



mazda



Mazda MX-5
MARCH 2009
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MAZDA MX-5

MARCH 2009 UPGRADE

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1. AT A GLANCE

Mazda MX-5

- Mazda MX-5 launched in October 1989, second-generation MX-5 in April 1998, third-generation in September 2005
- 855,000 sold worldwide, 15,000-plus in Australia
- Mazda MX-5 is Australia's only affordable rear-drive, two-seat roadster
- MX-5 has won 178 awards worldwide, including *Wheels Car of the Year* (1989 and 2005)
- *Guinness Book of World Records* lists MX-5 as world's best-selling open two-seat sports car
- 2009 Mazda MX-5 on sale mid-March. Sales target: 500pa

2009 Mazda MX-5 range

- 2009 Mazda MX-5 powered by the 2.0-litre, four-cylinder petrol engine
 - with six-speed manual transmission with Limited Slip Differential (LSD)
 - 118 kW @ 7,000 rpm, 188 Nm @ 5,000 rpm,
 - 8.1 litres/100 km, improved 0.4 litres/100 km
 - Six-speed Activematic with paddle shift on Touring and Roadster Coupe
 - 118 kW @ 6,700 rpm, 188 Nm @ 5,000 rpm,
 - 8.1 litres/100 km, improved 0.7 litres/100 km

MX-5 Soft-top

- Remote central locking, air-conditioning, six-speaker, six-disc stereo with Aux-in jack, cruise control, power windows and mirrors, tilt-adjustable steering, driver's seat height adjust, and leather-wrapped gear shifter / steering wheel / handbrake lever
- Driver and passenger front and side airbags, Dynamic Stability Control with Traction Control System and antilock brakes, 17-inch alloy wheels and Limited Slip Differential (manual only)

MX-5 Touring

- Adds leather seats and trim, and drilled alloy pedals, Bose© premium seven-speaker sound system

MX-5 Roadster Coupe

- Adds electric folding hard-top, opens or closes in just 12 seconds

MX-5 Roadster Coupe Sports

- Adds RECARO sports seats and BBS alloy wheels

Design Changes

Exterior Design Changes

- Exterior styling is more aggressive and aerodynamic
- Expressive new single front fascia bumper incorporates new five-point grille, new headlamp design, and new highly-sculptured triangular front fog lamp bezels
- New side sills with garnishes for a sculptured look and aerodynamic improvement
- Revised rear bumper design is more integrated into the body
- New rear combination lamps with more aerodynamic shape
- Roadster Coupe adds new design details for a more premium character
- Eight colours, three new: Aluminium Metallic, Metropolitan Grey Mica and Sunset Yellow

Interior Design Changes

- Improved levels of quality feel and interior comfort
- Decorative panel on the dashboard changed from piano black to dark silver
- New meter graphics for better readability
- Wider red zone (with manual transmission)
- New red-backlit LCD tripmeter/odometer display
- Climate control knobs now silver-ringed
- Latest factory-installed audio system with a cleaner look
- New interior colour scheme for a sportier look
- Soft-touch centre console cover easier on the elbow
- Storage net relocated from passenger footwell to door pocket

Mechanical Changes

Engine and Six-Speed Manual Transmission

- 2.0-litre petrol engine revised for better response, performance feel
- New Induction Sound Enhancer (ISE) for a sporty engine sound
- Surge tank optimised for rigidity as contributor to improved engine sound
- New forged crankshaft to minimise vibration at high engine speed
- Fully-floating pistons with higher pin-boss reliability
- New-design valve springs suppress valve 'bounce' at high revs
- Higher-durability materials for the connecting-rod bearings
- Now rev to 7,500 rpm (up 500 rpm) for livelier acceleration feel
- Revised six-speed manual transmission for smoother, more precise shifting, includes Limited Slip Differential (LSD) for maximum traction
- 118 kW at 7,000 rpm (prev: 6,700 rpm), 188 Nm of torque at 5,000 rpm
- Fuel economy 8.1 litres per 100 km improved 0.4 litres (six percent)

Engine and Six-Speed Activematic Transmission

- Carryover 2.0-litre petrol engine
- 118 kW at 6,700 rpm and 188 Nm of torque at 5,000 rpm
- Six-speed Activematic with steering-wheel paddle shift and Active Adaptive Shift delivers everyday convenience and fun
- Fuel economy 8.1 litres per 100 km improved 0.7 litres (8 percent)

