	-
Speakers (6)	-	-	•
Steering wheel-mounted audio controls	•	•	•
USB-audio input port (iPod® compatible)	•	•	•

4 Trip computer displays current and average fuel consumption, distance to empty and average vehicle speed.

5 Please check the compatibility of your Bluetooth® device (particularly your mobile phone) with the specific Mazda vehicle you intend to purchase as not all devices operate correctly. Visit www.mazda.com.au/Bluetooth or consult your Mazda Dealer for further information.

• Option available with the purchase of SCBS and/or Colour pack

Safety and Security

		Neo	Maxx	Genki
Advanced keyless push-button engine start		•	•	•
Airbags SRS	Front (driver and passenger)	•	•	•
	Side (front)	•	•	•
	Curtain (front and rear)	•	•	•
Anti-lock Braking System (ABS)		•	•	•
Childproof rear door locks		•	•	•
Dynamic Stability Control (DSC)		•	•	•
Electronic Brake-force Distribution (EBD)		•	•	•
Emergency Brake Assist (EBA)		•	•	•
Emergency Stop Signal (ESS)		•	•	•
Engine immobiliser		•	•	•
High mount stop lamp		•	•	•
Hill Launch Assist (HLA)		•	•	•
ISOFIX child restraint anchor points and top tethers		•	•	•
Left-hand-side convex (wide angle) exterior mirror		•	•	•
Remote central locking (2 transmitters)		•	•	•
Seat-belt warning (front and rear)		•	•	•
Seat-belts 3-point lap-sash (all seats)		•	•	•
Seat-belts (front) with pretensioners, load-limiters and height adjustable shoulder anchorages		•	•	•
Side impact door beams		•	•	•
Smart City Brake Support (SCBS)[2] (option)		•	•	•
Traction Control System (TCS)		•	•	•
Triple H safety construction with front and rear crumple zones		•	•	•
Whiplash-minimising front seats		•	•	•

2 i-ACTIVESENSE safety technologies are driver assist technologies only and should not be used in place of skilled and safe driving practices. It is the driver's sole responsibility to constantly monitor vehicle surroundings and conditions at all times.

• Option available with the purchase of SCBS and/or Colour pack

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