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ALL-NEW Mazda

MX-5 PRESS KIT

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CONTENTS

Message from the Programme Manager	4 - 7
All-New MX-5: At a Glance	8 - 10
Pricing	11 - 12
Product Concept	13 - 16
Design	17 - 25
Weight Reduction	26 - 30
Packaging	31 - 38
Driving Dynamics	39 - 48
Body Colours	49
Top Down Driving	50 - 51
Safety	52 - 56
History of the MX-5	57 - 67
Specifications	68 - 73
Contacts	74

A MESSAGE FROM THE

Innovate in order to preserve – a 25th anniversary resolution

It is with great pleasure that we are now ready to introduce the fourth-generation Mazda MX-5. As a member of the MX-5 development team and a passionate sports car enthusiast, I am deeply grateful to all the people who created, fostered and supported this car over the years. To see that many people around the world continue to admire the MX-5 even now, 25 years after its launch, makes me happier than I can express.

It is thanks to their passion and the different ways owners and fans enjoy this car that the MX-5 has matured and evolved over the last quarter century.

I also wish to express my gratitude and heartfelt respect to the European carmakers that originally pioneered the fun-to-drive lightweight sports car, to our staff in the U.S. who hatched the MX-5 plan more than 25 years ago, and to the many Mazda employees in Hiroshima and around the world who helped refine it and supported its evolution over the years.

PROGRAMME MANAGER

Features handed down from generation to generation

The *Jinba-ittai* driving experience exemplified by Mazda's brand icon, the MX-5, is no longer the exclusive domain of lightweight sports cars. Rather, it has become the essence of every vehicle Mazda builds.

As symbolised by the challenge of developing the world's first mass-market rotary engine, the spirit of constantly striving to meet new challenges is very much part of the Mazda DNA.

The passion of the engineers and designers who were carrying on that spirit is what directed the development of the original MX-5, which in turn became the starting point for the *Jinba-ittai* driving experience.

This evolved further and played no small role in the development of SKYACTIV Technology, the 'KODO – Soul of Motion' design theme and other innovations.

Over its 25-year history, the Mazda MX-5 has brought drivers and cars closer together in its never-ending quest to deliver a faithful response and an enjoyable driving experience, whether cruising at slow speeds or enjoying a high-speed run.

At the same time, it helped establish the Mazda brand's unique reputation for providing driving pleasure.

An open-top sports car that all drivers can truly enjoy

From the first generation, our philosophy for MX-5 development has remained the same: Create a car that delivers true driving pleasure and is an irreplaceable partner for the people on board – and onlookers, too – brightening and cheering their mood.

In addition to lessons learnt from our predecessors, we carried out advanced research into human sensitivity, developed new technologies, met a wide range of challenges, broke through barriers and finally realised the pleasure of the lightweight sports car as best suits the times.

This includes Mazda's hallmark *Jinba-ittai*, the feeling of oneness between the driver and car as the driver enjoys a fresh breeze in an open-top sports car, and the "Lots of Fun" characteristics that go beyond ordinary driving pleasure.

These two themes have remained unchanged over the past 25 years, guiding the MX-5's development as we continued to enhance the model's driving pleasure while meeting increasingly pressing customer demands for comfort, safety and environmental friendliness.

It is the reason why all generations of the MX-5 have preserved the principal



requirements of a lightweight sports car featuring a compact open-top two-seater body, a front-midship engine, rear-wheel drive configuration, a 50/50 front-rear weight distribution, a low yaw inertia moment and an affordable price.

Engineering devoted to taking our original aims into the future

Development of the fourth-generation MX-5 became a struggle with the model's 25-year history. It also marked a challenge to connect that history to the coming 25 years.

Over the past quarter century, the demands for greater environmental friendliness and safety have grown increasingly more stringent.

Each successive model of the past three generations has seen slight increases in body size and weight in response to these demands.

In developing the fourth-generation MX-5, we returned to the original aims of the first generation that had restored the culture of the lightweight sports car and then took on the challenge of embodying the fundamental pleasure of driving an open-top lightweight sports car in a product suited to today's needs.

In other words, Mazda firmly believes that the fun of being one with the car - the exhilaration felt by any driver on any kind of road - must be maintained.

To do this, Mazda considers it essential to achieve a different kind of innovation that goes far beyond mere product refinement. This is clearly summed up by the maxim "innovate in order to preserve," which expresses the challenge behind developing the fourth-generation MX-5.

There is no doubt that the key to realising this lays with the effective implementation

of SKYACTIV Technology, which strikes the right balance between reduced weight and environmental friendliness and safety.

It includes the KODO design, which brings the presence of a living creature and a strong sense of vitality to the car.

At the same time, we also went back to the original intention of the first generation. We asked ourselves how best to awaken the driver's innate sensibilities as we aimed to further enhance the MX-5's *Jinba-ittai* driving experience. We also wanted to raise the level of fun associated with every detail when it comes to owning, viewing and customising the car, or simply meeting up with friends.

Toward this purpose, we delved further into the concept of Kansei engineering¹, employed since the first generation, as we made a concerted effort to appeal to the senses and sensations through which people enjoy cars to attain an unprecedented level of driving pleasure.

We adopted the latest SKYACTIV Technology, and its related theories, as part of a thorough effort to achieve the ideal structure for a lightweight sports car. The result is the most compact body size of any MX-5 generation combined with a weight reduction of around 100kg² over the third-generation model.

The MX-5 has steadily evolved in a way that is only possible thanks to an unchanging

passion shared between Mazda and countless MX-5 owners and fans around the world.

As the current Programme Manager for this product, I am both profoundly appreciative and keenly aware of the great responsibility I bear. This explains why we can never take a break from "innovating in order to preserve" if we want the MX-5 to continue to be the recipient of such passionate adoration for the next 25 or 50 years.

This is our duty as the developer, and at the same time it's an exciting dream, a source of happiness and something we are proud of.

It is also a conviction that will surely be inherited by the next generation of engineers who work on the MX-5.

We are ready for the challenges of the next quarter century and beyond, always inspired by the passion of our fans around the world.

Nobuhiro Yamamoto
Mazda MX-5 Programme Manager



¹ Kansei engineering addresses customers' impressions of a product to design the desired owner impressions into it. Mazda was the first company to use Kansei engineering in the 1980s on the original MX-5.

² Australian MX-5 weighs from 1,009kg, representing a 91kg weight reduction



ALL-NEW MAZDA MX-5 FAST FACTS

- > Priced from \$31,990, the All-New Mazda MX-5 is only \$2,000 more than the original 1989 launch price, but with significantly more equipment
- > An entry-level Roadster and high-grade Roadster GT come with the choice of a 1.5L or 2.0L SKYACTIV-G petrol engine mated with a 6-speed SKYACTIV-Drive automatic or SKYACTIV-MT manual transmission
- > Weight is reduced by over 90kgs, with the base model Roadster with 1.5L engine weighing in at 1,009kg - the lightest generation MX-5 since launch
- > Electronic Power Assist Steering (dual pinion) is introduced to a Mazda model for the first time, offering a lighter, responsive driving experience
- > The new suspension system improves turn-in ability, stability when braking and control when cornering
- > A new soft top makes it easy to open and close the roof in seconds
- > Introduction of MZD Connect with commander control and Mazda's 'Drive Selection' on selected models
- > The Bose premium sound system includes speakers positioned in the headrest of each seat, making listening to music and making calls even clearer when the top is down
- > Global sales are fast approaching 1,000,000

SALES AND MODEL MIX

The fourth generation Mazda MX-5 is expected to re-ignite interest in the open-top roadster.

With global sales approaching one million units, and following an extensive marketing campaign, All-New Mazda MX-5 goes on sale in mid-August with a choice of two grades, two engine and two transmission types.

Mazda Australia expects approximately 125 sales per month during its first year on the market with the following model split:

1.5L Roadster	6MT	10 per cent
1.5L Roadster	6AT	5 per cent
1.5L Roadster GT	6MT	20 per cent
1.5L Roadster GT	6AT	13 per cent
2.0L Roadster	6MT	10 per cent
2.0L Roadster	6AT	7 per cent
2.0L Roadster GT	6MT	20 per cent
2.0L Roadster GT	6AT	15 per cent

ALL-NEW MAZDA MX-5 RANGE HIGHLIGHTS

1.5L MX-5 Roadster

Manufacturer's List Price (MLP)
from \$31,990

Powertrain:

- > 1.5 litre in-line 4 cylinder 16 valve DOHC S-VT petrol (SKYACTIV-G) engine
- > Maximum power: 96 kW @ 7,000 rpm
- > Maximum torque: 150 Nm @ 4,800 rpm
- > Fuel consumption (combined): 6.1L/100km (6MT) or 6.4L/100km (6AT)

Roadster features include:

- > 16" alloy wheels (silver)
- > 195/50 tyres
- > Body coloured mirrors
- > LED headlamps
- > Cloth soft-top

- > Black cloth seat trim
- > Air-conditioning
- > Cruise control
- > Trip computer
- > Leather-wrapped steering wheel, handbrake handle and gear shift knob
- > Audio system with AM/FM tuner and six speakers
- > AUX & USB
- > Bluetooth
- > Steering wheel audio controls
- > Advanced keyless push button engine start
- > LSD (MT only)
- > Tyre Pressure Monitoring System (TPMS)

ALL-NEW MAZDA MX-5 RANGE HIGHLIGHTS

1.5L MX-5 Roadster GT

Manufacturer's List Price (MLP)
from \$37,990

Powertrain:

- > 1.5 litre in-line 4 cylinder 16 valve DOHC S-VT petrol (SKYACTIV-G) engine
- > Maximum power: 96 kW @ 7,000 rpm
- > Maximum torque: 150 Nm @ 4,800 rpm
- > Fuel consumption (combined): 6.1L/100km (6MT) or 6.4L/100km (6AT)

GT features additional to the Roadster include:

- > 16" alloy wheels (gunmetal)
- > 195/50 tyres
- > Headlamps auto on/off
- > LED daytime running lamps
- > Piano black mirrors (heated)
- > Rain-sensing wipers
- > Black or tan leather seat trim
- > Seat warmers
- > Auto-dimming rear-view mirror
- > Climate control air-conditioning
- > 7-inch touchscreen display (MZD Connect)
- > Internet radio integration (Pandora®, Stitcher™ and Aha™)
- > Multi-function commander control
- > Premium Bose audio with nine speakers
- > Satellite navigation
- > Advanced keyless entry

2.0L MX-5 Roadster

Manufacturer's List Price (MLP)
from \$34,990

Powertrain:

- > 2.0 litre in-line 4 cylinder 16 valve DOHC S-VT petrol (SKYACTIV-G) engine
- > Maximum power: 118 kW @ 6,000 rpm
- > Maximum torque: 200 Nm @ 4,600 rpm
- > Fuel consumption (combined): 6.9L/100km (6MT) or 7.1L/100km (6AT)

Roadster features additional to the 1.5L model include:

- > 17" alloy wheels (gunmetal)
- > 205/45 tyres
- > LED daytime running lamps

2.0L MX-5 Roadster GT

Manufacturer's List Price (MLP)
from \$39,550

Powertrain:

- > 2.0 litre in-line 4 cylinder 16 valve DOHC S-VT petrol (SKYACTIV-G) engine
- > Maximum power: 118 kW @ 6,000 rpm
- > Maximum torque: 200 Nm @ 4,600 rpm
- > Fuel consumption (combined): 6.9L/100km (6MT) or 7.1L/100km (6AT)

Roadster GT features additional to the 1.5L model include:

- > 17" alloy wheels (bright)
- > 205/45 tyres



MANUFACTURER'S LIST PRICE (MLP)*

1.5L Roadster	6MT	\$31,990	2.0L Roadster	6MT	\$34,490
1.5L Roadster	6AT	\$33,990	2.0L Roadster	6AT	\$36,490
1.5L Roadster GT	6MT	\$37,990	2.0L Roadster GT	6MT	\$39,550
1.5L Roadster GT	6AT	\$39,990	2.0L Roadster GT	6AT	\$41,550

*Manufacturer's List Price (MLP) includes GST and Luxury Car Tax (LCT) where applicable but excludes dealer delivery, registration, third party insurance costs, stamp duty and other mandatory charges.

MAZDA SERVICING

Regular servicing is the key to the long-term performance, efficiency and safety of a Mazda. Keeping the Zoom-Zoom factor at its peak is made easy, convenient and worry-free through the Mazda Maintenance Program.

While the duration of most other capped-price servicing plans expire with the new car warranty, Mazda servicing runs for the entire lifespan of the vehicle. This provides

our customers with greater value as they'll know exactly how much the standard service costs will be across the life of the car.

We also understand everyone has different driving habits. That's why we've revised our service scheduling to better suit the customer. Now they simply service their Mazda every 10,000kms. This correctly maintains the vehicle's integrity and helps ensure trouble-free motoring.

MAZDA SERVICING

Regular servicing is the key to the long-term performance, efficiency and safety of a Mazda. Keeping the Zoom-Zoom factor at its peak is made easy, convenient and worry-free through the Mazda Maintenance Program.

Mazda's servicing plans give the buyer the certainty of knowing exactly how much they will pay for a particular Scheduled Service performed by Mazda than the price advertised at the time your Scheduled Service booking is confirmed, no matter which Mazda Dealer they use and no matter whether their new car warranty has expired.

By checking the price of the service on our website at the time a booking is confirmed, the buyer can be assured that they will pay no more than that advertised price.

Mazda also understands that everyone has different driving habits. That's why we've revised our service scheduling to better suit

their needs. Now the buyer simply services their Mazda every 10,000kms. This correctly maintains the vehicle's integrity and helps ensure trouble-free motoring.

Mazda Service Select

With Mazda Service Select the buyer can vary their visit schedule according to how they use their Mazda.

For example, if they travel on average 13,000kms per year, they can service their Mazda once every nine months, if they travel less, say 8,000kms per year, they only need to come in once a year.

They'll also get peace of mind as they will not pay more for a Scheduled Service performed by us than the price advertised at the time their Scheduled Service booking is confirmed*. Just check mazda.com.au/service to view the current pricing when it's time to book your service.

