Mazda 6





Each and every vehicle we build must understand the driver's desires and respond exactly as intended.

Our core belief is true driving pleasure begins at the moment you experience the car as an extension of your body.

Aiming to engineer vehicles achieving unprecedented unity with the driver, Mazda renews its commitment to the challenge.



03











HOF POTSDAMER



The pinnacle of mature elegance

Mazda design pursues forms that embody life in all its dynamism and beauty. Our overriding belief is that such forms come only from the human hand, and our skills and passion are directed at imbuing them with soul. The results speak straight to the heart from just a single glance, making our cars much-loved, lifelong partners of their owners. This is the core aim of Mazda's KODO design philosophy.

In designing Mazda6, we leveraged all our abilities to achieve elegance that satisfies mature sensibilities along with further refined dynamism. Now Mazda6 displays its flagship dignity with greater beauty, higher quality and a more mature atmosphere both inside and out.



Human-centric engineering: the key to satisfaction

At Mazda, driver satisfaction is always the driving force. So all our research and development is centred on you, the driver, to give you the confidence and peace of mind that comes with Mazda's trademark *Jinba-ittai* feeling of unity with the car. And to deliver soul-stirring driving along with superior safety and environmental performance, Mazda developed the innovative SKYACTIV TECHNOLOGY suite of technological breakthroughs by re-evaluating and revising every aspect of automotive engineering from the ground up. The latest step in the evolution of SKYACTIV TECHNOLOGY is SKYACTIV-VEHICLE DYNAMICS and G-Vectoring Control (GVC). Based on how you and your passengers physically experience Mazda6's dynamic performance, GVC's human-centred innovations raise the bar in enjoyment of the road.

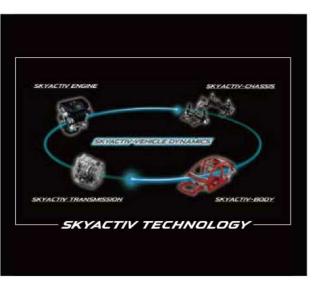
The birth and evolution of SKYACTIV TECHNOLOGY

Exhilarating, fun driving combined with unprecedented environmental and safety performance – it seems like an impossible dream. And it required tearing up the rule book of conventional ideas plus a series of quantum leaps in technology to achieve. But this is what inspired the development of SKYACTIV TECHNOLOGY, and what continues to drive its evolution along a path charted by human-centric engineering. From its very beginnings, SKYACTIV TECHNOLOGY was squarely aimed at eliminating inefficiency and waste throughout the entire vehicle to deliver unheard-of levels of fuel efficiency along with cutting-edge safety and unmatched driving pleasure, helping to realize Mazda's future vision of 'Sustainable Zoom-Zoom'.

The next step: SKYACTIV-VEHICLE DYNAMICS

Jinba-ittais what makes every Mazda so special. The outcome of Mazda's human-centric design and development philosophy, Jinba-ittailets the driver control the vehicle – whether turning, braking or just cruising – as simply and naturally as if it were an

extension of his or her body. And SKYACTIV-VEHICLE DYNAMICS takes this concept to the next level. This branch of SKYACTIV TECHNOLOGY provides integrated control of the engine, transmission, chassis and body to further enhance the Jinba-ittai feel of connectedness between car and driver. As opposed to conventional vehicles where these four key areas are controlled separately, SKYACTIV-VEHICLE DYNAMICS takes a holistic, human-centred approach with real-time feedback and dynamic interaction occurring between the driver and amongst these four pillars of vehicle control. The result is an involving, exhilarating drive as Mazda6 responds to your every intention with crisp, confidence-inspiring linearity and predictability. This innovative, new-generation vehicle dynamics control system is the fruit of a multi-year initiative undertaken in pursuit of the ideal in rewarding sensations for both driver and passengers, as well as the ultimate in vehicle dynamics. And it sets a new benchmark for driver satisfaction.

