Mazda CX-60

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1. INTRODUCTION

The all-new Mazda CX-60 introduces the company’s first plug-in full hybrid technology to the European SUV market. Expanding Mazda’s SUV line-up, the all-new Mazda CX-60 is the first of two new models from the company’s Large Product group to be introduced throughout Europe during the next two years.

Demonstrating Mazda’s commitment to a multi-solution approach to sustainable mobility and the principal of the right solution at the right time, the Mazda CX-60 meets the growing needs of the segment with a wider choice of SUVs combining the latest environmental performance with the driving pleasure inherent in every Mazda.

Showcasing the company’s first plug-in full hybrid powertrain, Mazda’s new flagship model, the Mazda CX-60 PHEV, represents everything that Mazda has built into its DNA over the last 100 years, from outstanding exterior and interior design to the finest Japanese craftsmanship, the latest innovations in human-centric technologies and world-leading powertrains

The imposing strength of the Mazda CX-60’s beautiful and dynamic styling conveys the intelligence and elegance of the latest developments in Kodo design woven into the toughness of the striking front-engine, rear-wheel drive SUV architecture.

The elegant, premium quality interior design mixes different materials and textures such as maple wood, nappa leather, uniquely worked Japanese textiles, chrome details, and a specially detailed instrument panel stitching.

Human-centric technologies have been rethought and refined to perfect the Jinba-Ittai driving experience and, more than ever, meet the individual needs of the driver. The ground-breaking Mazda Driver Personalisation System will recognise the occupant of the driver’s seat and automatically adjust the surroundings – seat position, steering wheel, mirrors, HUD, even the sound and climate control settings – to fit their physique as well as their personal preferences.

The Mazda CX-60 PHEV spearheads the European introduction of plug-in hybrid models with a powertrain which combines a Skyactiv-G 2.5, four-cylinder direct injection petrol with a large, 100 kW electric motor and a 355V, 17.8 kWh high-capacity battery.

This combination of engine and motor delivers a total system output of 327 PS/241 kW and abundant torque of 500 Nm, making it the most powerful road car Mazda has ever produced. The Mazda CX-60 PHEV delivers highly impressive performance, accelerating from 0-100 km/h in just 5.8 seconds, and on to a limited maximum speed of 200 km/h.

Conversely, and most notably when running on electric motor power alone, the new Mazda PHEV displays outstanding environmental credentials. WLTP combined fuel consumption is just 1.5 l/100 km1, and WLTP combined CO2 emissions only 33 g/km[[1]](#footnote-1).

The Mazda CX-60 e-Skyactiv PHEV offers 63 km of motor-powered driving with the vehicle running at 100 km/h or less. With normal AC charging (compatible with 220-240V power supplies) the battery can be fully charged from empty in four hours.

The positioning of the high voltage battery between the front and rear axles and as low as possible within the bodyshell gives the new Mazda CX-60 PHEV a particularly low centre of gravity. This, combined with a permanent all-wheel drive system incorporating shaft-driven transfer of torque between the axles, gives the car superior handling characteristics on a par with the best in the premium segment.

Developed using the ‘right sizing’ concept which calls for optimised displacement to improved fuel and power efficiency, new generation, straight-six, 3.0 litre e-Skyactiv X petrol and 3.3 litre Skyactiv-D diesel engines with two different power outputs will also be introduced. Featuring M Hybrid Boost - Mazda’s 48V mild hybrid system - they combine high output with excellent fuel economy and emissions performance.

All three powerplants are mated to a new eight-speed automatic transmission and Mazda’s i-Activ All-Wheel Drive system. The e-Skyactiv D diesel unit and the e-Skyactiv X petrol engine may also be equipped with rear-wheel drive only. Mazda Intelligent Drive Select (Mi-Drive) offers a choice of four drive modes (plus EV mode for the PHEV) to provide optimum control and driving pleasure in every driving scenario.

The all-new Mazda CX-60 is based on Mazda’s Skyactiv Multi-Solution Scalable Architecture, which features numerous enhancements that offer excellent driving dynamics. Adopting Mazda’s human-centric approach, these include bodyshell rigidity that ensures drivers can feel vehicle response without lag, seats that make it even easier for every occupant to maintain balance while the car is moving, suspension that stabilises vehicle posture while driving, and a Mazda-unique vehicle posture control system - Kinematic Posture Control (KPC).

A comprehensive range of advanced i-Activsense driver assistance systems ensures active safety at the highest level, and targets a Euro NCAP 5-star safety rating.

Several new technologies debut in the Mazda CX-60: See-Through View - a next-generation 360-degree monitor with extended field of view at low speeds; Hill Descent Control (HDC), which assists in safely descending steep slopes with slippery or rough road surfaces; Cruise Control (i-ACC), which can now incorporate speed limits from Traffic Sign Recognition; and Vehicle Exit Warning (BSM) for rear-approaching road users.

1. AT A GLANCE

## Exterior Design

* Latest developments in Kodo design woven into the toughness of the imposing front-engine, rear-wheel drive SUV architecture
* Deeply sculpted front face and long nose/truncated rear silhouette create a powerful and dynamic shape
* New higher aspect front grille, signature wing with illumination function and vertically stacked front lamp design
* New Rhodium White signature body colour
* Choice of 18- or 20-inch aluminium alloy wheels

## Interior Design

* Interior expresses the strength of the Mazda CX-60’s front-engine, rear-wheel drive SUV architecture
* Wide instrument panel features continuous lines which run through the sides air vents into the door trim, reinforcing the spaciousness of the interior
* Strong shape of the centre console penetrates the cabin space from front to back
* Ergonomically excellent, natural and supportive driving position. Seat height adjustment without occupant posture change, steering wheel 45 mm rake and 70 mm reach adjustment
* New Driver Personalisation System recognises the driver and automatically adjusts seat position, steering wheel, mirrors, HUD, even the sound and climate control settings
* HMI (Human Machine Interface) features a full TFT-LCD driver’s instrument binnacle, a large window Head-up Display (HUD) and a 12.3-inch infotainment centre display

## Packaging

* Mazda CX-60 is 4745 mm long, 1890 mm wide, 1680 mm high, and has a 2870 mm wheel base
* 1,504 mm of shoulder room in the front seats (44 mm more than the CX-5), and 1,441 mm in the rear seats (50 mm more than the CX-5)
* 570 litre loadspace capacity, increasing to 1148 litres with the rear seats folded flat and 1726 litres when loaded to the ceiling
* Wireless Android Auto™ for the first time in a Mazda, and wireless Apple CarPlay®
* Mazda Harmonic Acoustics system with new technology to remove shot noise included in digital audio sources such as CDs – a first ever on genuine car audio
* 12-speaker Bose Sound System with SoundStage Signal processing, and BassMatch, Centrepoint 2 Surround and Audio Pilot 2 Noise Compensation technology.