Chassis and Structure

- Evolution of Jinba Ittai 'one-with-the-car' feeling
- Front-midship, rear-wheel drive configuration for ideal 50:50 weight distribution and superior handling attributes (carry-over)
- Approximately 58 percent of the body-in-white is made of ultra-high or high-tensile steel for excellent flexural and torsional stiffness and crash resistance (carry-over)
- Height of the front roll centre lowered by 26 mm for more linear steering response
- New suspension tuning for even more precise reaction to steering input
- Yaw and roll feel more natural for a higher quality ride

Safety

- Dynamic Stability Control (DSC) standard (carry-over)
- Front and side airbags standard on all models

Comfort, Convenience and Equipment

- Roadster Coupe version now 2.7 dB quieter in cabin (measured at 60 km/h on a coarse road) due to urethane filling in front suspension and new damping in front roof section
- RECARO sports seats now available on Roadster Coupe
- Height adjustment on driver's seat
- Redesigned lower door cupholders for more side leg room
- New soft pads armrests and centre console lid for more comfort (Touring and Roadster Coupe)
- Larger storage compartment in front of shifter for MP3 player or cell phone (with rubber mat to minimise rattling noise)
- New AUX-in jack at bottom of centre console for connecting MP3 player to car's audio system
- Storage compartment in centre console now with removable partition for flexible use and rubber mats at the bottom to prevent rattling noise
- Cruise control standard
- Improved premium Bose® audio system optimised for MX-5 facelift with more power, more channels, better speakers

2. MODEL BY MODEL

New Mazda MX-5 Range

	6-sp manual	6-sp Activematic
Mazda MX-5 Soft-top*	\$43,850	-
Mazda MX-5 Soft-top Touring	\$45,720	\$47,920
Mazda MX-5 Roadster Coupe	\$48,755	\$50,955
Mazda MX-5 Roadster Coupe Sports	\$51,455	\$53,655

Mazda MX-5 Soft-top

The definitive lightweight roadster has been enhanced.

Refined design, enhanced dynamics and features to deliver Zoom-Zoom at its purest.

- 2.0-litre in-line 4-cylinder 16-valve DOHC S-VT engine
- 118 kW @ 7,000 rpm
- 188 Nm @ 5,000 rpm
- Six-speed manual
- Soft-top with rear window (glass) demister
- 17-inch alloy wheels
- Body coloured power mirrors
- Chrome exhaust extension
- Power windows
- Air-conditioning
- Cloth 'sports' bucket seats
- Cruise control
- Height adjustable driver's seat
- Leather-wrapped steering wheel, gear shift knob and handbrake handle
- Seat back style bars (black)
- Tilt adjustable steering wheel
- AM/FM tuner with 6-disc in-dash CD player (MP3 compatible) and 6 speakers
- Auxiliary input (3.5 mm MP3 player compatible)
- Steering wheel with audio and cruise control switches
- Airbags SRS: front and side
- Anti-lock Braking System (ABS)
- Dynamic Stability Control (DSC)
- Limited-Slip Differential (LSD)
- Remote central locking with retractable key
- Seat-belts with pretensioners and load-limiters

Mazda MX-5 Soft-top Touring

With the addition of leather 'sports' bucket seats, a 200 watt Bose® audio system and more, the MX-5 Touring delivers performance with a touch of luxury.

- 2.0-litre in-line 4-cylinder 16-valve DOHC S-VT engine
- 118 kW @ 7,000 rpm (six-speed manual)
- 118 kW @ 6,700 rpm (six-speed Activematic)
- 188 Nm @ 5,000 rpm
- Six-speed manual
- Six-speed Activematic with paddle shift (optional)
- Soft-top with rear window (glass) demister
- 17-inch alloy wheels
- Body coloured power mirrors
- Chrome exhaust extension
- Power windows
- Air-conditioning
- Cruise control
- Drilled aluminium pedals and footrest
- Height adjustable driver's seat
- Leather 'sports' bucket seats
- Leather-wrapped steering wheel, gear shift knob and handbrake handle
- Seat back style bars (silver)
- Tilt adjustable steering wheel
- 200 watt premium Bose® amplifier and speakers
- AM/FM tuner with 6-disc in-dash CD player (MP3 compatible) and 7 speakers
- Auxiliary input (3.5 mm MP3 player compatible)
- Steering wheel with audio and cruise control switches
- Airbags SRS: front and side
- Anti-lock Braking System (ABS)
- Dynamic Stability Control (DSC)
- Limited-Slip Differential (LSD) - manual only
- Remote central locking with retractable key
- Seat-belts with pretensioners and load-limiters

Mazda MX-5 Roadster Coupe

Press a button and the power-retractable hard-top effortlessly takes you from coupe comfort to open air exhilaration.