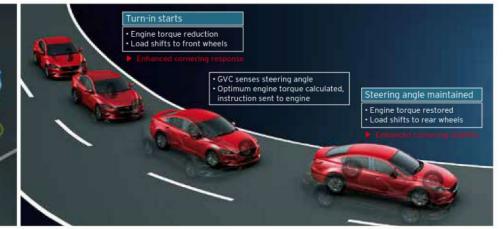


GVC conceptual diagram



Turn-in with regular vehicle

GVC operation



G-VECTORING CONTROL

Enhancing chassis performance via the engine

Smooth transitions between G-forces when braking, turning and accelerating are an essential element of *Jinba-ittai* and have been a major development focus at Mazda for many years. This unified feel to braking, steering and acceleration, along with consistent feedback, allows the driver to control the vehicle easily and precisely. And G-Vectoring Control (GVC) – the debut technology of SKYACTIV-VEHICLE DYNAMICS – takes this dynamic, unified feel to an even higher level. It's a logical extension of Mazda's human-centric design and engineering philosophy that not only concentrates on mechanical efficiency but also considers how a vehicle should be in light of human characteristics. GVC is a new approach to controlling vehicle dynamics that uses the engine to enhance chassis performance, and it gives Mazda vehicles even smoother transitions between G-forces in all driving scenarios.

Natural control giving greater response and stability

Conventionally both lateral and fore-aft G-forces are controlled separately. In contrast, GVC adjusts engine torque according to

the driver's steering inputs to give unified control of G-force in all directions and dynamically optimize the vertical load on each wheel. For example, the instant the driver begins to turn the wheel to enter a curve, GVC momentarily lowers engine torque to transfer weight to the front wheels and enhance the front tyres' grip. Then while a constant steering angle is maintained, GVC recovers engine torque to transfer load back to the rear wheels and heighten vehicle stability. This series of load transfers not only maximizes front and rear tyre grip to enhance response and stability in accordance with the driver's intentions, GVC does it so smoothly and naturally that neither the driver nor passengers feel any discomfort. And GVC demonstrates this effect over a wide range of situations from low-speed everyday driving to high-speed emergency manoeuvres, and even on slippery road surfaces. Thanks to this dynamic load allocation, GVC greatly reduces the necessity for steering corrections, enabling the driver to maintain a chosen line with greater confidence and lower fatigue on long drives. What's more, by smoothing the transitions between G-forces, GVC suppresses the swaying of heads and bodies to give all occupants a smoother and more enjoyable ride.

SKYACTIV-D 2.2

The new-generation, high-efficiency SKYACTIV-D 2.2 advanced diesel engine's long list of cutting-edge technologies and extremely low compression ratio of just 14.4:1 help bring Mazda's long-held goal of ideal diesel combustion even closer. New-concept Rapid Multi-stage Combustion employs optimally designed pistons with a stepped, egg-profile combustion chamber and ultra-high-response multi-hole piezo injectors to greatly enhance combustion efficiency, achieving quieter performance, better fuel economy and cleaner emissions. Plus, the new water-flow management system featuring a new control valve optimizes coolant circulation for greater thermal efficiency. The two-stage twin turbocharger (one small and one large) engages either one or both turbo units according to driving conditions for smooth torque and power output throughout the engine's entire rev range. The larger turbine now adopts a variable geometry design that delivers boost more quickly at lower engine speeds, further increasing maximum power and torque and realizing smooth performance with quick response right through to high engine speeds. With its astonishing torque and power and a high redline above 5,500rpm, SKYACTIV-D 2.2 delivers sporty and linear response far beyond any diesel you've ever experienced. What's more, High-Precision DE Boost Control optimizes boost pressure management for finer control of fuel injection, sharpening engine response to accelerator inputs to more perfectly match your intentions and make Mazda6 even more a part of you. And for a pleasing engine note, Natural Sound Smoother employs a damper located in the hollow part of the piston pin to greatly reduce diesel knock, while Natural Sound Frequency Control technology finely tunes combustion timing to prevent synchronization between the frequency of vibrations caused by combustion and the frequencies of resonating parts. The result is greatly reduced knock and an exhilarating engine sound without weight, driving performance or fuel efficiency penalties.