## Grade Structure

* Choice of three model grades: **Exclusive-line** mid grade, and **Takumi** and **Homura** high grades.
* All grades feature dual zone-air-conditioning, a 12.3-inch colour TFT central touch screen, DAB radio, Bluetooth, Wireless Apple CarPlay and Android Auto, sat nav, head-up display and cruise control.
* All grades may be further equipped with different option packs: **Driver Assistance, Convenience & Sound, Panoramic sunroof** and **Comfort**

## Powertrain

* Mazda’s first PHEV powertrain: Skyactiv-G 2.5, four-cylinder direct injection petrol engine, 100 kW electric motor and a 355V, 17.8 kWh high-capacity lithium-ion battery
* Mazda CX-60 e-Skyactiv PHEV total system output of 327 PS/241 kW and 500 Nm of torque – the most powerful road car Mazda has ever produced
* Highly impressive performance - 0-100 km/h in 5.8 seconds, maximum speed of 200 km/h (limited).
* Outstanding environmental credentials - WLTP average fuel consumption is 1.5 l/100km[[2]](#footnote-2) and CO2 emissions just 33 g/km1
* 63 km of electric motor-powered driving with the vehicle running at 100 km/h or less.
* With normal AC charging, battery can be fully charged from empty in four hours.
* New generation 3.3 litre Skyactiv-D diesel engines with two different power outputs will also be introduced at a later stage.
* e-Skyactiv D diesel and the e-Skyactiv X petrol may also be equipped with rear-wheel drive only.
* Mazda Intelligent Drive Select (Mi-Drive) offers a choice of four drive modes (plus EV mode for the PHEV)

## Driving Dynamics

* CX-60 based on Mazda’s Skyactiv Multi-Solution Scalable Architecture, designed to be compatible with the SUV’s longitudinal front-engine rear-wheel drive mechanical layout
* Bodyshell rigidity that ensures drivers can feel vehicle response without lag
* Positioning of high voltage battery between the front and rear axles and as low as possible for a particularly low centre of gravity
* New seat design with improved body support and increased seat mount rigidity making it easier for every occupant to maintain balance while the car is moving
* Double wishbone front and multi-link rear suspension systems designed to control the sprung mass (vehicle body) smoothly during cornering and stabilise vehicle posture
* Dual-pinion electric power steering (EPS) - increased rigidity of the EPS motor and parts to which it connects
* Kinematic Posture Control (KPC) - Mazda-unique technology stabilises vehicle posture when cornering, braking the inside rear wheel to mitigate roll and draw the car body downwards
* New CX-60 PHEV has a towing capacity of 2,500 kg

## Safety

* i-Activsense driver-supporting safety technologies deliver class-leading active safety performance and target a Euro NCAP 5-star safety rating
* New See-Through View - next-generation 360° view monitor which improves close proximity visibility when driving at low speeds
* Turn Across Traffic Assist, SBS-R pedestrian detection, Emergency Lane Keeping, i-Adaptive Cruise Control (i-ACC), and BSM Vehicle Exit Warning
* Mazda CX-60 e-Skyactiv PHEV has comprehensive high voltage protection measures, physical protection of the battery, and power shut off in the event of a collision
1. DESIGN

## Evolution of Kodo Design

Mazda’s ‘Kodo-Soul of Motion’ design philosophy entered phase two with the launch of the Mazda3. For the Mazda CX-60, the company took on the challenge of creating a design that would instantly reflect the enhancement and further advancement of Kodo design.

Conceived under the design concept ‘Noble Toughness’, the imposing strength of the Mazda CX-60’s beautiful and dynamic styling conveys the intelligence and elegance of the latest developments in Kodo design - the Japanese concept of Ma, which is the calm and dignified beauty of empty space - woven into the toughness of the striking front-engine, rear-wheel drive SUV architecture.

The elegant, premium quality interior design further introduces the ideas of Kaichou - an element of harmony which mixes different materials and textures such as maple wood, nappa leather, uniquely worked Japanese textiles and chrome details, and Musubu – the art of binding which was the inspiration for a specially detailed instrument panel stitching.

The deeply sculpted front face and long nose/truncated rear silhouette create a powerful and dynamic framework and an imposing SUV-like presence in a form with simple beauty and elegance, as well as a roomy and richly detailed interior space.

The Takumi and Homura model grades add extra touches of visual and tactile quality that endow the Mazda CX-60 with a tough yet dignified exterior and a spacious and luxurious interior.

## Exterior Design

Careful and meticulous development of the imposing front face and long nose/truncated rear silhouette give the Mazda CX-60 its powerful and dynamic shape. The Kodo design concept of ‘breathing life into a car’ aims to create a form in which the car as a moving object resembles a living create running at full speed.

Its framework expresses stability, much as a living organism uses its skeletal structure and muscles to firmly grip the ground. This is the essence of Kodo design. The Mazda CX-60 uses its strong framework to convey its skeletal appeal when viewed from any angle.

The front grille adopts an adjusted aspect ratio which shows off the height of the grille more than on other Mazdas. The signature wing now features illumination functionality to further accentuate the powerful look of the grille.

The front lamp design is also new for Mazda. Unlike previous models, the Mazda CX-60 headlight arrangement features vertically stacked lamps and an L-shaped lighting signature to create an new expression that conveys the strength of an SUV.

In profile, the relatively rearward positioning of the cabin on the body lends the vehicle a dynamic sense of movement. The SUV’s sense of commanding toughness is enlivened by elegant surface treatment, with a streak of light which beams down from the cabin’s rear edge and grazes the rear wheel arch before reaching the ground. This simple yet powerful motion represents a boldness seen in Japanese calligraphy and modern art, in refusing to be bound by the frame of the canvas.