SCHEDULED SERVICE

Intervals		All models
1st	Service or 10,000km	\$295
2nd	Service or 20,000km	\$336
3rd	Service or 30,000km	\$295
4th	Service or 40,000km	\$336
5th	Service or 50,000km	\$295
6th	Service or 60,000km	\$336
7th	Service or 70,000km	\$295
8th	Service or 80,000km	\$336
Additional Maintenance Items		All models
Brake Fluid Replacement		Every 2 Years or 40,000km \$89
Engine Air Filter Replacement		Every 60,000km \$70
Manual Transmission Oil Replacement*		Every 5 Years or 100,000km TBA
Spark Plug Replacement		Every 100,000km \$260
Engine Fuel Filter Replacement		Every 150,000km \$422

All Price are inclusive of GST. * Manual Transmission only. + The recommended price for each Scheduled Service may be amended from time to time to reflect changes such as the cost of labour, parts, lubricants and other materials. There may also be variances from state to state so we recommend the buyer check with their local Mazda Dealer. The buyer will however not pay more for a Scheduled Service performed by their Mazda Dealer than the price advertised for that service on mazda.com.au at the time your Scheduled Service booking is confirmed.



The significance given to maximising the *Jinba-ittai* and "Lots of Fun" experiences means that Mazda did much more than simply develop a compact sports car.

Rather, the MX-5 was made to be looked at, to perform and respond faithfully to the driver's will, to deliver a pleasing experience and to emphasise the owner's character. Just having an MX-5 makes life more pleasant and more colorful.

The product concept, "Joy of the moment, joy of life," reflects Mazda's hopes that the All-New MX-5 will become a presence in the lives of customers that continues to transcend its existence as a mere car.

To convey that desire more purely, the development team devoted themselves to adopting SKYACTIV Technology

and KODO design to evolve the MX-5, while at the same time working to evolve the essence of what appeals to the senses and sensations through which people enjoy cars.

Basing efforts on the concept of further developing these "sensations" resulted in achieving three key values.

1. A DESIGN THAT WILL SET ANY HEART POUNDING WITH EXCITEMENT

Just one look at the All-New MX-5 should get the pulse racing.

Sitting in it should bring a smile to the driver's face and instantaneously spark an urge to take the top down and go for a drive.

And it should become a cherished part of the owner's life as time goes on.

These joyful attributes are what the development team aimed to express in an even purer state with the All-New MX-5.

In pursuit of them, they worked to add greater depth to the KODO design, to embody beautiful proportions that make its occupants stand out and to make the open-air roadster experience all the more enjoyable. They focused on the following:

- > Beautiful proportions that make its occupants look good, from the car's low, short front overhang to its compact cabin that positions the occupants in the centre
- > A low and wide trapezoidal form at both front and rear that conveys a highly dynamic stance with an expression of stability that makes the vehicle appear as though it is firmly gripping the road surface and an image of agility that makes the All-New MX-5 appear ready to move instantly in any direction
- > Body surfaces created by the fine craftsmanship of Mazda's renowned clay modelers richly express the Japanese sense of contrast between stillness and motion

- > An interior design by which the body panels wrap around to extend right into the door trim, thereby dissolving the visual boundaries between the vehicle's interior and exterior
- > A bonnet and front fender design that makes the driver feel the front wheels are an extension of their own body as they steer the car. The achieved effect enables the driver to accurately determine the position of ridge lines that directly connect the upper part of the door trim to the raised edges at the top of the fenders as well as the position of the front wheels
- > A symmetrical cockpit formed around a singular axis that fosters concentration on driving

2. A DRIVING EXPERIENCE THAT WILL CAPTIVATE ANY DRIVER

For every generation of the MX-5, importance was placed on appealing to the senses and sensations through which people enjoy cars with the *Jinba-Ittai* driving experience rather than focusing merely on sheer performance.

With "sensation" as the keyword for the All-New MX-5, particularly when it comes to the driving experience, development efforts focused on making the car even more enjoyable to control and faithful in its response.

When driving in typical daily situations, the car responds directly to the driver's intentions, as though it were an extension of the driver's own body.

When enjoying a sporty run along winding roads, it perfectly responds to the driver's actions. Every effort went into further refining these attributes to realise the pure *Jinba-Ittai* driving experience that will captivate any driver.

Here are some of the highlights:

- > Leveraging all the latest advances offered by SKYACTIV Technology, "optimised distribution of functions and a more compact design", "structural innovation", "expanded application of lightweight materials" and Mazda's "gram strategy" combine to reduce weight by almost 100kg¹ over the previous model
- > The 50/50 front-rear weight distribution common to all previous generations combines with a lowered yaw inertia moment achieved by moving the engine rearward and adopting aluminium parts at the front and rear ends of the body. In addition a lower centre of gravity is achieved by lowering the engine's mounting position and seating position, to achieve dynamic performance specifications that deliver a light driving feel
- > The pedals, controls, meters and displays are optimally positioned in a human-centric manner that enables the driver to maintain a straight posture and drive comfortably. In addition, the low front nose, rearward positioning of the A-pillars and thinner front header combine to afford a panoramic view that makes it easy to confirm surrounding conditions and the car's behaviour

- > The 1.5 and 2.0 litre SKYACTIV-G direct-injection petrol engine is positioned longitudinally and specially tuned to be responsive, delivering a pleasing feeling of acceleration that extends continuously from low through to high engine speeds
- > Development of the new 6-speed SKYACTIV-MT manual transmission for the front-engine rear-wheel-drive (FR) layout is designed to give a light operation feel, a positive feeling of "suction" (the shifter being drawn into the right position while shifting), and a feeling of crispness. In addition, it adopts a direct-drive sixth gear that contributes to simplifying the structure and making it more compact and lighter
- > The 6-speed automatic transmission delivers wider slip control and lock-up ranges for a more direct feel and adds features such as a blipping function and Drive Selection, giving a sporty, powerful driving experience
- > The sporty engine sound is tuned to set the heartbeat racing the instant the driver starts the engine. It delivers a pleasingly light feeling at low speeds, a powerful and pulsating sound at mid-range speeds, and a clear note that heightens the pleasure of driving at high engine speeds
- > While the All-New MX-5 continues to use the double-wishbone front suspension and multilink rear suspension as the previous model, it was redesigned as a new challenge for SKYACTIV Technology to optimise the geometry and create a new suspension system that is highly rigid and light in weight

¹ Australian MX-5 weighs from 1,009kg, representing a 91kg weight reduction.

- > The new Electric Power Assist Steering (Dual Pinion) system delivers highly rigid steering characteristics and provides direct feedback from the road's surface
- > In moving the pitch centre rearward and delivering more linear characteristics, the brake system aims to provide highly reassuring braking power and an enhanced vehicle posture when braking
- > Improved framework, a straighter high-mount backbone frame with a larger cross section, and expanded use of high-tensile steel completes a new SKYACTIV-Body that combines a significant reduction in weight with a high level of structural rigidity
- > Mazda's new S-fit seat structure employs a newly developed net material and urethane pads that make the seats fit perfectly the instant they are sat on, and provides much greater holding capability while driving.

3. A PLEASANTLY REFRESHING ROADSTER EXPERIENCE THAT ANYONE CAN ENJOY

It embodies the feeling of openness only possible in an open-top lightweight sports car (LWS): a sense of freedom one feels with all five senses. In specific terms, the key aspects of development include:

- > The exterior design features a line that flows straight from the low bonnet to the rear deck, creating a silhouette that suits the car's open-top styling
- > The interior design aims to dissolve the boundaries between the interior and exterior, heightening the pleasure of

driving an open-top sports car by enabling the driver to experience changes in the surrounding environment, such as the sunlight filtering through the trees or light reflecting as the sun sets

- > The lightweight soft top is easy to open and close while seated
- > Wind control makes a pleasure of driving with the top down
- > The headrest speakers deliver clear sound, whether listening to music or talking on the hands-free phone while driving with the top down
- > Mazda worked with Bose® to jointly develop an exclusive audio system for the MX-5 that produces quality sound, even when driving with the top down

In addition to the three aforementioned key values, the All-New MX-5 further evolves the pleasure of the MX-5 driving experience, while adapting it to reflect its owner's character.

Furthermore, it adopts Mazda's latest-generation human-machine interface (HMI) and MZD Connect, Mazda's new car connectivity system that efficiently links the driver to the car and the outside world.

A human-centric perspective was adopted in pursuing advanced safety based on the company's safety philosophy, Mazda Proactive Safety, to appeal to the senses and sensations through which people enjoy cars and enable the driver to fully enjoy the driving experience.



DESIGN

For the fourth-generation MX-5, the development team was not going to be satisfied with a mere facelift. Nor were they prepared to aim for a design that simply accommodates current trends.

Mazda's only desire was to satisfy its vision of how an open-top lightweight sports car (LWS) should look. It had to light a fire of excitement in the hearts of all those who relate to the stance Mazda assumed in developing the model over the past quarter century, and who crave a pure embodiment of Mazda's icon.

While paying due respect to the British as the pioneers of the genre and to the first-generation MX-5 as the car that rebuilt it in the modern age, the design aim for the All-New MX-5 was to create the ideal image of a lightweight Mazda sports car.

Every inch of the All-New MX-5 reflects this desire and the pleasure it intends to give to all who drive it.

EXTERIOR DESIGN

Mazda's first aim for the design was to create beautiful proportions that make the occupants stand out and look good.

True to its Japanese name - Mazda Roadster - the basic form of the MX-5 makes those riding in the car the stars when seen with the top down and windows lowered.

As such, the designers and packaging engineers assigned to the development team worked closely together to examine a wide variety of elements related to achieving a layout that seats the occupants at the body's midpoint. We wanted a design that moved the cabin a little toward the rear to match the position of the occupants' heads, and lowered the hip point of the seats in conjunction with the new design's low center of gravity.

By addressing every detail to achieve a layout that understands the fundamental principles of a human-centric LWS design,

the development team created a design that is particularly beautiful when the top is down, that emphasises the driver's seating position, and that embodies beautiful proportions that best convey the satisfaction and exhilaration of driving the MX-5.

Based on the proportions that make the occupants stand out and look good, the development team took on the challenge of adding greater depth to the KODO design language within the new design.

The front and rear overhangs were shortened as much as possible and the volume of the body panels above the tyres shaved, creating a low and wide trapezoidal form at both front and rear.

This includes developing a highly dynamic stance with an expression of stability that makes the vehicle appear as though it is firmly gripping the road surface and creating an image of agility that makes the All-New MX-5 appear ready to move instantly in any direction.

The fine craftsmanship of Mazda's renowned clay modelers creates contours that cause reflections off the body's surfaces to change in beautiful fashion as the car moves.

In addition, the lines travelling from the headlamps, peaking at the front fenders and converging in front of the rear tyres before sweeping upwards over the rear fender create a sense of motion at varying speeds.

Reminiscent of Japanese calligraphy, this represents the Japanese sensibilities bred into the MX-5.

From corner to corner, every detail of the build includes sports car design elements that will resonate with enthusiasts.



FRONT VIEW KEY DESIGN ELEMENTS

- > Adopting highly compact four-lamp LED headlamp units and an Active bonnet design made it possible to create one of the lowest and shortest front overhangs in the world
- > The sharp character lines running from the upper edge of the grille towards each headlamp, and the line of illumination produced by the LED positioning lamp located within each headlamp unit, create a distinctive family face shared by Mazda's new-generation product lineup
- > LED daytime running lamps* positioned in the corners of the front bumper adopt a vertically oriented design that angles outward toward the bottom, emphasising the wide stance of the All-New MX-5
- > The headlamp design features an expression of eyes that give the All-New MX-5 a strong sense of vitality. From some angles, they present a sharp, sleek expression, while from others they project a gentle, affable persona

*On selected grades.

SIDE VIEW KEY DESIGN ELEMENTS

- > In positioning the cabin to achieve the most natural seating position possible, the A-pillars and cowl are moved further toward the rear by 57mm and 77mm respectively when compared to the previous model
- > The shorter top and more compact space where the soft top is stowed, achieved in conjunction with the rearward movement of the header, create a taut rear deck. They also create a side view with beautiful, evenly balanced proportions, whether the top is up or down
- > Newly designed door mirrors mounted just beneath the front quarter windows are compact in size and feature excellent aerodynamic performance
- > A black garnish covers the mirrors on the 1.5L High grade, the outside of the A-pillars and the front header, and matches the black colour of the soft top, to create a unified finish that heightens the coupe-like appearance of a taut cabin form
- > The seatback garnish adopts an inverted U-shape that appears to flare out at the bottom, creating an image of stable open-top styling



REAR VIEW KEY DESIGN ELEMENTS

- > The flared rear fenders create a sense of volume and a rich expression from the rear
- > The iconic U-shaped rear combination lamp design and its round tail lamps harken back to the rear view of the previous generations of the MX-5
- > The license plate attaches to the bottom of the rear bumper to maintain a sense of continuity between the rear edge of the boot and the bumper



- > The key cylinder is eliminated and the boot opener has been moved to an inconspicuous location, giving a clean design where no parts other than the brand symbol and model badges meet the eye

QUARTER VIEW KEY DESIGN ELEMENTS

Shortening the front and rear overhangs as much as possible, tucking the sides of the body at the ends to round the corners, and shaving the volume of the body panels above the tyres creates a low and wide trapezoidal form at both the front and rear giving the impression of power and muscular strength

**SOFT TOP DESIGN**

The focus was to design a soft roof that would look perfect when stowed away, but give a beautiful, clean appearance across the top, along with excellent aerodynamic performance, when up.

Mazda wanted to create a silhouette befitting an open-top car with a line that runs straight from the low bonnet through to the rear deck. With this in mind Mazda developed a compact new soft top that retains the same basic Z-fold structure as the previous model, but can be stowed away in a smaller space than any of its predecessors.

In addition, the rear of the roofline was lowered slightly while also tucking in the sides at the rear to create a teardrop design. The beautiful shape of these smooth curves guides air smoothly from the rear of the cabin off the back of the car. It combines with openings adopted on each end of the front bumper lower section, which optimise front and rear lift, to contribute significantly to the All-New MX-5's excellent aerodynamic performance.

WHEEL DESIGN

Newly designed 17-inch and 16-inch aluminium wheels accentuate the form of the centre hub, and shaves off excess material.

The lightweight design includes a change from a five-nut to a four-nut centre hub matched with eight spokes.

They employ a method of cold casting that strengthens the aluminium while keeping the material thin; creating a design that contributes to achieving both weight reduction and functional beauty.

The 17-inch wheels offers a choice of bright silver paint or gunmetal grey paint, and the 16-inch wheels are offered with either gunmetal grey or silver paint.

**BODY COLOURS**

New to the MX-5 range is Ceramic Metallic, which changes shade depending on how the light hits it.