SKYACTIV-D 2.2

Max. power: 140kW/4,500rpm Max. torque: 450Nm/2,000rpm

SKYACTIV-G 2.5 / SKYACTIV-G 2.0

High-efficiency SKYACTIV-G direct-injection petrol engines are your passport to a world of driving that is simultaneously exciting and eco-friendly. These two engines do more than set new standards for fuel efficiency and emissions control: they also actively enhance Mazda's trademark Zoom-Zoom performance. To accomplish this, Mazda engineers achieved a whole series of technical breakthroughs including newly designed high-tumble intake ports, shape-optimized piston heads, and high-pressure multi-hole fuel injectors with three-stage split injection control. This enables an extraordinary compression ratio of 13.0:1 while suppressing the knock usually caused by such high compression. Oil rings with an asymmetric cross-section and revised piston-skirt curvature reduce mechanical resistance, while the new water-flow management system featuring a new coolant control valve helps prevent thermal loss at start up in cold weather, contributing to enhanced real-world fuel economy. SKYACTIV-G 2.5 even features a newly adopted cylinder deactivation system that shuts down two of the engine's four cylinders in light-load situations for improved fuel economy

especially at city cruising speeds. Automatic switching between two- and four-cylinder operation is precisely controlled to deliver smooth, unnoticeable transitions. Together, the technical breakthroughs in SKYACTIV-G engines realize excellent fuel economy and environmental performance, as well as more satisfying everyday driving thanks to the ample torque available at low- to mid-engine speeds. Now there's no need to make a choice between fuel efficiency and driving pleasure, because SKYACTIV-G engines deliver both at the highest levels.

SKYACTIV-G 2.5*

Max. power: 140kW/6,000rpm Max. torque: 252Nm/4,000rpm

SKYACTIV-G 2.0*

Max. power: 115kW/6,000rpm Max. torque: 200Nm/4,000rpm

*Engine specifications measured using regular petrol. Values measured using premium petrol are:

SKYACTIV-G 2.5: 143kW/6,000rpm maximum power, 258Nm/4,000rpm maximum torque SKYACTIV-G 2.0: 121kW/6,000rpm maximum power, 213Nm/4,000rpm maximum torque

SKYACTIV-DRIVE

This six-speed automatic transmission combines the smooth operation of a conventional automatic with the fast shifting of a twin-clutch gearbox. Lockup is extended to nearly 90% for the solid feel of a manual transmission, and there's also the choice of Sports and manual shift modes for sportier driving.

SKYACTIV-BODY

Innovations in structure, construction and materials make Mazda6 lighter, safer and more rigid. Straight structural members, a continuous framework and extensive use of high-tensile steel achieve the contradictory requirements of lighter weight and greater collision-resistance, particularly in the occupants' area. This increased body rigidity also further evolves Mazda6's distinctive ride comfort and cabin quietness.

SKYACTIV-CHASSIS

To deliver satisfying *Jinba-ittai*driving, Mazda6 features MacPherson struts at the front and a multi-link layout at the rear, specifically tuned for stability at high speeds and sharp, nimble response at low and mid-range speeds. Electric Power Assist Steering provides comfortable, responsive operation with positive feedback while new, rigid steering gear mounts contribute to a neutral steering feel.



SKYACTIV-D 2.2



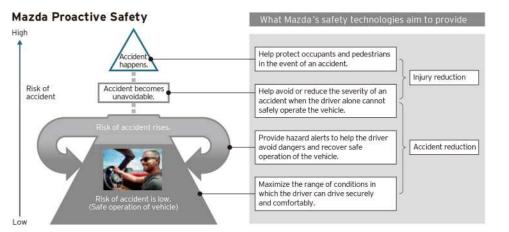
SKYACTIV-G 2.5

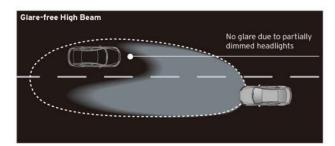
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Human-centric innovation: the key to safer, more secured driving