In keeping with the practice of adding an emblem to the front wing of sports cars, the Mazda CX-60 features a side signature to reflect the excellent driving performance offered by its front-engine, rear-wheel drive architecture.

The rear lighting signature also adopts an L-shaped design to match that of the front lamp clusters. The widely spread consecutive horizontal styling creating a lighting signature appropriate to a premium class vehicle.

Created through a further evolution of Mazda’s Takuminuri painting technology, a new Rhodium White finish joins the company’s Soul Red Crystal and Machine Grey as a third signature body colour.

The choice of white was inspired by the Japanese aesthetic belief that less is more, and the ‘nothingness’ of Zen Buddhism, creating the image of a machine focused on the dense luminosity of metal. In contrast to a conventional white pearl finish, Rhodium White has a hard shine with an even more dense particle texture, accentuating the Mazda CX-60’s powerful, graceful form.

In all, a choice of eight body colours are available: Jet Black, Deep Crystal Blue, Sonic Silver, Platinum Quartz, Arctic White, Rhodium White, Machine Grey and Soul Red Crystal.

The new Mazda CX-60 may be fitted with either 18-inch or 20-inch alloy wheels.

## Interior design

The interior design follows the exterior in expressing the strength of the Mazda CX-60’s front-engine, rear-wheel drive SUV architecture. The wide instrument panel features continuous lines which run through the sides air vents into the door trim, reinforcing the spaciousness of the interior.

The strong shape of the centre console penetrates the cabin space from front to back, expressing both structural strength and the presence of a longitudinally mounted engine, a new 8-speed automatic transmission, and rear-wheel drive.

Uniquely Mazda and deeply rooted in Japanese heritage, the interior celebrates the living quality of natural wood grain and high quality woven textiles, with Japanese craftsmanship achieving the highest levels of quality in both materials. Textures are created using both traditional methods and new technologies.

The treatment of the maple wood trim reflects the Japanese aesthetic of Hacho – asymmetrical balance, or intentional unevenness. The woven fabrics’ diverse patterns and yarns respond sensitively to changes in light, and a Japanese stitching technique called Kakenui creates ‘hanging stitching’ seams with spaces between the trim fabrics revealing a glimpse of the material beneath.

White ambient lighting on the front and rear door trim brings out the best of the colour and texture of the interior finishes.

Optional mid and high grade versions of the Mazda CX-60 feature a large, 1060 mm x 995 mm panoramic roof to expand the range of visibility and light for rear seat passengers. The roofline between the B pillars has been designed to reduce weight and enhance safety against side impacts.

### Driving Position

The Mazda CX-60 shares the same carefully considered cockpit design found on all Mazda cars, with a horizontally symmetrical layout centred on the driver. It offers an ergonomically excellent driving position that feels natural and supportive, and allows the driver to focus on road and traffic ahead.

The development of a notably slim eight-speed automatic transmission has minimised any increase in transmission tunnel width, allowing for the ideal pedal and seat placement, and knee space beside the centre console, even for those of a larger build.

In addition to the further development of seats that make it easier for occupants to maintain their natural sense of balance (see Driving Dynamics), the seat height adjustment has been designed to allow occupants to alter their seat height without either changing their posture or having to adjust the slide mechanism again after using the lifter. The steering wheel offers a 45 mm rake and 70 mm reach adjustment range.

Greater comfort and physical support is offered by a centre armrest which is 230 mm longer and 37 mm wider than that of the CX-5. The Commander Control knob has been moved forward by 132 mm and raised 82 mm to allow its operation with the user’s arm resting comfortably on the centre armrest. Both the front door grips and armrests have been designed to offer enhanced grip and support. The door armrests are now set at the same height as the centre armrest for ergonomic symmetry and maximum occupant comfort.

### Driver Personalisation System

The Mazda CX-60’s new Driver Personalisation System comprises three functions; an automatic driving position guide; automatic setting restoration; and ingress/egress assistance.

The automatic driving position guide uses a camera to detect the position of the driver’s eyes and input regarding the driver’s height to estimate their physique, then automatically adjusts the seat, steering wheel, HUD and door mirrors to match the driver’s eye position.

Automatic setting restoration uses facial recognition, and data on more than 250 adjustments and settings stored in the vehicle - including the driving position, audio and air-conditioning - to quickly and automatically restore the settings for each individual when the driver changes. The system can store settings for up to six people, plus guests.

In addition, the ingress/egress assistance function makes it easier for the driver to get in and out of the car by sliding the steering wheel and seat out of the way.

### Visibility

The Mazda CX-60’s seating is set higher to secure a clear and unobstructed view. A clear view of the bonnet from the driver's seat makes it easier for the driver to gain a clear sense of the vehicle's extremities and place it accurately on the road; an asset when driving on narrow roads or in parking lots.

The shape of the Mazda CX-60’s bonnet has been carefully designed to make it easier for the driver to identify the leading edge of the vehicle. The bonnet’s diagonal forward visibility threshold (the amount of road surface hidden by the vehicle corner diagonally opposite the driver) has been shortened by 303 mm compared to that of the CX-5, and its forward visibility threshold (the amount of road surface hidden by the vehicle directly in front of the driver) has also been shortened by 100 mm.

The CX-60 has also been designed to make it easier to visually check diagonally behind the vehicle, allowing the driver to change lanes with greater peace of mind. In addition, the base of the A pillar has been given a large, curved shape to make it easier to identify children at intersections.

### Human Machine Interface (HMI)

The driver’s cockpit area features three main instrument displays: a full TFT-LCD driver’s instrument binnacle, a large window Head-up Display (HUD) and a 12.3-inch infotainment centre display.

The driver’s instrument screen has been enlarged to a full 12.3-inch display. In addition to driving assist modes and warning displays, it also supports the Driver Personalisation System (see below) to optimise visibility of reach driver. In addition, the dynamic start-up and Mi-Drive mode displays enhance safety and security through improved visibility.

The HUD screen area is three times larger than that of the Mazda CX-30. This reduces unnecessary eye movement, provides the driver with essential information in an easy -to-understand manner, and heightens the sense of security while driving.