It joins Soul Red Metallic - which made its debut on the 25th anniversary MX-5 - and

four alternate colours including Crystal White Pearl Mica, Blue Reflex Mica, Meteor Grey Mica and Jet Black Mica.





INTERIOR DESIGN

The aim for the interior was to create a cockpit design that brings a smile to the face and gets the heart pounding simply by looking at it - or sitting in the driver's seat.

Aiming to dissolve the visual boundaries between the vehicle's interior and exterior, the design attempts to heighten the pleasure of driving an open-top sports car by enabling the driver to take in the change in the surrounding environment as they are being experienced.

The ridge line that extends in powerful fashion from the upper part of the door trim to the top of the front fenders emphasises a feeling of oneness between the driver and car.

In addition, positioning the fender's peak, where it forms an extension of the line of the caster angle, and the valley on the bonnet behind the front fender, where it forms an extension of the line of the front wheel's king pin, the design enables the driver to

accurately determine the position of the front wheels.

Another important design consideration was to create a single axis through the cockpit zone centered on the driver and around which all major controls are laid out in perfect symmetry.

This creates a pleasantly snug cockpit feeling that enables the driver to concentrate on driving.

COCKPIT DESIGN

The cockpit centres on the driver with all major controls laid out in perfect symmetry.

- > The steering wheel and three-meter cluster are located on a single axis directly in front of the driver
- > Round air-conditioning louvers laid out symmetrically on either side of the meter cluster aim at the driver at precisely the same angle
- > A vertical pleat on the seatback aligns nicely with the line of the driver's spine.

Meters

- > Finely detailed and sporty in appearance, the three-meter cluster features a large analog tachometer in the centre, a speedometer on the right and an information display on the left
- > The tachometer and speedometer feature vertical zero position needles that point out the contrast between stillness and motion
- > The water temperature gauge covers a higher temperature range to better support management during hard sports driving
- > The meters are all trimmed with high quality satin chrome rings



Steering wheel

- > With a diameter of 366mm, the steering wheel features a sharp, compact look, three slim spokes coated in satin chrome, and a grip covered in black leather with red stitching
- > The grip and rim are designed to enable quick, precise steering wheel operation when negotiating winding roads by providing easy hand-over-hand action and a smooth form that lets the driver slide their hands along the wheel's surface
- > The switches mounted inside the left and right spokes are recessed so as not to interfere with steering operations



Shift knob

- > The shift knob for vehicles equipped with a manual transmission features a bulb-type design that measures 48mm in diameter. It fits in the hand well and also provides a pleasingly light feeling to shift operation



- > The shift knob for the automatic transmission features a high-quality design that adopts a bulb-like shape with a gear select button mounted on the upper part for improved operation

PASSENGER ZONE

In contrast to the cockpit's front-to-rear axis that centres on the driver, the instrument panel on the passenger side is designed to spread horizontally.

Adopting a slim design for the instrument panel creates a sense of roominess and delivers a light feeling throughout the interior that is appropriate to an LWS.

DOOR TRIM DESIGN

The upper door trim panels are designed to form a continuous line that flows across the instrument panel to the bonnet and extends to the ridges on the front fenders.

Creating this continuity between the interior and exterior forms heightens the sensation of being connected with the surrounding environment while driving.

The shape of the door trim takes advantage of the door's low and sleek shape, presenting a dynamic design featuring deeply contoured surfaces and a pattern that gives a strong sense of front-rear movement.

The armrests and centre sections of the door trim are covered in soft material finished with decorative stitching.

The contrast between this material and the upper door trim panels highlights the sculpted look of the All-New MX-5's door trim.

SEAT DESIGN

The cushions and seatbacks for the All-New MX-5 use a newly developed net structure.

The seats fit comfortably and snugly the instant the occupant sits down, and they demonstrate firm holding capability when driving. They are high quality sports car

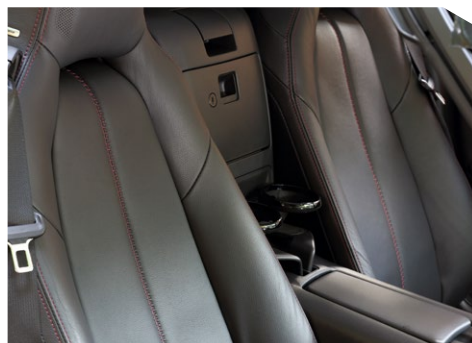
seats that blend a beautiful design with solid functionality.

Fabric seats

Aiming for a light, functional look that suits a LWS, the fabric features a dull glow that is similar in appearance to rubber, and a solid three-dimensional quality, that is expressed through the use of a grid-like pattern.

It is a fresh new look that differs from fabrics used previously. The fabric's raised squares grip the occupant's body firmly, contributing to a fit that better helps the driver feel at one with the seat.

The three rows of vertical stitching that run through the cushion and seatback, highlight the elegant curves of the seat's shape and



the rich expression of the material that changes depending on how shadows fall on it.

Leather seats

The centre section features a pleat with the same hexagonal diamond-shaped stitching featured on the KODO chair, which earned high acclaim when exhibited at Milan Design Week in 2013.

The leather on the right and left presents a taut three-dimensional look, while also expressing the detailing and precision finish of high quality craftsmanship.

INTERIOR COLOURS

Two varieties of colour-coordinated interiors are available, with each featuring different decorative panels and stitching colour variations according to the respective grade specifications.

The Black interior, available in either fabric or leather, expresses pure sportiness, while the Sport Tan leather interior presents an authentic flavour with gorgeous good looks.

The leather interior uses stitching on the seats, centre section of the door trim and lower section of the dashboard.

The stitching for the black interior is red and for the tan interior is beige.

Metallic finish is used on parts such as the air-conditioning control dials and steering wheel spokes to guide the eyes or to express rigidity, highlighting the sophisticated ambience of the All-New MX-5 interior.

CRAFTSMANSHIP**An engine compartment that pursues functional beauty**

The goal of providing functional beauty extends to the engine compartment, heightening the anticipation of the *Jinba-Ittai* driving experience when simply lifting the bonnet.

In addition to organising the layout of the various parts and pipes of the units under the bonnet, adopting black as the colour scheme for many of the parts other than the engine establishes a monotone colour scheme for components within the compartment, highlighting the presence of the engine itself.

In addition, the engine is covered by a thin die-cast aluminium head cover that measure just 1.7mm in thickness. It is a lightweight structure on par with the weight of the plastic head covers used on the previous generation, and has a simple but striking design.



BACK TO ITS ROOTS: ALMOST AS LIGHT AS THE FIRST-GENERATION MX-5

Building a lightweight, compact open-top sports car has been the basic principle behind MX-5 development since work began on the first-generation model.

SKYACTIV Technology and years of acquired knowhow were applied in redesigning every detail of the All-New MX-5 to achieve a radical reduction in weight.

Pursuing the ideal structure for the body, chassis, and engine resulted in optimising the distribution of functions, introducing compact components, making structural innovations, and increasing the use of aluminium and other lightweight materials. Of course, the same “gram strategy” Mazda has used for years in developing its sports cars was applied in building the MX-5.

Tenaciously and cleverly applying the “innovate in order to preserve” development concept for the All-New MX-5 resulted in a significant weight reduction of over 90kg over the third-generation model. As a result, the 1,009kg weight of the Australian-specification Roadster is closer to the weight of the NA than any other generation.

Vehicle weight compared to previous generations (unit: kg)

Model	Stated values [difference over previous model]
All-New MX-5 [1.5L 6MT]	1,009 [-91]
Third-generation MX-5 (Final revision) [2.0L 5MT]	1,110 [+80]
Second-generation MX-5 (Final revision) [1.6L 5MT]	1,030 [+90]
First-generation MX-5 (Debut model) [1.6L 5MT]	940

OPTIMISED DISTRIBUTION OF FUNCTIONS AND A MORE COMPACT DESIGN

As the result of a committed effort to achieve the ideal body and chassis structure for a lightweight open-top two-seater sports car, the All-New MX-5 features the most compact overall length of any generation to date.

In conjunction, a total rethinking of the size and specifications of functional parts such as the brakes, tyres and wheels led to shaving away every bit of excess.

Vehicle dimensions compared to previous generations (unit: mm)

Model	Stated values [difference over previous model]			
	Overall length	Overall width	Overall height	Wheelbase
All-New MX-5	3,915	1,730 [+10]	1,235 [-10]	2,315 [-15]
Third-generation MX-5	4,020	1,720 [+40]	1,245 [+10]	2,330 [+65]
Second-generation MX-5	3,975	1,680 [+5]	1,225 [-10]	2,265 [0]
First-generation MX-5	3,955	1,675	1,235	2,265



STRUCTURAL INNOVATION FOCUSED ON APPLYING SKYACTIV TECHNOLOGY

By further advancing the SKYACTIV-Body concept of a continuous framework, the development team succeeded in achieving a significant reduction in weight as well as a higher level of rigidity.

The measures taken include optimising the framework, giving the high-mount backbone frame larger cross sections and straighter lines, as well as expanding the area where high-tensile steel sheet is adopted.

The chassis was integrated with the body as part of an effort to achieve the ideal structure, with part of the body frame serving as the chassis frame and other measures implemented to create a lightweight and rigid structure that surpasses previous designs.

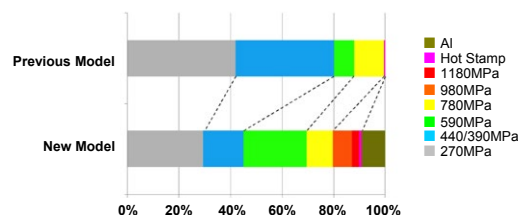
Thorough measures were also taken to reduce the weight of the engine and all aspects related to the powertrain.

SKYACTIV-BODY

The body shell of the All-New MX-5 is approximately 20kg lighter than the previous model, but maintains high levels of collision safety, rigidity, and ride quietness.

- > In addition to creating a straight and continuous framework and optimising the frame member cross-section, building a multi-load path structure that uses suspension crossmembers reduces weight while retaining structural rigidity and strength
- > The high-mount backbone frame introduced on the previous model was further straightened and the cross-section of its members increased in size
- > Cross-shaped cross sections adopted for the front frame members and crush cans, and a double-hat cross section for the rear side frames made it possible to reduce sheet thickness

- > Application of lightweight materials on the white body, including high-tensile steel, ultra-high-tensile steel and aluminium, is increased from 58 per cent on the previous model to 71 per cent for the All-New MX-5. Of particular note, aluminium accounts for nine per cent of the white body by mass, making a significant contribution to weight reduction
- > The front and rear bumper reinforcements adopt high-strength 7000-series aluminium, reducing the overall weight (combined) by 3.6kg over the hot-stamped material used on the previous model

**Distribution of high-tensile steel by strength rating (%)**

Strength	270MPa	390/440MPa	590MPa	780MPa	980MPa	1180MPa	1500MPa	Aluminium
Material	Steel	High-tensile steel	High-tensile steel	High-tensile steel	High-tensile steel	High-tensile steel	Hot-stamped metal	Aluminium
Previous model	42	38	8	11.4	0	0	0.5	0.1
All-New MX-5	29	16	24	10	8	3	1	9

SKYACTIV-CHASSIS

Measures were implemented to reduce the weight of every part of the suspension system. The system for the All-New MX-5 is 12kg lighter than that of the previous model.

- > By using a portion of the body frame as the rear suspension crossmember and joining it in a truss shape, the weight of the structure is reduced and diagonal rigidity is increased

- > In addition to the front upper and lower arms, Power Plant Frame and rear hub supports, the front knuckle is now also made of aluminium
- > 780MPa grade high-tensile steel was adopted for the front crossmember
- > The material for the undercover was changed to aluminium

SKYACTIV-G 2.0 AND SKYACTIV-G 1.5

Engine block weight (not including parts such as the exhaust manifold) is reduced over the MZR 2.0 engine of the previous model, by approximately 14kg for the SKYACTIV-G 1.5 engine block and 8kg for the SKYACTIV-G 2.0 engine block.

- > The material thickness and shape of the ribs for the cylinder block were optimised
- > Vehicles with the manual transmission adopt a dedicated lightweight flywheel (Models with a manual transmission only)
- > A unique shape adopted for the crankshaft counterweight enhances its function

SKYACTIV-MT

The manual transmission for the All-New MX-5 was newly developed with a directly connected 6-speed gearbox that features a simpler structure, and more compact design. Its overall weight is approximately 7.0 kg lighter than the 6-speed manual transmission on the previous model.

- > Its die-cast aluminium Lightweight Smooth Transmission Housing employs a "three-dimensional distribution of thickness" by which the thickness of the wall is varied and ribs are not added where not necessary

- > Finer control over the flow of transmission oil contributes to weight reduction by maintaining just the right amount of transmission oil within the casing
- > Material for the clutch pedal and cylinder was changed to plastic

REAR DIFFERENTIAL UNIT

The newly developed rear differential unit is made more compact as a result of the change in the gear rings for the direct-drive sixth gear and features a ring gear optimised in size to support the amount of drive torque produced.

CAE analysis was applied to reduce the thickness of the casing, which is now made of aluminium, while maintaining strength and NVH performance characteristics.

As a result, the unit for the 1.5-litre engine reduces weight by approximately 10kg when compared to the previous generation model with 2.0-litre engine. The unit for the new 2.0L engine is 7kg lighter.

POWER PLANT FRAME (PPF)

Changing the cross-section of the Power Plant Frame (PPF) that connects the transmission to the rear differential from a reversed "Z" shape to a reversed "C" shape, and optimising the weight reducing holes while retaining the level of rigidity, results in a weight reduction of approximately 1kg for the 1.5-litre version and approximately 0.7kg for the 2.0L car compared with the previous model.

BROADER APPLICATION OF LIGHTWEIGHT MATERIALS

After a detailed investigation of the parts that would contribute to effectively reducing weight and improving driving performance, the development team expanded the application of aluminium parts on the body and chassis.

Approximately 20 per cent of the weight reduction achieved over the previous model is due to the changeover to aluminium parts.

Other new technologies, such as the new seat structure that incorporates lightweight materials, further contribute to weight reduction.