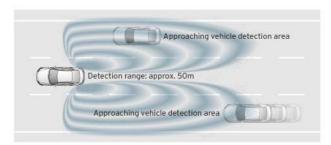
Mazda's Proactive Safety philosophy is firmly grounded in a belief in the driver's abilities, aiming to support safer driving while maintaining all the fun of the open road. Safer driving demands early recognition of potential hazards, good judgment and appropriate action, and Mazda works to support these essential functions so you can drive securely and with peace of mind despite changing driving conditions. First is an optimum driver environment with good visibility, well-positioned controls, easy-to-read instruments and minimal distractions, all enhanced by Mazda's further evolved recognition support. Next is i-ACTIVSENSE, a portfolio of active safety measures to incrementally warn you when a potentially dangerous situation is developing. In particular, the 360° View Monitor displays the area around the car on the centre display to cover blind spots, while the Adaptive LED Headlights (ALH) system is equipped with more finely divided LED arrays to enhance precision of light distribution. Finally there is passive safety, designed to help protect occupants and minimize injuries if an accident should occur.





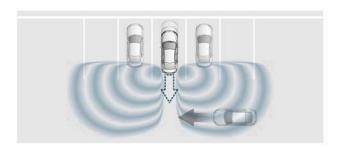
Adaptive LED Headlights (ALH)

ALH offers the driver greater support for recognizing potential hazards when driving at night. The system improves night visibility and helps the driver avoid hazardous situations by combining the use of auto-controlled Glare-free High Beam (featuring an adjustable illumination range via a 20-split LED array) and Wide-range Low Beam.



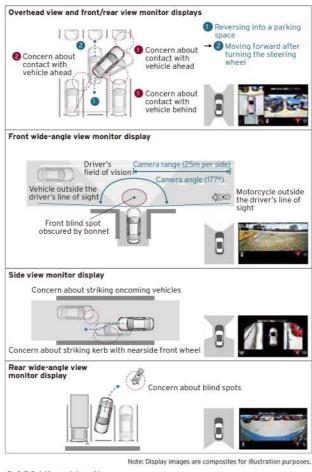
Blind Spot Monitoring (BSM)

BSM uses 24GHz guasi-milliwave radar sensors to detect vehicles in the blind spots behind and to the side, and using a turn signal while BSM detects a vehicle triggers visual and audio



Rear Cross Traffic Alert (RCTA)

RCTA uses the same sensors as BSM to alert the driver when it detects vehicles approaching from either side during reversing operations. Warnings are given by a flashing indicator in the door mirror and a beep.



360° View Monitor

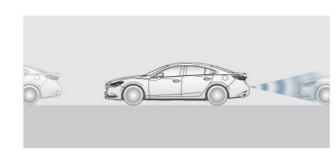
Four cameras on the front, sides and rear of the vehicle show the area around the car on a central display. Combined with alarm sounds triggered by eight parking sensors at the front and rear, the system helps you to avoid danger when pulling into or out of a garage, approaching T-shaped intersections or passing an oncoming car on a narrow road.



Advanced Smart City Brake Support (Advanced SCBS)

With the high-performance forward sensing camera, Advanced SCBS detects vehicles and pedestrians* in front of the vehicle and automatically applies the brakes to help avoid collisions and mitigate collision damage while driving between approximately 4 and 80km/h (sensing a vehicle ahead) or between approximately 10 and 80km/h (sensing a pedestrian).

*Detection of pedestrians and consequent automatic braking are not available in certain countries and regions.



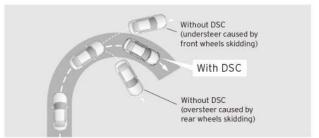
Smart City Brake Support [Reverse] (SCBS R)

Ultrasonic sensors mounted on the rear bumper allow SCBS R to detect vehicles and obstacles behind when reversing at speeds between approximately 2 and 8km/h. If an object is detected, the system automatically applies the brakes to help mitigate collision damage.