The text display has been enlarged and navigation data expanded to provide the driver with more detailed information on the road ahead. In addition, Advanced Driver-Assistance Systems (ADAS) settings and operation status information is optimally displayed to enable at-a-glance reading.

### PACKAGING

The all-new Mazda CX-60 is 4745 mm long, 1890 mm wide and 1680 mm high, and has a 5.4 metre turning circle. Its 2870 mm wheel base offers spacious accommodation for all occupants, as well as generous loadspace.

### Cabin and Loadspace

The Mazda CX-60 cabin has ample width, offering 1,504 mm of shoulder room in the front seats (44 mm more than the CX-5), and 1,441 mm in the rear seats (50 mm more than the CX-5). The rear seats offer enough legroom for passengers to sit with their legs straight instead of needing to twist their lower body – even those with a large physique can maintain a comfortable and stable posture whilst seated.

Including under-floor storage, the Mazda CX-60 has a 570 litre loadspace capacity, increasing to 1148 litres with the rear seats folded flat and 1726 litres when loaded to the ceiling. The usability of the cargo area has been greatly improved over that of the CX-5. The width of the tailgate opening has been increased to 1,082 mm (35 mm wider than the CX-5) and the height of the opening is 758 mm.

The height difference between loadspace floor and the tailgate sill has also been minimised for easier loading, and irregularities in the walls have been removed to offer a cleaner cargo bay shape. The loadspace is equipped with a 12V DC power outlet (optional 1,500 W AC for e-Skyactiv PHEV model with puncture repair kit).

The Mazda CX-60 may also be equipped with an optional hands-free powered tailgate. Activated by a sensor under the rear bumper, the tailgate can be both opened and closed by users even when both hands are full.

### MAZDA CONNECT WITH APPLE CARPLAY AND ANDROID AUTO

The Mazda CX-60 features the latest version of Mazda Connect, which includes enhancements such as a quicker start up, improved image and sound quality, a built-in 3D gyro sensor, and a free word search function that lets users search for destinations by entering a combination of keywords.

The system supports wireless Apple CarPlay® and, for the first time in a Mazda, wireless Android Auto™, as standard, to ensure a convenient user experience with smart phone integration.

### MYMAZDA APP

The latest MyMazda App is available for free from the Apple App Store and the Google Play Store. It introduces Connected Services across Europe with advanced functionality that removes any barriers between the car and driver to create a seamless ownership experience.

Numerous convenience and peace of mind functions include the following: Vehicle Finder helps the driver to find the car if it is parked in a large car park. When searching for the vehicle in a distant, non-visible location, its position can be identified on a map screen.

Remote Door Locking allows the driver who forgets to lock the vehicle doors to do so using the MyMazda App. The app will also notify the driver with an alert (and push notification if activated) when any vehicle door is not closed.

Before entering the vehicle, the MyMazda App can also be used to search for destinations when navigation guidance is required, and send the relevant information to the car. Multiple destinations, and places along the route, can be sent simultaneously.

A Vehicle Health Report function allows the owner to check information related to maintenance, such as the tyre pressure status. And owners can also be notified when scheduled maintenance is due.

Users can search for the nearest Mazda dealership and contact them directly via e-mail or telephone. The app also shows the vehicle's service history, and when the next service is due. Customers can directly schedule the next service and send a service request to the chosen Mazda dealership.

Through a Roadside Assistance function, information about a vehicle malfunction can be checked through the MyMazda App and customer support provided. Finally, if a door is pried open, the theft-alert function is activated and a Security Alert notifies the MyMazda App of the cause and the alert activation.

To use the MyMazda App, customers must register, and may then download it for free. They can then add their car to the app and enrol with Connected Services. Main drivers of the vehicle can also invite second drivers to the car, who will then also have access to connected vehicle functions. The functions available to the second driver can be chosen by the main driver.

### Audio Systems

The Mazda CX-60 features an enhanced version of the Mazda Harmonic Acoustics system originally developed for the Mazda3.

The size of the front cowl side woofers has been increased from 3 litres to 4.8 litres by using part of the vehicle frame to house them.

The front cowl side woofers are located in a space in the sides of the front cowl created by pushing the front tyre housing further forward to achieve ideal driving position ergonomics. The outer shell of the woofer box is used to reinforce the part of the vehicle frame to which it is welded. As a result, the Mazda CX-60 audio system has a greater bass dynamic range and higher quality sound reproduction.

Developed over the course of six years, the system amplifier is located under the Mazda CX-60’s right front seat. The high quality amplifier is the result of multiple, high-end audio technologies that work together to produce top quality sound.

They include a stable power supply, the use of a custom-made capacitor that’s unique to Mazda, and phoneme tuning that reproduces subtle and delicate sounds to playback as much audio information as possible.

Audio quality is further enhanced by the use of MSR NR (Master Sound Revive Noise Reduction) technology, which removes shot noise included in digital audio sources such as CDs – a first ever on genuine car audio.

Other enhancements include the addition of a second cone to the speakers under the centre cap. This extends the upper midrange and further improves then sound connection with the tweeters, which reproduce the higher frequencies.

### Bose Premium Sound System

The Mazda CX-60’s 12-speaker Bose sound system is unique in both its design and its performance. It takes the Bose BassMatch engineering approach to the next level, providing a powerful listening experience with deep, low-frequency impact for all occupants.

Located under the right-hand front seat, the heart of the system is a Bose digital amplifier with nine channels of custom equalisation and digital signal processing, including Bose Centerpoint 2 surround sound technology, Bose SurroundStage processing and Bose AudioPilot 2 noise-compensation technology.

The 12 high-performance speakers comprise: one 80 mm Twiddler in the centre of the instrument panel; two 25 mm neodymium tweeters, one in each door mirror patch; two 115 mm high-excursion neodymium woofers, each in a four-litre custom engineered cowl-side bass enclosure utilising the body frame; four 80 mm neodymium mid/high range speakers – one in each door; two rear 65 mm surround speakers – one mounted in each C pillar; and one 130 mm neodymium woofer in a 10 litre custom-engineered bass enclosure in the spare wheel housing.