- 2.0 litre in-line 4 cylinder 16 valve DOHC S-VT engine
- 118 kW @ 7,000 rpm (six-speed manual)
- 118 kW @ 6,700 rpm (six-speed Activematic)
- 188 Nm @ 5,000 rpm
- Six-speed manual
- Six-speed Activematic with paddle shift (optional)
- Power-retractable hard-top with rear window (glass) demister
- 17 inch alloy wheels
- Body coloured power mirrors
- Chrome exhaust extension
- Power windows
- Air-conditioning
- Cruise control
- Drilled aluminium pedals and footrest
- Height adjustable driver's seat
- Leather 'sports' bucket seats
- Leather-wrapped steering wheel, gear shift knob and handbrake handle
- Seat back style bars (silver)
- Tilt adjustable steering wheel
- 200 watt premium Bose® amplifier and speakers
- AM/FM tuner with 6-disc in-dash CD player (MP3 compatible) and 7 speakers
- Auxiliary input (3.5 mm MP3 player compatible)
- Steering wheel with audio and cruise control switches
- Airbags SRS: front and side
- Anti-lock Braking System (ABS)
- Dynamic Stability Control (DSC)
- Limited-Slip Differential (LSD) - manual only
- Remote central locking with retractable key
- Seat-belts with pretensioners and load-limiters

Mazda MX-5 Roadster Coupe Sports

The ultimate Mazda MX-5 takes the already brimming Roadster Coupe and customises it with the driving enthusiast in mind. RECARO sports bucket seats and stylish BBS alloy wheels set the Roadster Coupe Sports at the pinnacle of the New Mazda MX-5 range.

3. INTRODUCTION

What Roadster Driving Is All About

Mazda MX-5 offers roadster driving at its best. Its original concept has been so successful that Mazda has never changed it: affordable to buy and use, lightweight, *Jinba Ittai* 'one-with-the-car' handling, and classic roadster looks.

The third generation launched in 2005 was developed with a strict 'gram strategy', keeping weight the same while offering an even stiffer body and more equipment. This year Mazda introduces a facelift of the current third-generation MX-5 with enhancements that will attract even more people to this unique, pure roadster.

This year marks the 20th anniversary of the Mazda MX-5, which is listed in the *Guinness Book of World Records* as the best-selling open two-seat sports car ever. More than 855,000 MX-5s have been produced since launch in 1989, and more than 15,000 units have been sold in Australia (to December 2008).

The MX-5 has won a total of 178 major automotive awards in these two decades. The third-generation was no exception and carried home 58 awards – including *Wheels Car of the Year* 2005, Japan Car of the Year 2005-2006 and *Top Gear* magazine's Roadster of the Year 2005.

In 2006, Mazda launched the MX-5 Roadster Coupe with a power retractable hardtop while keeping the unique roadster styling. The hardtop weighs only 37 kg including its folding mechanism and takes no additional luggage space, ensuring the same ideal 50:50 weight distribution and the same boot volume (150 litres) as the soft top.

The facelift model of the third-generation MX-5 carries forward the popularity of this expanded line-up. Both bodystyles have a design enhanced to be more dynamic and strong, and harmonised with Mazda's next-generation line-up. Both MX-5 Soft-top and Roadster Coupe deliver an evolution of *Jinba Ittai* driving fun and have more equipment.



With these updates the MX-5 Soft-top will continue to appeal to customers looking for a pure roadster experience. The retractable hard top appeals to customers looking for a more coupe-like and premium roadster experience.

To underscore its upgrade nature, the facelift Roadster Coupe now has special exterior design details and a quieter cabin than the original Roadster Coupe with the top up.

Mazda MX-5 – Three Generations of Success

It was such a big step in the early 1980s to even consider building a roadster (which had pretty much died off a decade earlier) that it took nearly a decade to realise it. In 1986, after several years of careful evaluation, Mazda decided to build a compact, lightweight, front-midship engine, rear-wheel drive roadster.



On 9 February 1989 the first-generation Mazda MX-5 was launched at the Chicago Motor Show. The MX-5 had all the ingredients of a perfect roadster: it was lightweight, nimble and well-balanced and offered pure driving sensations. The MX-5's cute looks and pop-up headlights made it an instant hit with roadster fans around the world.



By 1993, Mazda's friendly little MX-5 triggered a rebirth of the two-seat roadster and was on its way to becoming a cult sports car. That year, Mazda introduced a new 1.8-litre engine with more power.



The second-generation MX-5 was launched in 1998, refining the original formula.

At the 2005 Geneva Motor Show, Mazda introduced the third-generation MX-5 Roadster. This version was the roomiest, best-equipped, most fun to drive and coolest-looking roadster Mazda had ever made.