> In addition to the bonnet and boot lid, the front and rear bumper reinforcements, front fenders, seatback

bars, underbody crossmember, bulkhead panel and soft top links are now made of aluminium

- > In addition to the chassis parts carried over from the previous model, including the front upper arms, lower arms, Power Plant Frame and rear hub supports, the front knuckles are also now made of aluminium
- > On the powertrain, the carrier case for the differential gears is now made of aluminium
- > The All-New MX-5 adopts a new seat structure that employs a lightweight net material on the seatback and seat cushion. This offsets weight gains in other areas ensuring the MX-5 complies with the latest collision safety performance assessments

GRAM STRATEGY AIMS TO REDUCE WEIGHT WHEREVER POSSIBLE

Beyond the above-mentioned weight reduction measures, the All-New MX-5 continues to advance the “gram strategy” that has played a major role in the development of all Mazda’s sports cars to date.

This calls for the elimination of every possible gram of expendable weight from every part on the car.

For example, holes to reduce weight were introduced in the materials for body and chassis reinforcements wherever they did not affect part strength, and the end sections were removed wherever they did not affect the welds.

Another testament to the determination of the engineers to shed every possible gram of weight from the vehicle can be seen in their effort to make the lever for adjusting seat position as slender as possible.

**STRIVING FOR BEAUTIFUL STYLING WITH PURE DRIVING PLEASURE**

Mazda’s “innovate in order to preserve” development approach is also clearly recognisable in the packaging.

Despite its compact body size, the beautiful proportions of the All-New MX-5 combine with reduced weight and a perfect 50/50 front-rear weight distribution, low yaw inertia moment, and a lower centre of gravity to produce an overall package that brings all the elements together at a higher level.

The All-New MX-5 was meticulously designed as a more compact car with a human-centric cockpit, and an improved lightweight body and dynamic performance.

The All-New MX-5 marks a great leap forward in the evolution of the model's packaging.

ACHIEVING BEAUTIFUL PROPORTIONS WHILE EVOLVING WEIGHT REDUCTION AND DYNAMIC PERFORMANCE

The effort to make the MX-5 lighter involved maintaining the same amount of interior space as the previous model while shortening the front and rear overhangs and the wheelbase.

At 3,915mm, the overall length is the shortest of any generation and 105mm shorter than the previous model.

Lowering the hip-point by 20mm (for vehicles fitted with 16-inch wheels) and the engine mount position by 13mm over the previous model lowers the centre of gravity. Shifting the engine rearward 15mm in relation to the front wheel centre further advances the front-midship engine, rear-wheel drive layout and reduces the yaw inertia moment.

In conjunction with the lower seating and engine position, the overall height of the

All-New MX-5 is reduced by 10mm (for vehicles fitted with 16-inch wheels) while maintaining the same level of cabin comfort, and the height of the bonnet is reduced by 28mm.

In addition, the cowl and A-pillars were moved rearward by 77mm and 57mm respectively, while moving the rear deck forward by 29mm, creating a compact and well-toned looking cabin.

Lowering the yaw inertia moment by moving the engine rearward, and lowering the centre of gravity by lowering the engine and seating positions - as mentioned above - further enhance the car's driving dynamics and performance specifications giving an even more exhilarating driving experience.

Body size compared to the previous MX-5

Dimension	All-New MX-5	Previous model
Overall length (mm)	3,915	4,020
Overall width (mm)	1,730	1,720
Overall height (mm)	1,235	1,245
Wheelbase (mm)	2,315	2,330
Front overhang (mm)	760	805
Rear overhang (mm)	845	885

HUMAN-CENTRIC COCKPIT LAYOUT

Particular care was devoted to making the driving position match the human-centric design goals for the All-New MX-5.

As such, efforts to further heighten the feeling of oneness between car and driver included positioning the driver closer to the car's centre and closer to the road surface.

Cabin occupants now sit 15mm closer to the centre of the cabin and 20mm lower than in the previous model.

In addition, the pedals were positioned to enable the driver to operate them while sitting straight, and all major controls and displays that offer visual confirmation were laid out in human-centric fashion.

Measures implemented to ensure clear visibility include the low front nose, A-pillars that were moved rearward, and thinner front header.

The design also delivers headroom, shoulder room, and legroom on par with the previous model, even though the body was made more compact.

Cabin dimensions compared to the previous MX-5 (In-house measurements)

Dimension	All-New MX-5	Previous model.
Cabin length (mm)	940	875
Cabin width (mm)	1,425	1,415
Cabin height (mm)	1,055	1,045
Headroom (mm)	950	950
Shoulder room (mm)	1,325	1,355
Legroom (mm) (with seat at its rearmost position)	1,096	1,096



PEDAL LAYOUT

The pedals are laid out so the driver can rest his or her feet comfortably.

The pedals can be pressed without twisting one's body, and without the driver's foot bumping against the adjacent pedal.

The pedal position was improved, with the clutch pedal moved approximately 15mm to the left and the distance between the brake and clutch pedals increased by 19mm.

The accelerator pedal adopts a hinged organ type design that operates along the natural path of the motion of the driver's foot and is designed to provide finer

CONTROL DEVICES

All driver-operated devices are beautifully designed and are of high quality, and are optimally positioned to enable smooth operation while maintaining a natural driving posture.

> Steering wheel

The steering wheel adopts a compact rim with a diameter of 366mm and a grip design that lets the driver slide their hands along the wheel's surface for smooth hand-over-hand turning.

Great effort also went into creating a stitch design and rim shape that enhances the feel when holding the wheel.

In addition, the steering wheel tilt adjustment range was increased to 42mm, a 10mm increase over the previous model.

With the low seating position of a sports car, space below the steering wheel is an essential component for smooth wheel operation and for ease of entry and exit.

control over the heel-and-toe operation.

The brake and clutch pedals do away with the drop-off around their periphery to create a flat surface with right-angled edges. As a result, the pedals offer adequate surface area for smooth operation, even though they are narrower, minimising the likelihood of the foot catching on the adjacent pedal.

Widening the area where the big toe of the left foot presses on the clutch pedal gives it a shape that is easier to operate.

The reduced diameter and expanded tilt range of the steering wheel for the All-New MX-5 provides up to 12mm more space below the steering wheel than on the previous model.

> Steering wheel switches

The switches mounted on the spokes are recessed so as not to interfere with steering operations.

They are also designed to line up with the fingers for easy operation, minimising the amount of finger movement required to operate them, helping to prevent mistakes.

> Shift knob

The manual transmission version of the All-New MX-5 gives a smooth and positive shift action that suppresses unwanted vibration.

Extensive testing to find the right balance resulted in the adoption of a shift knob that measures 48mm in diameter and weighs 300 grams.

On vehicles equipped with the automatic transmission, a gear select button mounted on the upper part of the shift knob offers improved operation. The design speaks of quality and aims to deliver an excellent feeling to shift operations when manual mode is selected.

SEATS

The seats for the All-New MX-5 play a critically important role in delivering a driving experience that will captivate any driver.

Aiming to embody the LWS driving experience, the seats are snug and comfortable, fitting perfectly the instant they are sat on.

In contrast to the conventional support structure by which the seatbacks and cushions use a combination of metal springs and urethane pads, the All-New MX-5 adopts Mazda's new S-fit Structure that employs a newly developed net material and urethane pads.

It reduces the weight and thickness of the seats, they offer excellent damping characteristics that achieve positive hold characteristics and give a mild, comfortable ride.



The net on the seatback is divided into six individual tension levels to deliver a firm hold at the hips and lower back, while keeping the shoulder area from feeling constrictive.

This allows for freer upper body movement at times such as when opening and closing the top.

Because the net wraps snugly around the occupant's body and follows its movement, it significantly improves holding capability when cornering.

The seats gently hold the body when driving in the city or in other situations where the car is subjected to low G-forces. They also support the body firmly and in linear fashion under powerful G-force conditions, such as acute and immediate turning.

Enhancing the feeling of oneness between car and driver regardless of the driving scene, the seats are perfect for the All-New MX-5.

Adding to this, the following adjustments enable drivers of various builds to find the optimal seating position.

- > When positioned at the rear end of the seat slide, the reclining mechanism offers 27° maximum travel; 2° more than the previous model
- > The angle at which the seat cushion rises when slid forward is increased to 10° as compared to 6° for the previous model. This provides smaller drivers who tend to move the seat forward a clear view out the windshield
- > Proper support under the thighs is critically important when using the pedals. A new tilt mechanism added to the seat cushion provides greater support, enabling drivers of all builds to adjust the cushion to achieve the right setting

EASE OF ENTRY AND EXIT

The following measures were implemented on the All-New MX-5 to help support ease of entry and exit, even though the hip-point was lowered.

- > A carved out shape for the lower part of the door trim and the side sill trim is designed to make it easier to extend a leg out of the cabin
- > The top of the side sills includes a flat area that the occupant can place a hand on and support their body as they stand up
- > The height of the seat cushion is lower on the door side to make it easier to extend a leg out of the cabin

FORWARD VISIBILITY

The well thought-out body design of the All-New MX-5 perfectly considers the driver's front-on vision thanks to a number of innovative ideas:

- > Moving the A-pillars 57mm rearward, and the seating position 15mm toward the centre of the cabin - when compared to the previous model - expands the spread angle of the horizontal field of view by 4.7°. This makes it possible to accurately read the conditions ahead, even when cornering
- > The front header was also moved rearward and made thinner, and the height of the bonnet lowered by 28mm. This combines with the low cowl height and compact design of the wipers to expand the spread angle of the vertical field of view by 5.5°

VISIBILITY OVER THE BONNET

The designers and engineers worked together to create a bonnet and fender shape that enables the driver to accurately determine the position of the front wheels.

The front fenders flow back and connect smoothly with the beltline, making it easy for the driver to determine the position of the left and right sides of the car.

In addition, high-rising edges that form ridgelines running along the front fenders better enable the driver to sense the movement of the front wheels.

The result of these design features is improved awareness of the roll, yaw and pitching motion of the car in response to steering actions.

HIGHLY EFFICIENT FUNCTIONS AND EQUIPMENT**Storage Space for Small Items**

In pursuing a lightweight, simple interior design for the All-New MX-5, storage compartments were designed to maximise ease of use.

> Floor console area

There is an open space in front of the shift knob with an integrated hub that includes a USB port.

A box with a lid located at the rear of the floor console provides handy storage and easy access for items such as sunglasses.

The All-New MX-5 features a pair of Detachable Cup Holders. Either can be attached to the front of the console (by the passenger's legs) or in one of two locations in the rear, making it possible to position them depending on the number of cabin occupants.



The positions for the cup holders are carefully designed so they will not interfere with gear shift action, even when they are holding a beverage.

The rims of these cup holders are made from Mazda Biotechmaterial, a newly developed bio-based engineering plastic that requires no paint to achieve a high-quality finish surpassing that of conventional painted plastic.

It is the first time that Mazda has used this specific kind of bioplastic material on an interior part in its products. It is made with a plant-derived material that both lowers impact on the environment and yields higher quality interior parts.

> Around the seats

The console box positioned between the seats has a lid that can be locked for added security when leaving the car unattended for a short while the top is down.

Additional storage boxes on the rear side of the seatbacks provide convenient space for storing items used regularly, such as a sun shade, etc.

BOOT

Although the rear overhang of the All-New MX-5 is shorter than that of the previous model, the length and height of the luggage compartment's bottom section were increased

to make the space more practical to use.

- > While the overall luggage capacity is reduced from the 150L (DIN) of the previous model to 130L (DIN), the luggage compartment is 35mm longer and 36mm deeper. As a result, its trunk can now accommodate a pair of 550mm x 400mm x 220mm soft-sided carry-on bags
- > Variations in protrusions and recesses in the trim around the opening were minimised and the number of ridgelines reduced to produce a clean look of roominess in the boot

CONVENIENT NEW FUNCTIONS**> Fuel lid lock linked to the door lock mechanism**

Marking a first for the MX-5, a new system linked to the door lock mechanism replaces the release lever previously located inside the cabin. The fuel lid lock is released when the driver unlocks the door, allowing the lid to be opened and closed by hand.

> One-touch power window control for both seats

There is a one-touch button on both sides of the All-New MX-5, including an additional control on the driver's side, so that the windows can be opened and closed with ease.

THE MZD CONNECT CAR CONNECTIVITY SYSTEM

This system makes it safer and easier to take advantage of functions including internet connectivity and access to social networking services, even when in transit.

It does not require hardware upgrades to take advantage of the latest services available, so is fully capable of supporting the ongoing hardware and software evolution of today's communication devices.

A menu of the various available functions is displayed on the seven-inch centre display and the customer accesses these by operating the commander control on the floor console, or by using voice commands. MZD Connect provides the following functions:

> Communication functions

The system allows hands-free telephone operation, and can also be used to receive and reply to short text messages.

It can read aloud the latest tweets in the customer's Twitter feed or the latest Facebook news feed entries, and allows the

customer to "like" Facebook entries or post audio messages using the Shout function

> Audio functions

The system is available with standard-equipment six-speaker configuration, or a nine-speaker Bose® premium sound system.

In addition to standard AM/FM radio, and in conjunction with the use of smartphone apps, it also offers access to web content such as Aha™ by HARMAN, Stitcher™ and Pandora®.

> Navigation functions

The navigation system uses data from an SD card.

When a smartphone is connected, the customer can also search the internet to find places they want to go.

In addition, the navigation software can use the smartphone's tethering capabilities to display the weather on route and live traffic.

**CAR AND DRIVER AS ONE**

Working under the keyword "sensations", the goal for All-New MX-5 is to simply create a car that will deliver the ultimate on-road experience while promoting fun and enjoyment.

Called *Jinba Ittai*, it is the driver and the car - via its suspension, body, powertrain and the latest advances in SKYACTIV Technology - working together in harmony, maximising the dynamic performance expected of a true sports car.

RESPONSIVE HANDLING PERFORMANCE

MX-5 designers focused on developing a responsive car that accelerated, decelerated, turned and cornered as per the expectations of one driving a lightweight rear-drive sports car.

One example is when decelerating as the car approaches a corner. The pitch centre of rear lift when braking coincides with the driver's position, enabling the driver to maintain a stable eye point.

Also, allowing the vehicle to lean forward moderately to form a diagonal roll position makes it easier for the driver to stay in touch with the car's behaviour.

Cornering performance is critically important so that the driver has the confidence in and understanding of the perfect feel and responsive nature of the All-New MX-5 as it steers into, steers and accelerates through and accelerates out of a corner.

HIGH-PERFORMANCE LIGHTWEIGHT SKYACTIV-CHASSIS**Front suspension system**

While continuing to use in-wheel double-wishbone for the front suspension, as did all its predecessors, a new suspension system was developed for the All-New MX-5.

Along with the goal of building a highly rigid and lightweight system, efforts went toward achieving geometric characteristics that optimized the turn-in ability and stability when braking in corners.