The BassMatch cowl-side enclosures utilise perfect ‘drive points’ to deliver tighter, more powerful bass while reducing ‘door buzz’. Combined with the rear bass enclosure and tuning, the overall dynamic range, clarity and image width of the sound system is enhanced.

1. GRADE STRUCTURE

The Mazda CX-60 is available in a choice of three model grades: Exclusive-line mid grade, and Takumi and Homura high specification and superior quality grades.

Mid and high grades may be further equipped with different option packs: Driver Assistance, Convenience & Sound, Panoramic sunroof and Comfort

The interior is finished in durable plastics, with shapes and grains that reflect the rugged image of a reliable and dependable SUV. Cloth interior upholstery is complimented by a black interior with titanium accents, and a leather-trimmed steering wheel and gear lever.

A comprehensive equipment specification includes electric windows, 6-way adjustable driver and front passenger seats, dual zone-air-conditioning, a 12,3-inch colour TFT central touch screen and HMI Command controller, DAB radio with 8 speakers, Bluetooth, Wireless Apple CarPlay and Android Auto, sat nav, and automatic cruise control.

Exclusive-line adds a bar type piano Black grille, piano Black glazing surrounds, 20-inch Silver metallic alloy wheels, front and rear signature illumination, smart keyless entry and wiper de-icing.

On board, a Black leather interior features a dashboard finished in Black faux-leather vinyl with titanium piping. Roof pillars and the roof lining are finished in lighter colours to soften the overall look.

The upgraded equipment specification adds a Head-Up Display (HUD), front seats with 10-way power adjustment, seat heating, ventilation and automatic setting resortation, a heated steering wheel, and glove box and front footwell illumination.

Takumi has been created for the urban environment. The exterior features an exclusive front bumper design, a bar type piano Black grille, a bright metal finish to the front signature wings, side signatures and glazing surrounds, and 20-inch, Black metallic, diamond-cut machined alloy wheels.

The White Nappa leather upholstered interior celebrates the living quality of natural wood grain and high quality woven textiles, with Japanese craftsmanship achieving the highest levels of quality in both materials. Textures are created using both traditional methods and new technologies.

The treatment of the maple wood trim reflects the Japanese aesthetic of Hacho – asymmetrical balance, or intentional unevenness. The woven fabrics’ diverse patterns and yarns respond sensitively to changes in light, and a Japanese stitching technique called Kakenui creates ‘hanging stitching’ seams with spaces between the trim fabrics revealing a glimpse of the material beneath. White ambient lighting on the front and rear door trim brings out the best of the colour and texture of the interior finishes.

The Takumi equipment specification matches that of the Exclusive-line with Comfort grade, with the addition of rear footwell lighting, and a Black leather wrapped steering wheel with White stitching and power adjustment. The Mazda CX-60’s new Driver Personalisation System is fitted, using face recognition to adjust the seat, HUD and door mirrors to previously memorised positions.

Homura features a uniform exterior body colour, balancing elegance and strength with a sense of dignity. The exclusive front bumper design accentuates the intake and creates more surface area for the body colour below the bumper. The exterior trim combines a piano Black honeycomb grille with jet Black signature wing and side signature plating, and all-Black door mirrors, exhaust garnish and aerodynamic, 20-inch Black metallic alloy wheels.

The Black interior with standard leather upholstery creates a more driving-focused environment, and white ambient lighting on the front and rear door trim brings out the best of the high quality interior finishes.

The Homura specification matches that of the Exclusive-Line with Comfort grade, with the addition of rear footwell lighting and power steering wheel adjustment. Once again, Mazda’s new Driver Personalisation System is fitted.

1. POWERTRAIN

Taking a further step towards realising its ‘Sustainable Zoom-Zoom 2030’ declaration, Mazda has set a goal to electrify all vehicles it produces by 2030. Hence the new Mazda CX-60 not only launches the company’s first PHEV, but also includes 48V Mazda M Hybrid Boost technology in its line-up.

The all-new Mazda CX-60 adopts Mazda’s Skyactiv Multi-Solution Scalable Architecture for its longitudinal power units. This makes it possible to take further steps in electrification and satisfy environmental requirements with the company’s newly developed in-line six-cylinder diesel engine, as well as Mazda M Hybrid Boost vehicles and PHEVs.

The Mazda CX-60’s longitudinal powertrain format offers many advantages. These include the ability to mount motors and batteries of different sizes in the same layout for both the Mazda M Hybrid Boost vehicles and PHEV versions, and the facility to place the motor on the same axis as the engine and transmission.

The Mazda CX-60 powertrain line-up features three new engines: Mazda’s first PHEV -a 2.5 litre, four-cylinder e-Skyactiv G petrol unit with electrification technology, and two straight-six engines: a 3.3 litre e-Skyactiv D diesel unit and a 3.0 litre e-Skyactiv X petrol engine, where Sweden will offer the PHEV and later, when available also the 3.3 litre diesel engine.

All three powerplants are mated to a new eight-speed automatic transmission and Mazda’s i-Activ All-Wheel Drive system. The e-Skyactiv D diesel unit and the e-Skyactiv X petrol engine may also be equipped with rear-wheel drive only.

Mazda Intelligent Drive Select (Mi-Drive) offers a choice of four drive modes (plus EV mode for the PHEV) to provide optimum control and driving pleasure in every driving scenario.

The six-cylinder engines were developed based on the ‘right sizing’ concept, which calls for optimising displacement to improve fuel and power efficiency. Combining eight-speed automatic transmission with the electrification of Mazda’s 48V mild hybrid system, M Hybrid Boost, all three units are designed to dramatically improve power delivery and driving pleasure, while at the same time enhancing environmental performance.

## 2.5 litre e-Skyactiv PHEV

Mazda’s first PHEV powertrain combines a modified version of the Skyactiv-G 2.5, four-cylinder direct injection petrol engine found in the CX-5 with a large, 100 kW electric motor and a 355V, 17.8 kWh high-capacity lithium-ion battery.

The petrol engine develops a maximum power output of 141 kW at 6000 rpm and 261 Nm of torque. The electric motor delivers 100 kW of power and 250 Nm of torque from zero rpm.