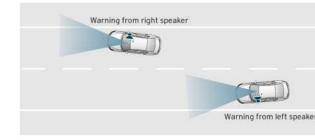
Lane-keep Assist System (LAS)

A forward sensing camera detects lane markings and assists the steering to keep you in lane. The system also alerts you when it judges an unintended lane departure is imminent by vibrating the steering wheel or with an audible alarm. When the system determines lane departure is intentional (use of turn signals, etc) steering assistance is cancelled and no warnings are given. The system operates at speeds above approximately 60km/h.



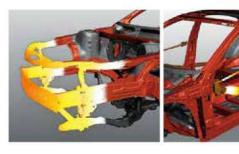
Dynamic Stability Control (DSC) with Traction Control System (TCS)

DSC with TCS electronically controls braking force applied to each wheel to help prevent under- or oversteer and maintain vehicle stability when cornering on slippery roads or during sudden steering inputs.



Lane Departure Warning System (LDWS)

LDWS senses lane markings on the road surface. When the system predicts departure from the lane it issues a beep or an audible warning similar to the noise a car makes when it runs onto a rumble strip to prompt timely steering corrections. The system assesses driver inputs such as use of the turn signals to weed out false alarms.



Body structure

The body provides excellent collision safety performance. Extensive use of ultra-high-tensile steel gives strength with low weight, while the framework absorbs and channels energy away from the cabin.

Notes: i-ACTIVSENSE safety features are not a substitute for safe and attentive driving. There are limitations to the range and detection of the systems.

Availability of safety equipment/features varies according to country and model grade. Please consult your local Mazda dealer for exact information.



Human-centric design: the key to communication

Human-centric design is the key to complete and intuitive communication between you and Mazda6. As well as real-time communication with the world when you're on the road. It's all thanks to Mazda's latest iteration of the Human-Machine Interface (HMI) and MZD CONNECT system. HMI and its human-centric design philosophy now include even your driving position to further enhance the *Jinba-ittai* experience with a panoramic view of the road and all instruments and controls ideally placed to support you in safer, enjoyable driving.

HMI - control centred on you

Modern cars constantly present more and more information which can confuse, and even distract. So Mazda engineered its HMI entirely around you, to provide detailed information with minimal eye movements and stress. Controls, instruments, steering wheel and shift lever are all ideally placed in relation to the driver's seat. The main instrument cluster and steering wheel – with ergonomic shape that optimizes grip comfort – are directly centred on the driver, while the pedals are positioned symmetrically to fall naturally under the feet. Excellent visibility is assured thanks to A-pillars located rearward to offer a broader view of the road. Mazda6 now features a full-colour head-up display projected on the windscreen. This Active Driving Display shows key driving and navigation system information just above the instrument cluster and just below your horizontal line of sight to keep you fully informed without the need to take your eyes off the road. The large, eight-inch centre display on the dash shows entertainment-related items and functions as a touchscreen when the car is stationary. In motion, the rotary commander provides control. By rotating, pressing and toggling this knob, you can operate entertainment functions while keeping your body and your eyes in the normal driving position. Unlike a touchscreen, there's no need to look at the commander when operating it, minimizing visual distraction. The commander is surrounded by five buttons giving shortcuts to four common screens plus a back button.

MZD CONNECT keeps you in touch

MZD CONNECT gives you versatile internet connection while on the road. It offers an extremely wide range of infotainment options through Aha™ by HARMAN when connected to your smartphone via Bluetooth®. The system's Audio feature lets you access multiple audio sources including AM/FM radio and mobile audio players, and Aha Internet Radio. The Communication feature can read SMS messages aloud as well as other internet social network services such as Twitter and Facebook available via Aha. The Navigation feature shows your current position on a map along with a route to your specified destination. System software is easily updated to give you ongoing access to the latest services without swapping out any hardware.







Equipment







The windscreen-type Active Driving Display is divided into two zones for better legibility with high-priority vehicle-status information and advanced safety information shown in the lower section, and driving environment information such as turn-by-turn directions in the upper section.