> Greater turn-in ability

The caster angle of the front suspension was changed to 8° from the 7° of the previous model. The negative camber effect when steering improves traction and reduces the amount of understeer to ensure excellent control characteristics while cornering.

> Greater stability when braking

The front suspension adopts a negative kingpin offset. Establishing characteristics that enable fine steering adjustments in the direction of travel stabilises vehicle behavior when braking, even in situations when the surface contact friction coefficient for the left and right wheels differs and braking tends to generate yaw.

Rear suspension system

While continuing to use the multi-link rear suspension, as did all its predecessors, a new system was developed for the All-New MX-5.

Creating a new truss structure for the crossmember creates a structure that is light and highly rigid.

The positioning of the rear links was also thoroughly reviewed, resulting in geometric characteristics that improve control when cornering.

> Improved control when cornering

The dampers are connected directly to the hub supports in order to give a 1:1 damper lever ratio in relation to the suspension stroke.

The mounting position of the dampers was also reconsidered and laid out to minimise changes the damper lever ratio, regardless of the stroke position. This improves the grip of the tyres.

The new rear suspension adopts a geometry that sets the axis of wheel deflection, rear of the point of contact, with the road surface in response to lateral input from the tyres.

From this, link positioning that uses lateral force from the tyres to increase toe-in, even when subjected to high lateral G-force when cornering, delivers greater stability.

Steering system

All-New MX-5 is the first Mazda car to adopt an Electric Power Assist Steering (Dual Pinion) system, which replaces the Hydraulic Power Assisted Steering (HPAS) system of the previous model.

The new system aims to deliver a steering feel with a light, responsive touch appropriate to an LWS, and to accurately transmit road input with a minimum of torque variation.

> The All-New MX-5 carries over the straight steering shaft positioning of its predecessors that gives a linear steering feel

- > Applying power assist directly to the steering rack near the wheel delivers plenty of rigidity when steering in the high G-force range
- > Aiming for linear response that matches human sensibilities and traits, the steering gear ratio is reduced approximately 4.3 per cent over the previous model

Brake system

While the brake system continues to employ ventilated discs in the front and solid discs in the rear, it was revised thoroughly to achieve greater control over

load shifts and provide greater stability.

- > Revision of the booster characteristics provides a brake feeling with linear response to operation in the low G-force range, and that demonstrates solid braking power under higher G-force loads
- > The new system also continues the dedicated efforts made on the previous model to give even smoother and more controlled braking

This includes a yet smoother link between longitudinal G-force and lateral G-force upon releasing the brake when decelerating, turning and accelerating during cornering.

LIGHTWEIGHT, HIGH RIGIDITY SKYACTIV-BODY

Applying all the knowledge acquired in developing SKYACTIV Technology to date, the development team built a new SKYACTIV-Body designed for an open-top LWS.

Based on the basic concept of using straight beams and creating a continuous framework wherever possible, the structure is built so the individual sections function in harmony.

In addition, the use of aluminium and high-tensile steel provides safety and rigidity, forming a lightweight open-top body that is responsive.

- > The high-mount backbone frame for the front tunnel section, a critically important component of an open-top body, was straightened and the size of its cross section was increased to build a strong structure

In addition, strengthening the subframe and crossmembers that connect the backbone to the front and rear frame

sections builds a structure that is lighter, safer and highly rigid.

- > Increasing the rigidity of the suspension supports comes thanks to a new ring structure that joins the front damper mounts and suspension mounts, which link to tyres and suspension, to the side sills and hinge pillars
- > Reinforcing material positioned on the rear suspension towers in the direction of its ridgelines suppresses rear deformation due to suspension input
- > A new structure that mounts the seats directly to the B-frame, a component of the framework, increases local rigidity and the stiffness of the seat rails
- > The rear wheel housing was changed to a horizontally divided structure, strengthening the joints to better handle the input to the lower section of the side sills that results from moving the rear suspension joints forward

NVH PERFORMANCE

Great effort went into reducing weight by more than 90kg over the previous model, while at the same time improving the NVH performance.

While also suppressing noise-generation, the All-New MX-5 adopts the same concept of efficiently blocking the penetration of noise into the cabin that is shared by all models in Mazda's new-generation product lineup.

High-frequency noises, such as road and wind noise, are reduced by approximately 40 per cent over the previous model.

The result is a comfortable cabin environment that enables the driver to enjoy the sporty engine sound and interaction with the passenger, whether the top is open or closed.

Reduced powertrain vibration and more direct feeling

- > Reducing the span between the engine mounts while softening the mount characteristics in the direction of engine roll, and stiffening them in other directions, results in a more comfortable ride and a reduction in powertrain vibration and noise
- > The cross section shape of the aluminium Power Plant Frame (PPF) that joins the transmission to the rear differential was improved by changing it from a reversed "Z" shape to a reversed "C" shape. The differential below the tunnel section is efficiently positioned, allowing seating closer to the centre of the car. It also reduces vibration in the powertrain and suppresses windup vibration

Reduced road noise

- > Precision CAE analysis tools and measurement devices were employed to help visualise the movement of the shock absorbers when driving. Having determined how the individual suspension parts affect road noise, the system was enhanced so the respective parts did not generate resonance between one another. This resulted in achieving handling stability and road noise performance at the same time, without increasing weight
- > Controlling the vibration characteristics of the various body panels results in an approximate 30 per cent reduction in low-frequency road noise over the previous model

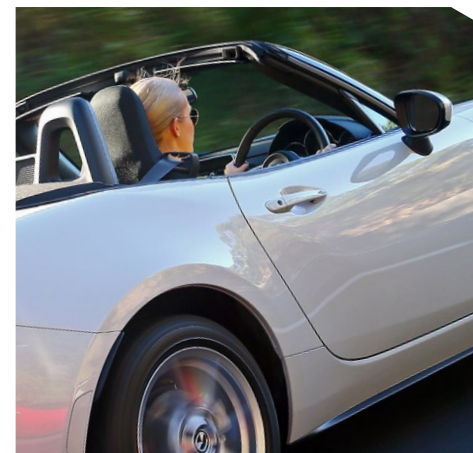
Reduced wind noise

- > Adoption of an aerodynamically efficient design for the rear edge of the bonnet, the A-pillars and header gives optimal flow of air. This reduces high-frequency wind noise around the windshield and side windows
- > Optimisation of the seatbelt mounting position suppresses the generation of noise caused by wind striking them when driving with the top down
- > The All-New MX-5 is the first Mazda to adopt the Partial Open/Close Function that automatically raises and lowers the side windows approximately 6mm to improve the sealing capability for the side windows when the doors are opened or closed with the top up. This suppresses the generation of noise around the side window when driving at high speed

Improved sound insulation

The All-New MX-5 adopts a header cover and aluminium header panel, to reduce noise when driving with the top up, by preventing the soft top from fluttering and improving sound insulation. By keeping the top taut and its surface smoother, the aluminium header panel presents a clean, beautiful roofline when driving with the top up.

For the first time, the soft top adopts a headliner and a rear package mat. Not only are these light in weight but they offer excellent sound absorption and insulation properties.

**PERFORMANCE THAT ENHANCES THE FEELING OF ONENESS BETWEEN AND DRIVER**

The All-New MX-5 follows in the tracks of its predecessors by offering a yet higher level of the direct response, expansive power output, engine sound, and shift and clutch feeling that distinguish an LWS.

The powertrain lineup consists of a 1.5-litre and 2.0-litre SKYACTIV-G direct-injection petrol engine paired with either a 6-speed SKYACTIV-MT manual transmission or 6-speed automatic transmission.

Delivering higher rpm and greater torque throughout its range, the 1.5-litre engine paired with the lightweight body enables a wide range of driving pleasure, from city streets to tight winding roads, and also on the racetrack.

The 2.0-litre engine produces more powerful low- to mid-range torque, and combines with the lightweight body to deliver ample performance for enjoying high-speed, high-load driving scenes.

SKYACTIV-G high-efficiency direct-injection petrol engine

The All-New MX-5 incorporates technologies from SKYACTIV-G engines used to date on front-wheel drive models such as Mazda3, namely the cavity pistons, high-tumble ports, multi-hole injectors and dual sequential valve timing (dual S-VT).

Most other parts, apart from the combustion chamber shape that offers highly efficient combustion, are designed exclusively for the MX-5.

The high compression ratio of 13.0:1 is used enabling linear performance and excellent fuel economy.

In addition, dedicated flywheel design for the 1.5 litre and 2.0 litre engine reduces inertia.

> SKYACTIV-G 1.5

When compared to the 1.5-litre engine for front-wheel drive models, changes to the cam timing, rotating parts, intake system and exhaust system raise the engine's red line to 7,500rpm while also increasing torque output throughout the engine's range.

The material for the custom-designed crankshaft was changed from cast iron to steel to support the engine's higher revolutions, and a full counterweight structure adopted.

Weight distribution was also adjusted to improve durability and NVH performance.

The engine combines with the lightweight body to deliver powerful acceleration and perfect power output that go beyond the maximum output and torque specifications noted in a catalog, while also giving fuel economy figures from 6.1L/100km.

> SKYACTIV-G 2.0

Torque output is significantly increased at low- to mid-range engine speeds when compared to the 2.0-litre engine from the previous model.

While providing a driving experience with plenty of torque, the engine also delivers fuel economy from 6.9L/100 kilometres (combined).

The engines adopt a new aluminum head cover that returns to the first- and second-generation models. Adopting a thinner material while maintaining NVH performance, keeps the weight of the head cover down.

Major engine specifications

	SKYACTIV-G 1.5	SKYACTIV-G 2.0
Type	In-line, 4-cylinder DOHC, 16-valve	
Displacement	1,496cc	1,998cc
Bore x stroke	74.5 x 85.8	83.5 x 91.2
Compression ratio	13.0:1	
Max. power	96kW @ 7,000rpm	118kW @ 6,000rpm
Max. torque	150Nm @ 4,800rpm	200Nm @ 4,600rpm
Redline	7,500rpm	6,800rpm
Fuel economy	6.1L/100km (manual)	6.9L/100km (manual)
	6.4L/100km (auto)	7.1L/100km (auto)

REDUCED RESISTANCE OF THE INTAKE AND EXHAUST SYSTEMS

From the fresh air duct through to the silencer, new intake and exhaust systems were developed exclusively for the new MX-5.

A concerted effort went into creating a lighter, more compact design, to reduce airflow resistance, and to tap the full potential of the engine's performance.

- > The intake system achieves a weight reduction of approximately 30 per cent over the previous model. At the same time, optimisation of the air cleaner capacity and air hose diameter results in a further reduction in resistance
- > A new air guide duct integrated into the fresh air duct uses the air blowing from the electric fan to effectively remove exhaust heat from the engine compartment. Without adding any parts, this made it possible to keep intake efficiency from dropping off due to heat

- > The structure of the 4-2-1 exhaust manifold is newly designed for the MX-5's rear-wheel drive layout and the overall length of the exhaust system is increased. Equalising the

interference of the combustion pressure waves makes it possible to achieve an ideal torque curve, while creating a pleasing exhaust note at low engine speeds

**IMPROVED RADIATOR COOLING EFFICIENCY**

The radiator of the previous model angled up toward the opening in the front grille. In the new model, standing it straight up made it possible to shorten the distance between the front edge of the bumper and the rear edge of the radiator by 240mm. Shortening the front overhang and moving the radiator, a relatively heavy part, closer to the car's centre of gravity helps enhance the car's ability to turn well.

- > A new air guide duct positioned between the inside of the grille and the radiator increases the efficiency of guiding air to the entire radiator. Adding flaps that open and close in response to the air pressure emitted by the electric fan, further improves cooling efficiency in the mid-to high-speed range
- > Cutting approximately 21mm from the height of the radiator and making it approximately 2mm thinner than the previous model has created a lighter and more compact cooling system

THE CORE OF A LIGHT PERFORMANCE FEELING: REFINING ACCELERATION

To increase accelerator performance to a level that enables the driver to hold down the accelerator pedal and have the engine rev up quickly and smoothly all the way to its red line, development of engine control focused on jerk (the change in acceleration with respect to time), when pressing the accelerator in everyday driving scenes.

By generating slightly more acceleration than the driver anticipates when first pressing the accelerator, the SKYACTIV-G engine provides a light, responsive feeling. The duration of how long the driver feels the change in acceleration is also extended.

Together with the lightweight body, these settings provide a pleasing sense of acceleration in response to accelerator pedal action, from low engine speeds through to the high rpm range.

NEWLY DEVELOPED SKYACTIV-MT MANUAL TRANSMISSION FOR A REAR-WHEEL DRIVE LWS

To further evolve its distinctive *Jinba-Ittai* driving experience, the All-New MX-5 introduces a newly developed 6-speed SKYACTIV-MT manual transmission.

Specifically developed for a front mid-engine, rear-wheel drive layout, designers went back to the drawing board and thoroughly re-examining the distribution of functions for every part of the transmission.

Direct-drive sixth-gear and simplified change link mechanism

Setting the gear ratio for direct-drive sixth gear to 1.000, and the direction of shift rod operation between fifth and sixth gears to operate in the same direction, eliminates the need for a turn-back mechanism on the shift rod.

In addition, the synchroniser mechanisms are all positioned on the main shaft and the change link mechanism is simplified, reducing the sliding resistance in the linkage as much as possible without losing the crispness of the shift feel.

The result is a direct feeling to shifts with a significant improvement in the feeling of “suction” (the shifter being drawn into the right position while shifting), a feeling of smoothness, and a feeling of lightness in the amount of operating force required to make the shift.

The direct-drive sixth gear lowers the final gear ratio, contributing to the building of a more compact rear differential unit and improving real-world fuel economy by lowering resistance when driving in sixth gear.

A lighter, smoother shift feeling

The new transmission retains the precision feeling of the previous model that earned high acclaim, while also aiming to achieve a lighter and smoother feeling to shift operations.

- > While the new transmission uses the same short 40mm shift stroke carried over since the first-generation MX-5, it adopts a direct shift change scheme that minimises sliding resistance in the linkage without losing the crisp shift feel. The result is an enhanced feeling of “suction,” smoothness, and lightness when shifting gears.

Development of a dedicated transmission oil

Newly developed for the All-New MX-5 is a dedicated transmission oil with a consistent viscosity that doesn't increase, even when the temperature drops.

This does away with the hassles of transmission oil that gets thicker and makes shifting more difficult in winter or in other cold weather situations.