With intake tuning to improve torque at the most frequently used mid- to low-speed ranges – 1,500 to 3,000 rpm, this combination of engine and motor delivers a total system output of 327 PS/241 kW and abundant torque of 500 Nm, making it the most powerful road car Mazda has ever produced.

The Mazda CX-60 e-Skyactiv PHEV delivers highly impressive performance, accelerating from 0-100 km/h in just 5.8 seconds, and on to a limited maximum speed of 200 km/h.

Conversely, and most notably when running on electric motor power alone, the new Mazda PHEV displays outstanding environmental credentials. WLTP combined fuel consumption is just 1.5 l/100 km1, and WLTP combined CO2 emissions only 33 g/km[[3]](#footnote-3).

The Mazda CX-60 e-Skyactiv PHEV offers 63 km of motor-powered driving with the vehicle running at 100 km/h or less. When charged via normal AC charging (compatible with 220-240V power supplies) the battery can be fully charged from empty in four hours.

## 3.3 litre e-Skyactiv D

Adopting a right-sizing approach and calculating the optimal emissions from the Mazda CX-60 based on its weight, Mazda’s inline six-cylinder diesel engine features a capacity increased from 2.2 to 3.3 litres, as well as an increase in the speed range at which lean burn (High-efficiency combustion with minimal fuel consumption) is possible.

As well as enhancing output performance through increased engine capacity, Mazda has designed the unit to use surplus air to improve combustion. This results in a more agile acceleration response, lower NOx emissions at high rpm and output, and better thermal efficiency due to a greater lean burn speed range.

Two technologies in particular ensure all surplus air is used during combustion, regardless of engine speed: the use of egg-shaped combustion chambers that divide the air-fuel mixture into two regions within the piston bowl, resulting in a greater lean burn area with minimal unburned residue; and high pressure fuel supply technology that enables fast and precise injection. Together, these two technologies contribute significantly to the Mazda CX-60’s outstanding driving range.

Additionally, the inline six-cylinder unit uses a simple structure, resulting in an engine weight similar to that of a conventional four-cylinder diesel, thus minimising the difference in handling balance despite the higher engine capacity.

## M Hybrid Boost (48V Mild Hybrid System)

A first for the company, Mazda’s MHEV48 hybrid technology equips both of the Mazda CX-60’s straight-six powerplants. When paired with the diesel engine, it offers not only the value of even better fuel economy, but also improved environmental performance by using the electric motor to support the engine in the light load (idle to low speed) range where internal combustion engines are not very efficient.

The support provided by the motor when pulling away from a standing start can be felt the instant the driver applies the throttle, contributing to the evolution of the Jinba-Ittai driving experience.

## Regenerative Braking

Mazda CX-60 MHEV powertrains adopt a regenerative-friction brake coordination system. This coordinates control of the friction brakes and motor energy regeneration system to achieve the intended braking force will recovering energy without waste.

It uses a brake-by-wire system to detect the required level of braking force whilst generating as much energy as possible within this range. It then compensates for any shortfall by braking force generated by the friction brakes, achieving both a natural braking feel and good fuel economy.

The compact and innovative brake-by-wire system unit integrates operation of the brakes, the brake booster and the brake control system. As the brakes are controlled by electrical signals, this set-up facilitates more intricate control of the brake compared to previous mechanical systems.

The Mazda CX-60 MHEV also adopts cooperative control of the AWD and motor regeneration systems. This works by increasing AWD fastening torque during motor-powered regenerative deceleration, stabilising vehicle posture during braking and regenerating more energy.

## Eight-speed Automatic Transmission without Torque converter

Mazda’s new eight-speed automatic transmission offers drivers smooth and responsive gear shifting with clear, smooth gear steps and a wide range, achieving the right balance of dynamic and environmental performance.

The new transmission shifts gears in the same manner as a torque converter transmission - via planetary gears and multi-plate clutches- but it does not have an hydraulic converter as an input clutch, rather, a multi-plate clutch as well as an integrated electric motor/generator.

By replacing the torque converter with a clutch, the torque of the engine and motor is transmitted directly, with fast and rhythmic shifting much like a manual transmission. In addition, the clutch’s friction transmission and cooling functions have been evolved to achieve smooth starting and high efficiency.

The Mazda CX-60 e-Skyactiv PHEV’s hybrid powertrain allows for the independent power mixing of the petrol engine and electric motor, and the new transmission helps to implement this smoothly at all speeds.

The compact design of Mazda’s unique eight-speed transmission and the optimal layout of the entire powertrain effects a smaller transmission tunnel space, minimising the impact on the pedal box space and allowing for an ideal driving position.

## i-Activ AWD

Mazda’s first cross-model longitudinal layout platform adopts an all-wheel drive system that uses an electronically controlled multi-plate clutch. This newly developed system achieves high traction performance and ideal handling characteristics, making it one of the best performing AWD systems on a production vehicle.

The AWD concept for the Mazda CX-60’s new longitudinal vehicle platform involves a full-time all-wheel drive system that preserves the neutral cornering performance characteristics of a rear-wheel drive system but balances it with the stability of AWD.

The greater stability of its powerful traction on snow or other slippery surfaces, its straight line stability on highways and its handling performance on winding roads greatly surpass the previous i-Activ AWD system based on front-wheel drive power.

On the PHEV’s hybrid system, the AWD system works with the regenerative coordinated braking to optimise front and rear wheel regenerative distribution so that more energy can be recovered from all four tyres during deceleration.

In Mi-Drive’s Sport, Off-road and Towing modes, the AWD system’s integrated control over the powertrain and braking systems optimises the distribution of drive force to all four wheels to handle various driving environments.

## Mi-Drive

The Mazda CX-60’s evolved Mi-Drive Mazda Intelligent Drive Select system offers five switchable drive modes – **Normal, Sport, Off-Road, Towing** and **EV** (PHEV only) - to optimise grip, traction, performance, handling and safety in the widest possible range of driving environments.

**Normal** mode pursues the best balance of fuel efficiency and driving performance and offers a comfortable ride in all aspects of daily life.

**Sport** mode maximises the potential of the car’s dynamic performance and enhances the responsiveness of the powertrain to support more aggressive driving. The AWD system increases its clamping force to improve manoeuvring stability and allow the driver to enjoy powerful driving with peace of mind.