But fans of the cult roadster didn't have to wait long for more to celebrate. In 2006, Mazda expanded the line-up with the Roadster Coupe, which had a power retractable hardtop and a distinctive look all of its own.

Mazda MX-5 Roadster Coupe

The MX-5 Soft-top was joined by a retractable hard-top version in 2006, called the Roadster Coupe. Since then it has made open-top fun available to a new customers looking for the practicality and comfort that a hard-top roadster offers. Its unique look and retractable hard-top made it a hit from the start.

The top opens and closes in just 12 seconds -- among the fastest in the segment -- and does not take away any boot space when open. The retractable hard top weighs only 37 kg, including its folding mechanism. Thanks to this the MX-5 Roadster Coupe is just as agile and dynamic as the MX-5 soft top, maintaining its ideal 50:50 weight distribution. The boot volume of 150 litres is also identical.

For its first facelift, engineers focused on enhancements that make the MX-5 Roadster Coupe more appealing to its biggest fans, and to position it to be a more premium product.

Updates include:

- a new mesh-type grille with a chrome-look fascia for more sophistication
- a chrome-finish inner bezel for the headlamps
- silver inner bezels for the fog lamp inners
- chrome-finish outer door handles
- a clear type high-mount rear stop lamp
- a quieter interior driving with the top up



4. DESIGN

Expressive New Front Face

The third-generation MX-5 Soft-top and Roadster Coupe continue a design legacy that visually communicates driving enjoyment in a unique Mazda way. They literally express *Jinba Ittai*, oneness between car and driver, through their compact size and roadster proportions.

With the facelift, designers have given the exterior an enhanced dynamic appeal using forms that improve aerodynamic performance and set off the Roadster Coupe with a more premium look, while refining the interior.

Exterior Design

The MX-5 facelift expresses Mazda's next-generation design DNA while retaining the friendly appeal for which the roadster is known. A single front fascia bumper is introduced that is more visually aggressive and aerodynamically efficient. It adopts the typical Mazda five-point grille, now framed by newly designed headlamps that slant inward towards the top points of the grille.

The turn indicator inner lenses at the outer corners of the each headlamp are now white for a quality look.

New triangular fog lamp bezels at the lower edges of the integrated bumper are imbedded deeply in the fascia surface with thick framing for a strong, sporty look.

The facelift's silhouette is characterised by new side sills and garnishes, which are more sculptured and protrude further than before. These form strong character lines that highlight the rear wheel wells for an enhanced sporty crouch.

The rear end is instantly recognisable as the MX-5, but with subtle design changes to give it a stronger appearance. The facelift's rear bumper is more integrated into the body. It slants inward and upward to be flush with the bottom of the rear lamps, which highlights bumper thickness.



The lower portion of the rear fenders are more sculptured and extended downward, as they are at the front, and new rear combination lamps are introduced that have a sparking 'U' shape when illuminated by headlamps of following vehicles, for an enhanced sense of quality.

Advanced Aerodynamics

The front end design not only looks more dynamic and strong, it supports the facelift's stability at speed by being extremely aerodynamic.

New body features to achieve this are:

- an extended area below the front fog lamps with optimised shapes
- a more protruding lower grille lip
- wider front tyre deflectors
- new side sills that make the sides wider, so that less wind hits the rear wheels
- side mirrors optimised for low wind drag
- new rear lamps that extend outward for less rear turbulence

Interior Design – Classy, easy to live with

The roadster spirit of the exterior is reflected in the cockpit. The facelift inherits the clean forms of the original third-generation model, and updates this with new materials, detailing and colour combinations for a stronger sense of quality.



The transversal decorative panel on the dashboard has been changed from piano black to dark silver. The meter graphics are now placed further apart for better readability, and the tripmeter/odometer in the lower centre of the cluster is now a red-backlit LCD.

In the centre stack, the three large air conditioning knobs also have new silver-look rings, and more silver is added to the assist grips on the doors, which match the rings of the driver cluster for a fresh, coordinated look. Mazda's latest factory-installed audio system, also used in the Mazda6, has a new, cleaner look as well.

A soft pad is added to the lid of the centre console's storage box and to the armrests on Touring and Roadster Coupe models to improve comfort.

The seats were modified to further strengthen feeling of oneness between car and driver. Larger side bolsters and revised cushion surfaces ensure optimal side support and a stronger sense of the seats wrapping around the occupants.

Two-tone RECARO sports seats with leather and perforated Alcantara®* are now available as part of the MX-5 Roadster Coupe Sports Pack.

Eight colours, three all-new

Eight body colours are available with the MX-5 facelift, including three new colours: Sunset Yellow, Aluminium Metallic and Metropolitan Grey. The Aluminium Metallic colour contains aluminium particles that diffuse light and cause diverse kinds of reflections and shadow, depending on light conditions.