Clutch optimisation

Significant exploration went into the use and further development of the clutch pedal on the All-New MX-5 with manual transmission.

The improved clutch enables the driver to control acceleration G-force as they like, making driving fun as they use the clutch to shift gears.

- > Understanding the amount of pedal stroke required led to the positioning of the pedal so that the release and then the engagement of clutch worked within

a perfect range. By adopting the optimal stroke length between the position of the pedal at rest and the engagement point allows rhythmical, light gear changes.

SIX-SPEED AUTOMATIC TRANSMISSION

The automatic transmission aims to deliver a direct shift feeling and excellent fuel economy, while Drive Selection provides an even more direct feeling to gear changes.

> Wider slip control and lock-up range

The new MX-5 adopts a lockup damper that easily absorbs the torque changes during lockup, while the wider lock-up range instituted improves the feeling of direct shifting.

In contrast to the lock-up control of the previous model that worked only in fifth and sixth gears, the All-New MX-5 has lock-up control from second gear up and slip control from third gear up.

This results in a more direct feeling in response to accelerator pedal operation and improved fuel economy.

> Blipping function

The 1.5-litre and 2.0-litre engine adopts a blipping function.

It automatically increases engine speed the instant the driver shifts down when using manual mode or direct mode with the transmission in Drive (“D”), adjusting engine rpm to match the selected gear.

The result is quicker shifts as well as better continuity and response in deceleration when shifting down.

The blipping function also operates when the transmission shifts down automatically while using Active Adaptive Shift (AAS) mode or Drive Selection's Sport mode, they operate when driving uphill or downhill with the transmission in Drive (“D”), or when taking a corner with quick accelerator pedal operation.

Blipping gives sportier gear shifts that come with a more dynamic engine and exhaust sound.

> Drive Selection

The 1.5-litre and 2.0-litre engine adopts Drive Selection.

When the Sport mode is selected, the transmission automatically preselects a lower gear.

By increasing torque output when the accelerator is pressed, it delivers more linear, powerful acceleration in response to even light accelerator pedal action.

Rear differential unit

The shape of the inside of the rear differential unit has been updated to create a smooth flow of oil from the stirring action of the rear differential gears.

In addition, using low viscosity oil reduces unit loss while driving by 27 per cent for the 1.5-litre MX-5 and 21 per cent for the 2.0-litre alternative over the previous 2.0-litre model.

The LSD also uses a newly developed ultra-compact and lightweight unit that places priority on delivering positive response and a direct feeling, improving the feeling of performance.

Sporty sound

A comprehensive effort to tune all aspects of the engine, intake and exhaust notes adds further polish to the engine sound that has been a trademark on all generations of the MX-5.

It is a lively sound with linear characteristics that suit the All-New MX-5.

- > Fine tuning was performed on the duration and volume of sound produced when the engine is started, specifically the sound from when it first turns over and until it fires
- > At low engine speeds up to 2,500rpm, a throaty exhaust note reverberates to emphasise the lively performance of a sports car
- > At mid-range engine speeds between 2,500rpm and 5,000rpm, the engine's own sound combines with the vibration characteristics of the differential mount to deliver a lively note accentuated by a pulsating sound expressing powerful performance. The weight of the differential mount was changed slightly and its vibration characteristics tuned for this purpose
- > Once the engine speed rises above 5,000rpm, it delivers a clear, linear sound free of rumbling that heightens the joy of driving and gives an impression of power
- > Compared to the previous model, the engine sound creates a greater difference between its volume when accelerating and decelerating, while reducing the amount of rumbling generated by the body resonating the sound

Induction Sound Enhancer (ISE)

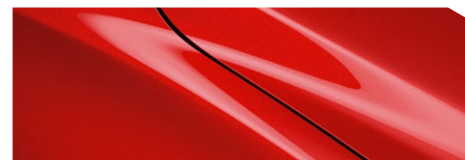
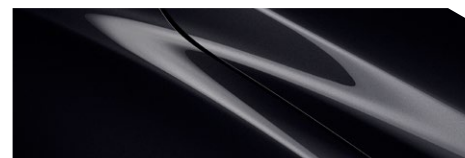
ISE amplifies the engine's natural induction sound and delivers it to the cockpit as a lively and pleasing note. An evolved version for the All-New MX-5 further heightens this effect.

Particularly at engine speeds of 5,000rpm and above, sounds in the 300Hz to 400Hz frequency range make it sound as though the engine could continue to increase its speed without limit.

- > Thorough revision of the system's overall length and pipe diameter, as well as its shape, materials and intake pressure characteristics, produce a lighter and more compact system
- > Moving the port used to convey the sound into the cabin from the upper part of the cowl to the lower part of the dash panel, where it is closer to the occupants, improves the sensation that the sound is being delivered directly
- > A new extended chamber filled with sound absorbing material is mounted in the engine compartment to eliminate rumbling. This amplifies only pleasing intake sounds, heightening the enjoyment of the driving experience

**BODY COLOURS**

A choice of six striking colours

< **Soul Red Metallic**< **Ceramic Metallic**< **Crystal White Pearl Mica**< **Jet Black Mica**< **Meteor Grey Mica**< **Blue Reflex Mica**



Aiming to further advance the unique trait of open-top motoring, Mazda developed a new soft top that makes it easy to open and close and makes the owner want to drive with the top down.

To create a pleasant atmosphere when driving with the top down, the development team put extra effort into controlling the flow of air that reaches the cockpit so just the right amount of wind blows in.

The seats are also fitted with headrest speakers that deliver clear audio when driving with the top down, whether listening to music or communicating via hands-free phone.

OPENING AND CLOSING THE TOP

By introducing an assist spring that supports the driver's action when raising the top from a fully open position, the amount of force required for the task is cut almost in half when compared to the previous model. As a result, the top is much easier to open or close.

The All-New MX-5 introduces a new function that automatically lowers the windows by 140mm below the fully raised position when the lock levers are operated to open or close the top.

When the Top Lock is released in preparation to lower the top, the windows are lowered automatically.

Likewise, when the top is down and the unlock lever is released, the windows automatically lower once the front edge of the top passes the area above the occupants' heads.

Automating part of the process makes it easier and more convenient to open and close the top.

Note that the windows must still be closed manually once the top has been opened or closed.

To make it easier to open and close the top while seated, the All-New MX-5 adopts a seat structure that ensures the unimpeded upper body movement of the driver.

Specifically, the seat is built to provide a consistent level of hold from the thighs through the posterior, hips, and sides of the ribcage.

The driver feels firm support and a strong sense of oneness with the car at the waist,

while the bolsters are set to be less snug at the shoulder level. This leaves the shoulders free to move.

WEATHER-PROOFING

- > The draining capability of the drain cover is increased, and a removable debris collector replaces the fixed one used on previous models. Easily removed and cleaned, it prevents leakage due to clogging
- > Improved sealing performance of the weather stripping and rain rails prevents rain from leaking into the cabin

QUIETNESS AND WIND CONTROL WHEN DRIVING WITH THE TOP DOWN

The soft top for the All-New Mazda MX-5 enhances sound insulation performance by adding a new header cover, aluminium header panel and a headliner.

Increased tension stiffness of the material when the top is up keeps it from flapping while driving to deliver a quieter ride.

When driving with the top down and the windows wide open, the body design combines with the rearward placement of the front header – that frames the

heads of the cabin occupants, flowing through to the rear of the car.

This minimises the amount of wind directed into the cockpit and onto the faces of the occupants. At the same time, changes to the shape of the upper door trim and a more compact front quarter window design actively guides a refreshing breeze to the mid torso.

AUDIO SYSTEMS

> Standard system

Soft dome tweeters are positioned at the base of each A-pillar and 6.5-inch wide range speakers are mounted in each of the doors.

Vehicles are also equipped with a pair of 45mm headrest speakers on the driver's side that make listening to audio more pleasant and also deliver clearer sound during hands-free phone conversations.

> Bose® premium sound system

Aiming to produce quality sound whether the top is up or down; Mazda worked with Bose® to jointly develop an exclusive audio system for the All-New MX-5.

In addition to the six speakers used by the standard-equipment system, the premium sound system includes a subwoofer positioned behind the dashboard at the foot of the passenger side and a pair of headrest speakers on the passenger seat.

The nine speakers with differing frequency ranges, that comprise this high performance system, are paired with a high-efficiency seven-channel hybrid amplifier to deliver clear sound with a wide reproduction range.





THE HUMAN-CENTRIC PERSPECTIVE OF MAZDA PROACTIVE SAFETY

Based on Mazda's safety philosophy, Mazda Proactive Safety¹, every effort was dedicated to maximising the range with which the driver can drive safely and confidently.

Passive safety features include a version of Mazda's high-strength SKYACTIV-Body that was newly developed for use on a front-engine rear-wheel drive open-top car.

While weight reduction was a key focus, great effort went into ensuring both excellent impact absorption performance and a high level of structural strength.

At Mazda, driver and passenger safety is as important as the protection of pedestrians.

The goal was to deliver truly excellent safety performance that makes the MX-5 capable of earning high-level ratings in collision tests around the world.

¹ Mazda Proactive Safety

Mazda's safety philosophy that aims to minimise the risks that can lead to an accident and maximise the range of conditions in which the driver can safely operate the vehicle. The various technologies it provides supports the driver to act appropriately through all driving processes, including cognition, judgment, and operation. It thereby helps prevent or minimise damage in the event an accident cannot be avoided. Mazda Proactive Safety will continue to evolve in the future.

PASSIVE SAFETY

High-strength SKYACTIV-Body

The All-New MX-5 adopts Mazda's SKYACTIV-Body, which uses straight beams wherever possible and a continuous framework that makes the individual sections function in harmony, while reworking them for application on a front-engine rear-wheel drive open-top car. The result is a high-strength body that features high rigidity, light weight and excellent collision safety performance.

In particular, a wide variety of measures implemented on the body structure, and the materials used to build it, aim to maximise absorption in the event of an accident despite the car's short front and rear overhangs.

Measures to protect against frontal impact

The SKYACTIV-Body's multi-load path structure effectively disperses and absorbs the impact force of a frontal collision.

Impact energy is dispersed vertically in two directions and absorbed by the upper path, which employs a cross-shaped structure for the crush cans and front frame members, and the lower path, which incorporates an impact-absorbing extension on the front suspension crossmember.

In addition, the upper and lower paths form a straight, uninterrupted architecture that disperses and absorbs energy across the side sills, B-frames and tunnel section to reduce the chances of cabin deformation.



The body introduces the use of high-strength hot-stamped steel and 1,180MPa ultra-high-tensile steel around the centre of the cabin, along with 7000 series high-strength aluminium in the front bumper beam.

The application of these materials reduces weight while at the same time achieves greater strength around the cabin area.

Specified front-end parts deform to absorb impact energy in a relatively light frontal impact at a low speed, thereby limiting the damage suffered to the engine compartment.

Using bolts to fasten these parts makes them easy to replace and minimises the cost of repairs.

MEASURES TO PROTECT AGAINST SIDE IMPACT

Mazda's fixed-roof vehicles employ an uninterrupted ring structure that joins the roof and B-pillars to the underbody.

To achieve the same on an open-top car, the All-New MX-5 adds new seatback bars, positioned directly above the crossmember, that joins the right and left sides of the body at the rear edge of the side sills.

This forms a structure that firmly takes the load of side impact, with the entire body absorbing the energy.

The shape of the reinforcing brackets for the seatback bar also adopts numerous ridges that help disperse the input to the crossmember.

In addition, 1,180MPa ultra-high-tensile steel is used on the side sills, while steel pipe and reinforcing material are added to the inside of the A-pillars increase their strength.

MEASURES TO PROTECT AGAINST REAR IMPACT

Measures taken to protect against rear-end impact began with the adoption of a double-hat-section structure on the rear side frames, and the use of 590MPa high-tensile steel on their upper sections, resulting in increased resistance to deformation over the previous model.

Deformation control beads are also positioned in four locations on the rear edge of the rear side frame members to absorb impact energy in stable fashion.

The rear suspension and a large section kick-up structure on the rear side frames form a multi-load path that protects the cabin and petrol tank.

By using the rear side frames and rear suspension to disperse and absorb rear impact energy, the multi-load path structure helps prevent deformation of the body.

The rear bumper on the All-New MX-5 adopts a 7000 series high-strength aluminium beam. It secures a high level of rigidity, while also contributing to a significant reduction in weight.

A COMPLETE LINEUP OF SAFETY EQUIPMENT

The All-New MX-5 adopts a wide variety of safety mechanisms and equipment designed to reduce the chances of harm to occupants, or secondary injuries, in the event a collision does occur.

> Seatbelts

Both seatbelts are equipped with a pretensioner that tightens the belts in the initial moment of a collision and a load limiter that subsequently loosens the belt

in a controlled manner to lighten the load received by the occupant's chest.

The driver's seat includes a double pretensioner that tightens both the lap and shoulder belts at once to mitigate injuries to the driver.

> SRS front airbags

Front airbags are standard equipment for both seats on all grades.

The driver's seat features compact airbag modules. Measuring just 140mm in diameter, it is the product of a dedicated effort to optimise the stowing method and deployment behavior so the module would fit within the small-diameter steering wheel.

> SRS side airbags

Dedicated efforts to ensure quick and appropriate deployment when impact is detected includes a new bracket mounted in the outside shoulder of the seat.

> Crushable steering shaft

The crushable steering shaft helps secure space for the driver to shift by moving forward, away from the driver, while absorbing impact energy in the event of frontal impact.

> Non-intrusive brake pedal and improved footrest

The use of a non-intrusive brake pedal and a footrest design that firmly supports even the driver's heel helps mitigate injury to the legs if an accident occurs.

> Door trim construction

The door trim construction employs a catch structure, on the backside of the door

switch panels' rear edge that prevents the panels from coming loose and exposing dangerous edges or protruding parts in the event of a side collision.

> Seat structure

The seats perfectly position the occupant, while giving control to the upper body and head, in the event of impact from the rear, supporting and mitigating shock to the neck.

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

PEDESTRIAN PROTECTION

The All-New MX-5 features a further evolved Active Bonnet design that raises the bonnet the instant impact with a pedestrian is detected, quickly securing space between the bonnet and the parts within the engine compartment.

A newly developed sensor and ECU system for the new MX-5 allowed the development team to lower the bonnet 27mm, over the previous model, at the rear edge of its centre section.

The number of sensors mounted on the face of the bumper were increased from four to six.