**Off-Road** mode optimises the AWD system, Traction Control System (TCS) and other dynamic systems to deliver traction-oriented characteristics for greater performance on rough terrain. This mode also offers an ‘off-road traction assist’ function to help drivers free the vehicle if it ever gets stuck.

**Towing** mode optimises the AWD powertrain output characteristics for the increased weigh when a towing hitch is mounted to pull a trailer or a bike carrier or roof box is mounted, providing a satisfying ride. In addition, the AWD system is optimised for trailer towing to improve straight line stability.

**EV** mode (PHEV only) makes it possible to drive under electric motor power alone. For example, in areas where internal combustion-engined vehicles are banned, or when driving in a quiet residential area.

1. DRIVING DYNAMICS

The new Mazda CX-60 is based on Mazda’s Skyactiv Multi-Solution Scalable Architecture, designed to be compatible with the SUV’s longitudinal front-engine rear-wheel drive mechanical layout.

In addition to working with the company’s new inline six-cylinder engines and making it easier to install electrification technologies such as M Hybrid Boost and e-Skyactiv PHEV systems, Skyactiv Multi-Solution Scalable Architecture features numerous enhancements that improve Jinba-Ittai driving.

Based on Mazda’s human-centric approach, these include bodyshell rigidity that ensures drivers can feel vehicle response without lag, seats that make it even easier for every occupant to maintain balance while the car is moving, suspension that stabilises vehicle posture while driving, and a Mazda-unique vehicle posture control system - Kinematic Posture Control (KPC).

## Bodyshell

Mazda’s goal with the Mazda CX-60 was to enable the driver to instantly sense the car’s response to each control operation, resulting in a car that offers the driver a true sense of unity from behind the wheel.

The rigidity of the body structure was strengthened by taking advantage of the longitudinal powertrain layout to enlarge and strengthen the cross-section of the front frame. Increasing the rigidity of the frame member joints contributes to greater overall rigidity of the entire multi-ring body structure.

From the steering wheel to the front tyres, and from there to the front suspension, the body, the rear suspension, the rear tyres, the body and then the seat, power is transferred from the rigid elements of the human body – muscular strength and skeletal structure – to the car’s mechanical rigid elements in order, and the feedback from the car is sensed without delay.

As a result, the Mazda CX-60’s structural transmission characteristics allow the driver to feel as if the car is a natural extension of the human body.

The positioning of the high voltage battery between the front and rear axles and as low as possible within the bodyshell gives the new Mazda CX-60 PHEV a particularly low centre of gravity. This, combined with a permanent all-wheel drive system incorporating shaft-driven transfer of torque between the axles, gives the car superior handling characteristics on a par with the best in the premium segment.

## Seats

In Mazda’s current line-up of Small Architecture models, the seats are already designed to support the pelvis correctly, so the mobility of the spine is ensured. This makes it easier for a person’s reflexes to balance against lateral G-forces during corners.

The new Mazda CX-60’s seats add support for the fulcrum points of body movement when operating the steering wheel, throttle pedal and brakes, creating a structure that supports the driver’s subconscious attempts to maintain balance in response to G-forces from all directions.

To achieve this, Mazda increased the number of cushion springs from three to four, further improving the seat’s support of the body and preventing the pelvis from rolling backwards. The seatback suspension mesh has been changed to a plate, reducing yaw rotation of the chest area. And seat mount rigidity had been increased to provide even more support.

In addition, for the polyurethane elements of the seats, the elasticity of the resin frame has been maintained but the resin coating on the cushion cells has been adjusted to balance damping and elasticity. This not only improves ride comfort, but also contributes to the faster transmission of force from the rear tyres, enabling the driver to feel more in sync with the vehicle and enjoy a more rhythmic driving feel.

Every seat is designed using the same concept as the driver’s seat, enabling all cabin occupants to enjoy the drive without being swayed by the movement of the car.

## Suspension

The new Mazda CX-60 features a double wishbone suspension system to the front and a multi-link set-up to the rear. Based on Mazda’s Jinba-Ittai philosophy, the suspension has been designed to control the sprung mass (vehicle body) smoothly during cornering and stabilise vehicle posture in a wide variety of speed ranges.

Three measures ensure the springs and dampers operate smoothly, only moving straight up and down, with no lateral or longitudinal shaking in response to input from the tyres: the adoption of a suspension geometry that smooths vertical movement of the car body; zero offset between tyre input and the position of the damping support members; and an optimised rear suspension layout.

In addition, the adoption of aluminium die-casting for the top of the suspension on all four wheels increases rigidity. This has resulted in more efficient input transmission from the suspension to the vehicle body and, hence, quicker transmission of force from the front to rear suspension.

The front double wishbone set-up has control arms at the top and bottom. Making use of the additional space afforded by the longitudinally mounted powertrain, the suspension control arms have been extended and the longitudinal span secured.

Even the most basic parts of the suspension have been carefully designed to make the tyres grip the road surface better and stabilise vehicle movement even in situation such as cornering or driving on rough surfaces. Refining the suspension settings has resulted in a simple, smooth body movement which offers close communication between car and driver.

Using knowledge and experience gained from the MX-5, the rear multi-link suspension is designed to enhance ride comfort and reduce road noise without negatively affecting handling or stability. The use of metal ball joints in place of rubber bushes on the outer sides of the rear suspension links increases rigidity.

As a result, the structure transmits force from the rear tyres to the vehicle body more directly. This means that, in turn, vehicle response to driver input will be transmitted to the driver in a more direct manner, allowing the driver to experience a true sense of connection with the car.

The outcome of the new Mazda CX-60’s human-centric suspension system design results in a chassis that enables drivers to experience smooth vehicle movement no matter what the driving situation and suspension that minimises head movement, enabling owners to enjoy intuitive control of the car at all times.

## Steering

Also used on the MX-5, the Mazda CX-60’s dual-pinion electric power steering (EPS) increases the rigidity of the EPS motor and parts to which it connects that exert a large amount of power, creating a solid and consistent relationship between the steering wheel angle and front tyre angle. The result is a direct, clean steering feel that provides more precise and reassuring control over the car.