Newly adopted front-seat ventilation system draws hot and humid air away from areas where the occupant's body is in contact with the seat surface, providing a more comfortable driving environment. The system offers three-stage control over ventilation strength.



Ten-way power driver's seat with fore/aft slide, recline, lumbar support, lift and tilt provides the optimum driving position for drivers of almost any size. The memory saves multiple seating positions along with the projection location, brightness and content setting of the Active Driving Display.



Newly designed 19-inch aluminium wheels look larger than their actual size and present a powerful, sculpted appearance. The brilliant silver finish enhances the mature elegance of Mazda6.



A full complement of airbags – front, front seat side, curtain – provide another layer of protection in depth against physical shock and injury in a collision.

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Exterior and interior colours

TAKUMI-NURI



Soul Red Crystal Metallic (46V)

Mazda's unique painting technology TAKUMI-NURI (TAKUMI: master craftsman, NURI: painting), with its unprecedented combination of colour, highlights, shade and depth, further emphasizes the sheer beauty and



Machine Grey Metallic (46G)

quality of the dynamic KODO design body shape. Now the Mazda6 lineup includes two TAKUMI-NURI body colours: Machine Grey Metallic and the newly developed Soul Red Crystal Metallic. The bright highlights, pure



High-brightness aluminium flake

depths and outstanding transparency of Soul Red Crystal Metallic deliver a powerful impression of emotionally charged energy, giving Mazda6 a fresher, more impressive and refined appearance.



Blue Reflex Mica (42B)



Deep Crystal Blue Mica (42M)



Nappa leather, Brown



Titanium Flash Mica (42S)



Sonic Silver Metallic (45P)



Leather, Black

Nappa leather, Pure White





Leather, Pure White

Jet Black Mica (41W)

Arctic White (A4D)



Cloth, Black





Cloth, Sand Beige



- 1. Mazda produced its first automobile in 1931, and steadily increased the production volume of three-wheel vehicles after
- 2. June 23, 1991 saw the rotary-powered Mazda 787B beat the world at motor-racing 's most prestigious endurance event, the 24 Hours of Le Mans.

Celebrating challenge, celebrating driving

The history of Mazda stretches back over 90 years - a history of meeting challenge head-on and winning. In 1931 Mazda became the first manufacturer of an entirely Japanese-made three-wheel vehicle, going on to cement its position as Japan's leading maker of three-wheeled trucks, a mainstay of short-haul cargo transportation at the time. At the end of World War II Mazda's home base of Hiroshima lay in ruins, yet Mazda took on the challenge of reconstruction and through innovation and dedication resumed export of three-wheeled trucks within just four years.

In 1961 Mazda accepted another major challenge: development and commercialization of the rotary engine. This unique design for the internal combustion engine presented a host of technological hurdles including development of new materials and the improvement of processing technology precision. And again Mazda engineers rose to the challenge, bringing fresh thinking to the table and succeeding where others had failed. The result was a series of rotary-engined vehicles beginning with the stunning 1967 Cosmo Sport, now a sought-after classic.

It was also the 60s that saw lightweight sports cars hit their peak. But through the course of the 70s, increasingly stringent safety standards and emissions controls caused their numbers to plummet. Once again, Mazda saw a challenge – reinventing the lightweight sports car to meet new safety and environmental standards while maintaining uniquely fun-to-drive characteristics. In 1989 the groundbreaking Mazda MX-5 debuted to instant acclaim and has stayed in production ever since, winning a place in the Guinness Book of Records as the world's best selling two-seater sports car.

Further underlining Mazda's sporting credentials came overall victory in the 1991 Le Mans 24 hour endurance race with the rotary engine 787B. This was the first - and only - time for a Japanese manufacturer to take the laurels in this prestigious event, amply demonstrating that not only do we set out to win, we do it with our own unique technology.

At Mazda, we have always blazed our own trail in our own way. Where others see limits, we see only a challenge as we create vehicles for people who love to celebrate driving.