At the same time, the bonnet's inner structure adopts a horizontally oriented frame layout that effectively absorbs impact energy. Impact-absorbing beads were also added above the engine.

To help reduce the amount of impact received by a pedestrian's knees in the event of an accident, energy-absorbing

foam is used in front of the front bumper beam.

In addition, a lower stiffener added to the bumper helps keep the pedestrian's legs from sliding under the front of the car.

These measures combine to provide a high level of protection to the legs of pedestrians, despite the short front overhang of the All-New MX-5.

MAZDA'S NEW-GENERATION HUMAN-MACHINE INTERFACE (HMI)

As with all the cars in Mazda's new-generation product lineup, the All-New MX-5 adopts Mazda's new-generation HMI, which places safety as its top priority.

The cockpit design is based on the Heads-up Cockpit concept, which aims to help drivers process large amounts of information while maintaining the correct driving position and concentrating on driving safely.

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

> Meters

The three-meter cluster for the All-New MX-5 features a large analog tachometer positioned in the centre.

The meter on the right that houses the speedometer also displays information related to driving conditions and safety equipment, while the digital display on the left displays the fuel gauge, water temperature, fuel consumption rate, and other information critical to the car's condition.

Indicators are neatly laid out in a manner that enables the driver to concentrate on driving.

To avoid being distracting, indicators that are normally lit are located in areas outside the tachometer and only warnings of relative urgency displayed within the tachometer.

> Seven-inch centre display

An independent seven-inch display is mounted on the top of the dashboard of vehicles with MZD Connect. Positioning the displayed information at the right height and distance contributes to minimising visual distraction time.

> Commander control

The commander control switch is positioned where the driver can access it simply by lowering one hand from the steering wheel to the floor console in a natural motion. This allows the driver to operate the controls without taking their eyes off the road.

> Voice control

The driver can control a number of functions simply by using spoken commands. This includes the audio system's play, stop and skip functions, as well as zoom in and out for the navigation system's map displays.

Because the driver need not remove their hands from the steering wheel or move their eyes away from the road, voice control enables them to concentrate on driving safely.

HISTORY OF THE MAZDA MX-5

A PERPETUAL QUEST FOR DRIVING PLEASURE THAT'S ACCESSIBLE TO ALL

Mazda unveiled the first-generation MX-5 at the Chicago Auto Show on 9 February 1989. At that time, virtually no lightweight open-top sports cars were available.

The segment, which had blossomed in England in the latter half of the 1940s, gained popularity thanks to the agile handling, characteristic style and affordability of such vehicles.

But after the 1960s, with the market focused more on safety and comfort, these cars had all but disappeared.

The aim of the engineers and designers at Mazda who produced the first-generation model was simple: To bring back a fun-to-drive lightweight sports car for people around the world like themselves - people who love cars and love to drive.

To build a car that satisfies this passion for driving, they developed the MX-5 based on the principle that it would combine a lightweight, compact open-top two-seater

body with a front-midship engine, rear-wheel drive configuration, a 50/50 front-rear weight distribution, a low yaw inertia moment and an affordable price.

The simple, familiar nature of its compact sports car styling, the light feeling and faithful, linear response Mazda defined as *Jinba-Ittai*, and the open feeling it offered resonated with car lovers around the globe.

It soon won a number of awards, gained widespread popularity, and fan clubs big and small began to spring up worldwide.

The second-generation model was revealed at the Tokyo Motor Show in October 1997, and the third-generation model debuted at the Geneva Motor Show in February 2005.

Production reached 950,000 units in 2014. In doing so the MX-5 broke its own Guinness World Record as the world's bestselling two-seater sports car, a title it first achieved in May 2000.

MAZDA MX-5 HISTORY

1983		Mazda begins considering the development of an open-top lightweight sports car
	NOV	Development project begins
1986	FEB	Development for mass production begins
1987	SEP	Final design is set
1989	FEB	World debut of the Mazda MX-5 at the Chicago Motor Show
	MAY	Sales begin in the U.S.
	SEP	Sales of the Eunos Roadster begin in Japan
	OCT	Sales begin in Australia
1990	FEB	Sales begin in Europe (U.K. and the Netherlands)
1993	JUL	Minor revision: Updated product with 1.8-litre engine replaces the 1.6-litre engine
1997	OCT	Second-generation Mazda MX-5 debuts at the Tokyo Motor Show
1998	DEC	Mazda MX-5 10th Anniversary Model introduced
		> A special limited edition model with the same specifications worldwide to commemorate the model's 10th anniversary
		> Production numbers: 7,500 units worldwide (500 for Japan and 7,000 divided between North America, Europe and Australia)
2000	MAY	Certified by the Guinness World Records as the world's bestselling two-seater sports car (total production of 531,890 units)
	JUL	Minor revision to the second-generation MX-5
		> Significant improvements to the product, including changes to both the exterior and interior, improved output from the 1.8-litre engine, increased body rigidity, etc.
2005	MAR	Third-generation Mazda MX-5 debuts at the Geneva Motor Show
	MAR	Mazda MX-5 3rd Generation Limited Edition premieres at the New York International Auto Show to celebrate the debut of the third-generation MX-5 (Production limited to 500 units)
	APR	Guinness record updated after production reaches 700,000 units
2007	JAN	Total production reaches 800,000 units

2008	OCT	Minor revision to the third-generation MX-5
		> Improvements include changes to both the exterior and interior, enhanced output from the 2.0-litre engine, increased body rigidity, etc.
2009	JUL	Mazda MX-5 20th Anniversary Model goes on sale
2011	FEB	Total production reaches 900,000 units
2013	JUN	Second record in Guinness World Records: largest parade of Mazda cars (683), achieved by Mazda MX-5 at the RDW Test Centre in Lelystad, Netherlands, on 15 June 2013
2014	APR	Chassis of the fourth-generation Mazda MX-5 and Mazda MX-5 25th Anniversary Edition debut at the New York International Auto Show
		> A special limited edition with the same specifications worldwide to commemorate the model's 25th anniversary
2014	SEP	Fourth-generation Mazda MX-5 unveiled simultaneously in Japan, the U.S. and Spain



MAZDA MX-5 AWARDS LIST**Third-generation MX-5**

Year	Country/Region	Award
2013	U.S.A.	U.S. News Auto Rankings: #1 in Affordable Sports Cars (2014)
2013	Chile	Chilean Car of the Year 2014: Sport Car of the Year 2014
2013	U.S.A.	2013 U.S. IQS Compact Sporty Car segment award
2012	Canada	Golden Key: Best sports car - under \$50,000
2012	Canada	Le Guide de l'auto (the Car Guide): Best new roadster under \$50,000
2012	Canada	2013 Convertible of the Year: Mazda MX-5 (The 4th annual Auto123.com Awards)
2012	U.S.A.	KBB.com: 10 Best Road Trip Convertibles
2012	Indonesia	2012 Autocar Indonesia Reader's Choice Awards: Favorite Convertible
2012	Germany	AutoBild: Best brands in all categories
2012	Singapore	Singapore Car of the Year 2011 (SGCM EDITOR'S PICK)
2012	Germany	First Place, sports car category (up to 50,000 km and 100,000 km), in the DEKRA used car report 2012
2011	U.S.A.	Car and Driver: 10 Best Cars of 2012
2011	U.K.	Auto Express: New Car Awards Best Roadster 2011
2011	U.K.	J.D. Powers Customer Satisfaction Surveys 2011: Winner, sports car segment
2011	Hungary	Playboy Car of the Year 2011: Open-top sports car category
2011	U.K.	CarBuyer Car of the Year 2011: Best Convertible
2011	U.S.A.	2011 J.D. Power U.S vehicle dependability study: Highest ranked compact sporty car
2010	U.S.A.	Car and Driver: 10 Best Cars of 2010
2010	Germany	Auto Trophy 2010: Best imported convertible under 30,000
2010	U.K.	2010 UK Vehicle Ownership Satisfaction Study: Best sports car
2010	U.S.A.	Edmunds 2010 lowest True cost to own vehicles: Convertible under \$35,000
2010	Slovakia	Auto Motor a Sport: Best cars 2010 (B-section)
2009	Germany	Auto Trophy 2009: Best imported roadster/convertible under 30,000

Year	Country/Region	Award
2010	U.S.A.	Edmunds 2010 New Car Buying Guides: Top recommended convertibles under \$25,000
2010	U.S.A.	Cars.com: Play Car of the Year 2010
2009	U.S.A.	Car and Driver: 10 Best Cars 2010
2009	Australia	Wheels Gold Star Cars Awards: Best Sports Roadster under \$150,000
2009	Ireland	New car magazine 2009: Best roadster
2009	U.K.	Auto Express New Car Awards: Best Roadster 2009
2009	U.S.A.	Consumer Reports Top Picks 2008: Fun to Drive
2008	Philippines	2008 Philippines Car of the Year: Sexiest Car Award
2008	U.K.	Auto Express Used Car Honours 2008: Best Roadster
2008	U.K.	Auto Express New Car Honours 2008: Best Convertible
2008	U.S.A.	Road and Travel 2008 Annual Sexy Car Buyer's Guide: Top ten
2008	U.S.A.	J.D. Power Initial Quality Study 2008: Highest-Ranked Compact Sporty Car
2008	Thailand	Thailand Car Of The Year 2008: The Best Roadster
2008	U.S.A.	Consumer Reports Top Picks 2008: Fun to Drive
2008	Canada	World of Wheels Editor's Choice: Best Convertible of 2007
2007	Germany	Auto Trophy 2007: Best imported convertible under 30,000
2007	U.S.A.	Car and Driver: 10 Best Cars 2008
2007	U.S.A.	Edmunds 10 Most Affordable Convertibles 2007 (1st place)
2007	U.S.A.	Luis Vuitton: Top Ten Sports Cars
2007	Scotland	Scottish Car of the Year 2007: Best Drop-Top
2007	U.S.A.	J.D. Power U.S vehicle dependability of 2004 model year (Compact Sporty Car)
2007	Thailand	Thailand Car of the Year 2007: Best roadster
2007	U.S.A.	Consumer Reports Top Picks 2007: Fun to Drive
2007	U.S.A.	2007 Cars.com Lifestyle Awards: Best Deal for Empty Nesters

Year	Country/Region	Award
2006	U.K.	Top Gear Awards: Roadster of the Year 2006
2006	Australia	Drive Car of the Year 2006: Best Convertible
2006	U.S.A.	Environment Protection Agency: Most Efficient Two Seaters 2007
2006	Scotland	Scottish Car of the Year: Best Drop-Top
2006	U.S.A.	Edmunds Editor's Most Wanted Awards: Convertible under \$25,000
2006	New Zealand	National Business Review: Sports Car of the Year
2006	Australia	Wheels Automotive Design Awards: Overall Outstanding Automotive Design
2006	Germany	autoscout24.com Internet Auto Award 2006: Best Imported Convertible
2006	U.K.	Auto Express New Car Honours: Best Roadster
2006	U.S.A.	Forbes Best Convertibles 2006: Best entry-level roadster
2006	U.S.A.	Forbes Best Cars for the Bucks 2006: Best Convertible For The Bucks
2006	World	2006 World Car of the Year: one of the top three finalists
2006	U.K.	Auto Express: Best used Roadster money can buy
2006	Canada	World of Wheels: Best Sport Coupe/Convertible
2006	Thailand	Thailand Car of the Year 2005: Best Roadster
2006	New Zealand	Driver Magazine: Driver Sports/Performance Car of the Year
2006	Hungary	Playboy Car of the Year 2006: Sports Car/Convertible (price value category)
2006	U.S.A.	Car and Driver: 10 Best Cars of 2006
2006	Hong Kong	Car and Driver: 10 Best Cars of 2006
2006	U.S.A.	Playboy: Most Fun on Wheels
2006	Australia	Wheels 2005 Car of The Year
2006	U.K.	What Car? Car of the Year 2006: Best open-top
2006	New Zealand	2005 New Zealand Car of the Year
2006	JAPAN	Sport Nippon: King of Car
2005	Croatia	2006 Roadster of the Year
2005	New Zealand	2005 New Zealand Herald Car of the Year

Year	Country/Region	Award
2005	U.S.A.	Car of the Year 2006 Top 10
2005	U.S.A.	Car and Driver: 10 Best Cars 2006 (Best Roadster)
2005	JAPAN	Fashion Colour Award (Galaxy Grey Mica Body Colour/Tan Interior Colour)
2005	JAPAN	Goods of the Year (Vehicle Category)
2005	JAPAN	Best Design Award
2005	U.K.	Top Gear: Roadster of the Year 2005
2005	JAPAN	RJC Car of the Year 2006: 2nd Place
2005	JAPAN	Car of the Year Japan 2005-2006
2005	Canada	Golden Key: Best Sports car under \$50,000
2005	U.S.A.	Best Buy in Sport/Performance Car Class
2005	JAPAN	2005 Good Design Award (G-mark)

Second-generation MX-5

Year	Country/Region	Award
2005	U.K.	2006 Auto Express Used car Honours: Best Used Roadster Money Can Buy
2004	U.K.	Autocar: Excellent Second Hand Buy
2004	Thailand	Thailand car of the Year 2004: Best Roadster
2004	Denmark	Bil Magasinet: Best Roadster
2003	Israel	Auto Magazine: 2003 Sports Car of The Year
2003	U.K.	Autocar: Best Handling Car
2003	Portugal	Best Speed trophy in Portugal
2003	Thailand	Thailand Car of the Year 2003: Roadster
Year	Country/Region	Award
2003	Denmark	Bil Magasinet: Best Roadster
2003	New Zealand	Best Mid-Size Car
2002	Australia	Wheels: Most significant car of the 1980s
2002	Hungary	Playboy Car of the Year
2002	Thailand	Thailand Car of the Year 2002: Roadster