Carry-over colours are True Red, Copper Red Mica, Stormy Blue Mica, Marble White and Brilliant Black.

Mazda does not charge extra for metallic or mica colours.

* ALCANTARA® is a registered trademark of owned by ALCANTARA S.p.A, Italy.

MX-5 COLOURS



Aluminium Metallic



Brilliant Black



Copper Red



Marble White
(Only available on Soft-top & Soft-top Touring)



Metropolitan Grey



Stormy Blue



Sunset Yellow



True Red

5. POWERTRAINS

Enhanced Performance Feel

The MX-5 facelift inherits the third-generation's lively petrol engine and precise-shifting manual transmission, with some major updates to enhance the roadster experience. Engineers changed the 2.0-litre petrol to give it a stronger performance feel, retuned all engines to use less fuel and produce less CO₂, and finessed the six-speed Activematic.

2.0-litre engine and six-speed manual transmission

Higher Rev-Limit and Engine Updates

On the surface it appears as though the 2.0-litre petrol engine has been carried over without change. But that would underplay the dozens of changes and modifications that realise a more responsive drive and a significant fuel economy improvement.



The 2.0-litre petrol with six-speed manual transmission produces 118 kW of power and 188 Nm of torque. While maximum torque is still produced at 5,000 rpm, maximum power is now reached at 7,000 rpm (300 rpm higher than before), and the rev-limit is now at 7,500 rpm on manual models (500 rpm higher than before) making sporty driving even more exciting.

A forged crankshaft is also introduced to ensure rigidity at higher engine speeds. New as well are fully floating pistons with higher pin-boss reliability, revised valve springs that suppress valve 'bounce' that can occur at high revs, and higher-durability materials for the connecting rod bearings.

Together with the higher rev-limit, these modifications give the 2.0-litre engine and six-speed manual transmission combination an even better performance feel than before.

The six-speed manual transmission developed by Mazda features optimised synchronisation that allows shifting gears even more quickly and smoothly than before.

The six-speed manual transmission's third-to-fourth gear synchronesh diameter is increased by 6 mm, synchroniser cone specifications for all gears have been revised and carbon used on some of the meshing surfaces of the first through fourth gear synchroniser cones.

Performance with the six-speed manual transmission is improved, with the MX-5 Soft-top accelerating from 0–100 km/h in 7.6 seconds (prev: 7.8). The MX-5 Roadster Coupe can reach a top speed of 218 km/h.

A More Exciting Engine Sound

All Mazda MX-5 facelift versions offer a sportier engine sound. Mazda engineers restructured the sound-creating elements of the facelift model – like the surge tank, the intake ducts and the exhaust system – to give an even sportier and more distinct engine sound that varies noticeably according to driving situations and pedal input.

For the 2.0-litre petrol with six-speed manual transmission, a newly-developed Induction Sound Enhancer (ISE) is added for an even sportier driving feel. This component delivers a stronger sound response and a more varied tone by amplifying the pulse sounds created when the throttle valve opens and air is aspirated.

This sound is transmitted to the dash panel through the air, but also to the dashboard, the outside dash top and the windshield frame through a special duct. The sound transmission to the outside dash top creates an even more intense sound when the roof is open.

Further Enhanced Fuel Efficiency

Despite an increase in performance feel for the 2.0-litre powertrain, and the same power and torque output as before, the MX-5 facelift 2.0-litre engine with manual transmission and with Activematic transmission uses less fuel and produces fewer CO₂ emissions than before. In both cases fuel economy is rated at 8.1 litres per 100 km (six-eight per cent less than before) and produces 192 g/km of CO₂.

Six-Speed Activematic Transmission

The 2.0-litre engine is available with a six-speed Activematic transmission. It includes a direct Activematic (DAM) function that allows manual gear shifts using paddles on the steering wheel without changing into manual-shift mode beforehand.

This gives a sporty driving feel and is especially practical on a downhill slope, when cornering or when passing a vehicle.



When the transmission's control system determines that the lower gear is no longer needed, it reverts to normal operation. The Activematic® also features an Active Adaptive Shift (AAS) function that monitors the road's gradient and curviness, accelerator and brake pedal inputs, rate of vehicle acceleration and how the roadster is being steered, to select optimal shifts.

This delivers linear, dynamic performance in line with driver intentions and results in fun and sporty driving with all the comfort and convenience an automatic affords.

When combined with the six-speed Activematic transmission, the 2.0-litre engine delivers 118 kW at 6,700 rpm and 188 Nm at 5,000 rpm; its rev-limit is at 7,000 rpm. This powertrain uses 8.1 litres of fuel and produces 191 g/km of CO₂.

6. CHASSIS AND SAFETY

Evolution of *Jinba Ittai*

With its ideal weight distribution, compact dimensions, superior steering and chassis systems, the MX-5 offers pure roadster fun. For the facelift version, Mazda has evolved the roadster's unique *Jinba Ittai* 'one-with-the-car' feel by enhancing its legendary nimbleness and controllability even further.

Evolving *Jinba Ittai*

The third-generation MX-5 was developed with the *Jinba Ittai* philosophy in mind. The expression can be traced back to the *Yabusame* ritual, where an archer shoots an arrow at a target while riding a horse. To hit the bull's eye, the rider and horse have to act as one – otherwise the arrow will miss its mark. Applied to the MX-5, *Jinba Ittai* means oneness between car and driver - the MX-5 reacts instantly to the driver's commands.



For the facelift version of the third-generation model, Mazda engineers enhanced *Jinba Ittai* even further. The 2.0-litre engine's rev-limit, when mated to the smooth-shifting six-speed manual transmission, is higher and the engine now sounds even sportier.

The suspension was revised to improve roll performance and give a more natural feel when cornering. Advanced aerodynamics, especially at the front end, enhance stability and predictability at high speeds. Together, these updates make the New MX-5 even more thrilling to drive.

Chassis Updates

The third generation was launched with a stiffer and lighter body shell than the second-generation MX-5 it replaced. The facelift version carries on this tradition: it has high flexural and torsional rigidity and is roughly the same light weight as the original model, with an ideal 50:50 weight distribution.

The Mazda MX-5 retains the double-wishbone front and multilink rear suspension systems, along with the MX-5's front-midship engine, rear-wheel drive layout with a stiff powerplant frame in the transmission tunnel. This forms a rigid connection between the transmission and the rear differential to brace the chassis and suppress chassis deformation during sporty driving. MX-5 models equipped with the six-speed

manual transmission are fitted with a limited slip differential (LSD) that ensures optimum traction under all driving conditions.

For the facelift, Mazda engineers revised the front suspension by altering the ball joints' vertical pivot position, which lowered the height of the front roll centre by 26 mm. This decreases fluctuations in vertical load on the outer wheel when cornering. As a consequence, roll movement caused by steering input is now more linear.

Moreover, the R&D team fine-tuned the suspension settings to ensure that the MX-5 facelift reacts even more precisely to driver commands, and realised a higher quality ride by making yaw and roll feel more natural. Together these modifications translate into an enhanced '*Jinba Ittai*' feeling of control, especially when cornering.

Safety

The MX-5 facelift has the same outstanding active and passive safety package as the original third-generation model. Its brake system with 290 mm ventilated front discs and 280 mm solid rear discs delivers great brake pedal response and deceleration performance.



Dynamic Stability Control (DSC) and Traction Control System (TCS) are standard on all models.

Passive safety includes a high-tensile steel cabin, ultra high tensile roll-over brace bars in the A-pillars, side impact protection and strong body floor cross members. Front airbags are standard, as are special two-chamber side airbags that help protect both the thorax and the head.

These are integrated into the seatback and are activated by a common gas generator and inflator, which inflate both chambers faster than some single-chamber systems, for excellent side protection.

7. COMFORT, EQUIPMENT AND CONVENIENCE

Quieter and More Comfortable

The MX-5 is not only for driving with the top down. The MX-5 facelift introduces measures that make both the Soft-top and the Roadster Coupe quieter and more comfortable to be in when driving with the top up.

Improved Cabin Quietness

For improved cabin quietness on both bodystyles, engineers adopted stiffer door modules for less vibration at the side of the car, reduced the level of wheel resonance and used additional sound-insulation materials.

The Roadster Coupe adds comprehensive measures to suppress road noise and support its premium character. The front suspension cross member is filled with urethane to lower the transmission of road noise to the cabin, and reinforcements were added to the No. 2 cross member. Vibration induced noise is also suppressed by the addition of damping material to the front-most section of the roof.

Taken together, these measures insulate passengers of the Roadster Coupe better from low frequency road noise and bothersome high frequency sounds. As a result, the interior noise of the MX-5 Roadster Coupe facelift at 60 km/h on a coarse road is 2.7 dB quieter than the original model.

Comfort and Ease-of-Use

The cabin of the MX-5 facelift model offers enhanced comfort. The door cupholders, for instance, do not protrude into the cabin anymore, which provides more space to the occupants' legs. The armrests and the floor console lid in Touring and Roadster Coupe models have new pads for better comfort.