Year	Country/Region	Award
2001	Portugal	Best Speed trophy in Portugal
2001	U.K.	Autocar: Top 10 Performance Car
2001	JA	Auto Colour Award 2001 Grand Prix
2001	U.K.	Auto Express Used Car Awards: Best Roadster
2001	Canada	Automobile Magazine's only "11 time All-Star winner"
2001	U.S.A.	Car and Driver: 10 Best
2000	U.S.A.	Consumer Reports Top picks for 2000: Fun to Drive
2000	U.S.A.	Automobile Magazine 2000 All Star
2000	U.S.A.	Motor Week TV Driver Choice Award: Best Convertible
2000	U.S.A.	IntelliChoice 2000 Best Overall value of the Year Award: Best Base Sport model
1999	U.S.A.	Sports Compact Car: Eight Great Rides
1999	U.K.	Used Car Buyer: Best Sports Car under £10,000
1999	U.K.	Good housekeeping: Sports & Coupe winner
1999	U.S.A.	Consumer Reports: Best Buy
1999	U.K.	Auto Express: Used Car winner Sports car
1999	U.S.A.	Automobile Magazine 1999 All Star Best Entry -Level Sports Car
1999	U.S.A.	Car and Diver: 1999 Ten Best Cars
1998	U.K.	Autocar & Motor: Best Sports Car
1998	U.S.A.	Car and Driver: 1998 Ten Best Car
1998	Scotland	Scottish Sports Car of the Year
1998	U.S.A.	Consumers Digest: Best Buy
1998	U.K.	IBCAM Auto Design Award
1998	U.K.	Auto Express: 1998 Best Convertible Car
1998	New Zealand	NZ Autocar Magazine: Sports Car of the Year
1998	U.K.	Autocar: 1998 Best Sport Car
1998	U.S.A.	Consumer Digest: Best Buy in Sport Coupes/Sedan Category

First-generation MX-5

Year	Country/Region	Award
1997	Australia	Wheels Magazine Top 10 of '97
1997	Israel	Auto Magazine 1997 Sports Car of the Year
1997	U.S.A.	Automobile Magazine 1997 All-Stars
1996	Australia	Wheels Magazine Top 10 of '96
1996	Israel	Auto Magazine 1996 Sports Car of the Year
1996	U.S.A.	Consumer Digest: Best Buy in Sport Coupes/Sedan Category
1996	U.S.A.	Automobile Magazine The Ten Most Significant Automobiles From the First Ten Years: Perfect Ten
1996	U.S.A.	Consumer Reports: 1996 Cars Reliability, Sports/Sporty Cars Category (2nd Place)
1996	U.S.A.	Consumer Reports: MY96 Most Fun to Drive Car
1996	U.S.A.	IntelliChoice: Best Value in the Base Sports Car
1996	Israel	Auto Magazine: Car of The Year
1996	U.S.A.	Automobile Magazine 1996 All Stars
1995	Australia	Wheels Magazine Top 10 of '95
1995	U.K.	Auto Express: Best Sports Car in 1995
1995	U.S.A.	J.D. Power: Most Problem-Free in Class
1995	U.S.A.	Automobile Magazine: 1995 All Stars
1994	Australia	Wheels Magazine: Top 10 of '94
1994	U.S.A.	Automobile Magazine: 1994 All Stars
1993	Australia	Wheels Magazine: Top 10 of '93
1993	Germany	Auto Motor und Sport readers' poll: Best Import Convertible
1993	U.S.A.	Automobile Magazine: 1993 All Stars
1993	Germany	Auto Trophy 1993 Best Fun Car
1992	Australia	Wheels Magazine: Top 10 of '92
1992	Australia	Best Buys of 1992 Sports Car under \$47,280
1992	Germany	Auto Motor und Sport readers' poll: Best Import Convertible
1992	U.S.A.	Automobile Magazine: 1992 All Stars

Year	Country/Region	Award
1992	Germany	Auto Trophy '92 Best Fun Car (readers' poll)
1992	U.S.A.	Car and Driver: Ten Best Cars
1991	Australia	Wheels Magazine: Top 10 of '91
1991	Hong Kong	Automobile Magazine: Best Five Exterior Design Award
1991	Australia	Best Sports Car under \$45,000
1991	U.S.A.	Motorweek TV: Driver's Choice Awards
1991	U.K.	What Car? Best Sports Car of the Year '91
1991	Germany	Auto Motor und Sport readers' poll: Best Import Convertible
1991	Germany	Auto Trophy '91 readers' poll: Best Fun Car
1991	U.S.A.	Playboy: Sexiest Car For Your Girlfriend
1991	U.S.A.	Automobile Magazine: 1991 All Stars
1991	U.S.A.	Car and Driver: Ten Best Cars 1991
1990	U.S.A.	Road & Track: Ten Best Cars in the World & Best Sports/GT (\$13,000-21,000)
1990	Australia	Wheels Magazine: Top 10 of '90
1990	New Zealand	Car of the Year '90
1990	Australia	Best Sports Car
1990	Denmark	Prize of Honour '91
1990	U.S.A.	Motor Trend: Top Ten Trouble-Free Cars
1990	U.K.	Buying Cars: Best Value Sports Car of the Year
1990	U.K.	Middlesborough North Eastern Gazette: Sporting Car of the Year
1990	U.K.	Newcastle Journal: Best Sports Car
1990	U.K.	Autocar & Motor: Best Handling Car in the World
1990	U.S.A.	J.D. Power Initial Quality Study: Most Trouble-Free Sports Car
1990	U.S.A.	Motorweek TV: Best Sports Car, Driver's Choice Awards
1990	U.S.A.	Edison Best New Products
1990	U.S.A.	Playboy: Most Fun to Drive, Cars for 1990
1990	U.S.A.	Motor Trend: 1990 Import Car of the Year (2nd place)
1990	JAPAN	Cosmopolitan Best Car '89: Best New Model

Year	Country/Region	Award
1990	JAPAN	Super Goods of the Year '89: Golden Award
1990	Australia	Modern Motor: Best Car '89/90 & Best Sports Car '89/90
1990	Germany	Auto Motor und Sport readers' poll: Best Import Convertible
1990	JAPAN	Best Car: Grand Prix Exterior
1990	U.S.A.	TIME Best and Worst of the Year '89 : Best (one of)
1990	U.S.A.	Newsweek Best of the Decade: Best Design (one of)
1990	U.S.A.	Business Week: Best Products of '89
1990	Australia	Car Australia: Best Sports Car 1989
1990	Australia	Car Australia: Car of Australia '89
1990	Australia	Modern Motor: Best Car of 1989/90
1990	Australia	Wheels Car of the Year 1989
1990	U.S.A.	1990 Automobile of the Year (inaugural award)
1990	U.S.A.	Car and Driver: Ten Best Cars
1990	JAPAN	Nikkei: Design of the Year
1989	JAPAN	Trendy Goods '89 Grand Prize (hobby & play category)
1989	U.S.A.	Life: Hot Products for 1990
1989	U.S.A.	Business Week: The holiday gift-giving section
1989	U.S.A.	Automotive News: Coupe of the Year
1989	JAPAN	Best Sporty Car, Kings of the Cars '89
1989	JAPAN	Promoters' Cup, My Best Choice '90
1989	Australia	Wheels Magazine: Top 10 of '89
1989	U.S.A.	Popular Science: Best 100 Products
1989		First prize, Smash Hit Goods '89
1989	U.S.A.	Motor Trend: Top Ten Import Buys '90
1989	U.S.A.	Road & Track: Five Best Cars in the World (inaugural awards)
1989	U.S.A.	Autoweek: Most Fun, Chicago Auto Fair awards

MX-5 SPECIFICATIONS

POWERTRAIN		1.5L I4 Petrol	2.0L I4 Petrol
Bore and stroke (mm)		74.5 x 85.8	83.5 x 91.2
Compression ratio		13.0 : 1	13.0 : 1
Drivetrain		RWD	RWD
Emissions standard		Euro stage V	Euro stage V
Engine capacity (cc)		1,496	1,998
Engine type		1.5 litre in-line 4 cylinder 16 valve DOHC S-VT petrol (SKYACTIV-G) engine	2.0 litre in-line 4 cylinder 16 valve DOHC S-VT petrol (SKYACTIV-G) engine
Fuel consumption (l/100km) ¹ :	Manual (combined)	6.1	6.9
	Auto (combined)	6.4	7.1
Fuel system		Electronic direct injection	Electronic direct injection
Fuel tank capacity (litres)		45	45
Gear ratio - Manual/Auto:	1st	5.087 / 3.538	5.087 / 3.538
	2nd	2.991 / 2.060	2.991 / 2.060
	3rd	2.035 / 1.404	2.035 / 1.404
	4th	1.594 / 1.000	1.594 / 1.000
	5th	1.286 / 0.713	1.286 / 0.713
	6th	1.000 / 0.582	1.000 / 0.582
	Reverse	4.696 / 3.168	4.696 / 3.168
	Final drive	2.866 / 4.100	2.866 / 3.454
Maximum power (kW @ rpm)		96 @ 7,000	118 @ 6,000
Maximum torque (Nm @ rpm)		150 @ 4,800	200 @ 4,600
Recommended fuel		Premium unleaded (95RON or higher)	Premium unleaded (95RON or higher)
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)

MODEL AVAILABILITY

		Roadster	Roadster GT
2-seat Convertible:	1.5L I4 Petrol RWD / 6-speed manual	•	•
	1.5L I4 Petrol RWD / 6-speed automatic	•	•
	2.0L I4 Petrol RWD / 6-speed manual	•	•
	2.0L I4 Petrol RWD / 6-speed automatic	•	•

• = Standard, - = Not available

CHASSIS

		Roadster	Roadster GT
Brake diameter (mm):	Front	1.5L I4 Petrol RWD 258	258
		2.0L I4 Petrol RWD 280	280
	Rear	1.5L I4 Petrol RWD 255	255
		2.0L I4 Petrol RWD 280	280
Brake type:	Front	Ventilated disc	Ventilated disc
	Rear	Solid disc	Solid disc
Steering type		Double-pinion electric power assist steering	Double-pinion electric power assist steering
Suspension:	Front	Double wishbone	Double wishbone
	Rear	Multi-link	Multi-link
Turning circle kerb to kerb (m)		9.4	9.4
Tyre size	1.5L I4 Petrol RWD	195/50 R16	195/50 R16
	2.0L I4 Petrol RWD	205/45 R17	205/45 R17
Tyre index	1.5L I4 Petrol RWD	84V	84V
	2.0L I4 Petrol RWD	84W	84W
Wheel size	1.5L I4 Petrol RWD	16 X 6.5 J	16 X 6.5 J
	2.0L I4 Petrol RWD	17 x 7.0 J	17 x 7.0 J
Wheel type		Alloy	Alloy

WEIGHT AND CAPACITIES

		Roadster	Roadster GT
Cargo room volume (litres)		130	130
Kerb weight (kg):	1.5L I4 Petrol RWD / 6-speed manual	1,009	1,009
	1.5L I4 Petrol RWD / 6-speed automatic	1,032	1,032
	2.0L I4 Petrol RWD / 6-speed manual	1,033	1,033
	2.0L I4 Petrol RWD / 6-speed automatic	1,057	1,057

DIMENSIONS

		Roadster	Roadster GT
Ground clearance unladen (mm)	1.5L I4 Petrol RWD	140	140
	2.0L I4 Petrol RWD	150	150
Overall length (mm)		3,915	3,915
Overall width (mm)		1,735	1,735
Overall height (mm)	1.5L I4 Petrol RWD	1,225	1,225
	2.0L I4 Petrol RWD	1,230	1,230
Track (mm):	Front	1,495	1,495
	Rear	1,505	1,505
Wheelbase (mm)		2,310	2,310

EXTERIOR

	Roadster	Roadster GT
Daytime running lamps (LED)	•*	•
Door handles (body coloured)	•	•
Exhaust extensions (chrome)	•	•
Front and rear bumpers (body coloured)	•	•
Green-tinted windscreen, side and rear windows	•	•
Headlamps (LED)	•	•
Headlamps auto on/off function	-	•
Power mirrors	•	-
Power mirrors with heating function	-	•
Power windows	•	•
Soft-top (cloth)	•	•
Tail-lamps (LED)	•	•
Window demister (rear)	•	•
Wipers (front) 2-speed with rain-sensing function	-	•
Wipers (front) 2-speed with variable intermittent function	•	-

• = Standard, * = Standard (2.0L I4 Petrol only), - = Not available

SEATS

		Roadster	Roadster GT
Front seats with:	Heating function	-	•
	Rake and slide adjustment	•	•
	Tilt adjustment (driver)	•	•
Seat trim:	Black cloth	•	-
	Black leather ²	-	•
	Tan leather ²	-	°

• = Standard, ° = Optional, - = Not available

INTERIOR

		Roadster	Roadster GT
Air-conditioning		•	-
Air-conditioning (climate control)		-	•
Ambient temperature display		•	•
Critical function warning lights/chimes		•	•
Cruise control		•	•
Cupholders		•	•
Instrument panel light dimmer		•	•
Interior illumination:	Entry system with delayed fade	•	•
	Map reading spot lamps	•	•
	Power window switch	•	•
Leather-wrapped:	Gear shift knob	•	•
	Handbrake handle	•	•
	Steering wheel	•	•
One touch (down) power windows		•	•
Puncture repair kit		•	•
Rear-view mirror with auto dimming function		-	•
Tachometer and electronic odometer/ tripmeter		•	•
Tilt adjustable steering wheel		•	•
Trip computer ³		•	•
Vanity mirrors		•	•

• = Standard, - = Not available

SAFETY AND SECURITY

		Roadster	Roadster GT
Advanced keyless entry		-	•
Advanced keyless push-button engine start		•	•
Airbags SRS:	Front (driver and passenger)	•	•
	Side	•	•
Anti-lock Braking System (ABS)		•	•
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)		•	•
Intrusion-minimising brake pedal		•	•
Limited-Slip Differential (LSD)		•*	•*
Remote central locking (2 transmitters)		•	•
Seat-belt warning		•	•
Seat-belts 3-point lap-sash		•	•
Seat-belts (front) with pretensioners and load-limiters		•	•
Side impact door beams		•	•
Traction Control System (TCS)		•	•

•* = Standard (6-speed manual only), • = Standard, - = Not available

INFOTAINMENT

	Roadster	Roadster GT
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 ⁴	•	•
Internet radio integration (Pandora®, Stitcher™ and Aha™)	•*	•
Multi-function commander control	•*	•
Premium Bose® 203 watt amplifier and speakers	-	•
Radio Data System (RDS) program information	•*	•
Satellite navigation	•*	•
Speakers (6)	•	-
Speakers (9)	-	•
Steering wheel-mounted audio controls	•	•
USB-audio input port (iPod compatible)	•	•

• = Standard, •* = Standard (2.0L Roadster) / Option (1.5L Roadster), - = Not available

Specific disclaimers

- 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 Leather interior includes some Maztex material on selected high impact surfaces.
- 3 Trip computer displays current and average fuel consumption, distance to empty and average vehicle speed.
- 4 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.

General Disclaimer

iPod is a trademark of Apple Inc., registered in the U.S. and other countries

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