The Roadster Coupe's retractable hard top is also one of the easiest to use. It opens and closes in just 12 seconds – one of the fastest of its kind – and does not reduce boot space when retracted. The soft top opens and closes manually in just a few seconds. The boot itself inherits the original model's size of 150 litres and can be opened easily by pushing a button either on the dashboard or on the remote key.



Convenience and Equipment

The Mazda MX-5 facelift has enhanced small-item storage, and new features and equipment that make the car easy to use. The storage tray in front of the shift lever is now large enough to hold a mobile phone or MP3 player, and a rubber mat keeps stored items in place.

The console's two cupholders now have a new removable partition that allows the use of either two cupholders or one large storage space, and rubber mats for better support and rattling noise prevention.

New door pockets are introduced as well. Two practical storage boxes behind the seats (one box in the Roadster Coupe) are carried over from the original model.

Value-packed with features and equipment

The Mazda MX-5 facelift has a long list of standard equipment, including remote central locking, air-conditioning, six-speaker, six-disc stereo with AUX-in jack, cruise control, power windows and mirrors, tilt-adjustable steering, driver's seat height adjust, and leather-trim on the gear shifter, steering wheel and handbrake lever.



The Mazda MX-5 doesn't skimp on active or passive safety with driver and passenger front and side airbags, Dynamic Stability Control (DSC) with Traction Control System (TCS), and antilock brakes, 17-inch alloy wheels and Limited Slip Differential (on manual models).

The MX-5 Touring adds leather sports seats, drilled alloy pedals and a 200W Premium Bose® seven-speaker sound system.

The MX-5 Roadster Coupe includes all the features and equipment of the MX-5 Touring, and adds an electrically-retracting hard top which stows in just 12 seconds, and without impact on luggage space, to give the best of coupe and convertible motoring.

The range-topping MX-5 Roadster Coupe with optional Sports Pack adds RECARO sports bucket seats and striking 17-inch BBS alloy wheels.

The MX-5 Touring and MX-5 Roadster Coupe (with or without Sports Pack) can be optioned with Mazda's six-speed Activematic transmission, which includes steering wheel-mounted paddle shifters, for \$2,200.

Other options include a Bluetooth® phone system with voice recognition for hands free telephoning, which automatically mutes audio output during phone calls.

Premium Bose® Audio System – Updated for the New Mazda MX-5

Bose® and Mazda worked together to develop a refined premium audio system exclusively for the MX-5 facelift. It uses seven speakers, digital sound processing and six equaliser channels, two more than the previous system. Almost every speaker is now addressed by an individual equaliser channel which allows very precise sound tuning.

The new Bose® system also uses crossover technology to differentiate the speaker's respective frequency range. The result is a more clearly defined, well-balanced sound free of distortion, even at high volume levels.

AudioPilot™ 2 noise compensation technology automatically adjusts the sound to current driving conditions. While the previous AudioPilot™ compensated only interior noise, AudioPilot®2 works more precisely by adjusting to both interior noise and vehicle speed.



8. TECHNICAL DATA

		MX-5 Soft-top	MX-5 Soft-top Touring	MX-5 Roadster Coupe
Powertrain				
Engine type		2.0 litre in-line 4-cylinder 16-valve DOHC S-VT		
Engine capacity		1,998 cc		
Bore and stroke		87.5 x 83.1 mm		
Compression ratio		10.8 : 1		
Maximum power	man	118 kW @ 7,000 rpm		
	auto	-	118 kW @ 6,700 rpm	
Maximum torque		188 Nm @ 5,000 rpm		
Throttle control		Electronic (drive-by-wire)		
Fuel system		Multi-point electronic injection		
Fuel tank capacity		50 litres		
Recommended fuel		Premium unleaded (min. 95 RON)		
Fuel consumption (man & auto)	combined	8.1 litres per 100km ^{*1}		
Manual transmission		6-speed		
Activematic transmission		-	6-speed	
Gear ratio	1st - man/auto	3.709 / -	3.709 / 3.538	3.709 / 3.538
	2nd	2.190 / -	2.190 / 2.060	2.190 / 2.060
	3rd	1.536 / -	1.536 / 1.404	1.536 / 1.404
	4th	1.177 / -	1.177 / 1.000	1.177 / 1.000
	5th	1.000 / -	1.000 / 0.713	1.000 / 0.713
	6th	0.832 / -	0.832 / 0.582	0.832 / 0.582
	reverse	3.603 / -	3.603 / 3.168	3.603 / 3.168
	final drive	3.727 / -	3.727 / 4.100	3.727 / 4.100
Chassis				
Brake type	front / rear	Ventilated disc / Solid disc		
Brake diameter	front / rear	290 mm / 280 mm		
Steering type		Hydraulic power assist steering		
Suspension	front	Double wishbone		
	rear	Multi-link		
Turning circle	kerb to kerb	9.4 m		
Tyre size		205/45 R17 84W		
Wheel type / size		Alloy / 17 x 7.0 J		

*1 Fuel consumption figures are based on ADR81/02 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.

		MX-5 Soft-top	MX-5 Soft-top Touring	MX-5 Roadster Coupe
Exterior				
BBS wheels		-	-	Sports opt
Exhaust extension (chrome)		X	X	X
Fog-lamps (front)		X	X	X
Front and rear bumpers (body coloured)		X	X	X
Green tinted windscreen, side and rear windows		X	X	X
Headlamps (halogen)		X	X	X
Power mirrors (body coloured)		X	X	X
Power retractable hard-top with rear window (glass) demister		-	-	X
Power windows		X	X	X
Suspension strut tower brace bar (front)		X	X	X
Soft-top with rear window (glass) demister		X	X	-
Interior				
Air-conditioning		X	X	X
Critical function warning lights/chimes		X	X	X
Cruise control		X	X	X
Cupholders		X	X	X
Digital clock		X	X	X
Door bottle holders		X	X	X
Drilled aluminium pedals and footrest		-	X	X
Glove box (lockable)		X	X	X
Instrument panel light dimmer		X	X	X
Interior illumination:	dome lamp	X	X	X
	cargo room lamp	X	X	X
	ignition key surround	X	X	X
Interior release for fuel filler door and boot lid		X	X	X
Leather-wrapped:	gear shift knob	X	X	X
	handbrake handle	X	X	X
	steering wheel	X	X	X
Lights-left-on audible warning		X	X	X
Low fuel warning light		X	X	X
Oil pressure gauge		X	X	X
Puncture repair kit and compressor		X	X	X
Rear console box (lockable)		X	X	X
Seat back style bars		X	X	X

		MX-5 Soft-top	MX-5 Soft-top Touring	MX-5 Roadster Coupe
Interior Contd.				
Seat trim:	cloth	X	-	-
	leather* ²	-	X	X
	leather/cloth* ³	-	-	Sports opt
Seat type:	RECARO	-	-	Sports opt
Seats with:	height adjustment (driver)	X	X	X
	integral head restraints	X	X	X
	rake and slide adjustment	X	X	X
	seat back pocket (passenger)	X	X	X
Storage box (behind both seats)		X	X	-
Tachometer and electronic odometer/tripmeter		X	X	X
Tilt adjustable steering wheel		X	X	X
Vanity mirrors (driver and front passenger)		X	X	X
'Windblocker' aero board		X	X	X
Wipers (front) 2-speed with intermittent function		X	X	X
Audio				
AM/FM tuner		X	X	X
Auxiliary input (3.5mm MP3 player compatible)		X	X	X
CD player, in-dash 6-disc (MP3 compatible)		X	X	X
Premium 200W Bose® amplifier and speakers		-	X	X
Speakers, number of		6	7	7
Steering wheel mounted audio controls		X	X	X

		MX-5 Soft-top	MX-5 Soft-top Touring	MX-5 Roadster Coupe
Safety				
Airbags SRS:	driver & passenger	X	X	X
	side	X	X	X
Anti-lock Braking System (ABS)		X	X	X
Crumple zones (front and rear)		X	X	X
Day/night rear vision mirror		X	X	X
Dynamic Stability Control (DSC) - switchable on/off		X	X	X
Engine immobiliser		X	X	X
High backed bucket seats		X	X	X
High mount stop lamp		X	X	X
Left-hand-side convex (wide angle) exterior mirror		X	X	X
Limited-Slip Differential (LSD) torque-sensing		X	manual only	manual only
One touch (down only) power window (driver and passenger)		X	X	X
Remote central locking (2 transmitters with retractable key)		X	X	X
Seat-belts with pretensioners and load-limiters		X	X	X
Side impact door beams		X	X	X
Traction Control System (TCS)		X	X	X
Dimensions				
Ground clearance	laden	118 mm		
Overall height		1,245 mm	1,255 mm	
Overall length		4,020 mm		
Overall width		1,720 mm		
Track	front	1,490 mm		
	rear	1,495 mm		
Wheelbase		2,330 mm		
Cargo room	volume (VDA)	150 litres		
Kerb weight	man	1,129 kg	1,135 kg	1,167 kg
	auto	-	1,145 kg	1,177 kg
*2/3 Leather interior includes some Maztex material on selected high impact surfaces				