## Kinematic Posture Control (KPC)

Kinematic Posture Control (KPC) is a new, Mazda-unique technology that takes advantage of the way the Mazda CX-60’s suspension structure is designed to facilitate smooth body movement and stable cornering even at high speeds.

The rear suspension of the Mazda CX-60 is designed to oppose lift force and draw the vehicle body downwards when the vehicle brakes. KPC makes the most of these suspension characteristics, stabilising vehicle posture when cornering under particularly high G-force by braking the inside rear wheel slightly to mitigate roll and draw the car body downwards.

In addition, the system uses the speed difference between the rear wheels to detect the turning state in real time, using this information to make vehicle movement more linear, and stabilise vehicle posture as required. The KPC system adds no weight to the Mazda CX-60 at all.

## Hill Descent Control (HDC)

Mazda’s Hill Descent Control supports safe downhill driving on steep slopes with slippery, rough surfaces such as off-road terrain or snow-covered hills. The system constantly monitors tyre rotation and uses this information to precisely control brake fluid pressure and stabilise vehicle movement, automatically keeping the car at a constant speed without the driver needing to use the brakes.

In the event the heels should slip when driving downhill with Hill Descent Control activated, ABS will automatically take control of the brakes. Once ABS is deactivated, HDC once again maintains the set descent speed.

HDC is operational at speeds of 3 to 20 km/h. It switches to standby at speeds of 20 to 30 km/h so that it can resume control at any time the vehicle returns to the operational speed range. At speeds of over 30 km/h, the system switches off automatically.

## Towing Capacity

The new CX-60 PHEV has a towing capacity of 2,500 kg (for 8% and 12% slope). To achieve this, the engine cooling performance has been enhanced. The radiator surface area has been increased and a side radiator added. A two-level radiator structure has been adopted that cools high-temperature water on one level and low temperature water on another.

Under-bonnet airflow has also been optimised to achieve more efficient cooling through the fitting of a dual-latch bonnet, a wind guide to the side radiator, and strengthening of the ducts to reduce wind leakage.

## Quietness

The Mazda CX-60 utilises both sound insulation and absorption technology to eliminate all unpleasant noise and give the cabin a uniquely refined Mazda quietness.

Sound insulation (noise transfer prevention) has been improved by reducing the number of holes and gaps in the floor to an absolute minimum, and by adopting a two wall, body panel and surface material structure to reduce wind noise.

Sound absorption has been enhanced through adjustment of the cushioning layer between the body panels and surface materials to better control wind noise and absorb more low frequency sounds such as road noise.

1. SAFETY

The Mazda CX-60’s comprehensive range of advanced i-Activsense driver assistance systems ensure active safety at the highest level, and target a Euro NCAP 5-star safety rating.

Several new technologies debut in the Mazda CX-60: See-Through View - a next-generation 360-degree monitor with extended field of view at low speeds; Hill Descent Control (HDC), which assists in safely descending steep slopes with slippery or rough road surfaces; Cruise Control (i-ACC), which can now incorporate speed limits from Traffic Sign Recognition; and Vehicle Exit Warning (BSM) for rear-approaching road users.

Other i-Activsense systems include: Advanced Smart City Brake Assist (Advanced SCBS) with pedestrian and cyclist detection and intersection function, Rear Emergency Brake Assist (SBS-R) with pedestrian detection, Lane Keeping Assist with Steering Assist, Traffic Sign Recognition (TSR) and Drowsiness Detection (DAA).

## See-Through View

Mazda’s 360° View Monitor uses a four camera system that covers all sides of the vehicle to display a bird’s-eye view of the car from above on the centre display, as well as a choice of front, rear and left or right side views.

The Mazda CX-60 adds See-Through View as a further evolution of the 360° View Monitor functionality. It displays an image on the screen that seemingly allows the driver to see through the front and rear corners of the car from their viewpoint, making it easier to spot objects obscured by the vehicle’s bodywork.

This helps the driver remain fully aware of surrounding conditions when driving slowly in tight spaces such as parking lots and narrow alleys.

## Further i-Activsense Systems

Standard across the Mazda CX-60 range, Advanced Smart City Brake Support (Advanced SCBS) uses a forward-sensing camera to detect vehicles and pedestrians ahead -both by day and at night - and help avoid collisions or mitigate damage in the event one does occur. The system automatically stops or reduces the speed of the car when there is a risk of collision with the vehicle or pedestrian in front.

Other key i-Activsense driver-supporting technologies included as standard across the range include Mazda’s Lane-keep Assist System and Blind Spot Monitoring with Rear Cross Traffic Alert.

Blind Spot Monitoring keeps the driver aware of vehicles approaching when, for example, changing lanes. Its Rear Cross Traffic Alert function monitors the vehicle‘s surroundings when reversing, alerting the driver when it detects vehicles approaching from the sides.

Mazda Radar Cruise Control (MRCC) with Stop and Go function automatically maintains the appropriate vehicle speed and optimum following distance, even if the vehicle ahead comes to a complete standstill. i-Adaptive Cruise Control (i-ACC) is an additional function which allows drivers to easily set the MRCC to the speed limit by using Traffic Sign Recognition.

Further standard active safety equipment includes a four-wheel anti-lock braking system (4W-ABS) with Electronic Brakeforce Distribution (EBD) and Brake Assist, Dynamic Stability Control (DSC), a Traction Control System (TCS), an Emergency Stop Signaling System (ESS), Hill Launch Assist (HLA), and automatic headlamps which illuminate about 30 minutes before sunset, making it easier for pedestrians and other cars to notice the vehicle.

## Passive Safety

Mazda has carefully analysed real-world accidents to thoroughly refine passive safety technologies from various angles, including protection not only of the vehicle itself but also the one with which it collides to mitigate injuries within the other vehicle, as well as to better protect the elderly and pedestrians.

The company’s passive safety technology has been developed with the goal of obtaining the highest European safety ratings.

## Frontal Impact Protection

Three breakthrough technologies combine to deliver excellent frontal collision safety performance: Firstly, the multi-path structure efficiency absorbs energy through three separate load paths -main, upper and lower- to soften the impact on occupants and minimise cabin deformation.

Secondly, the axial compression frame doubles energy absorption efficiency whilst contributing to both space and weight savings. Thirdly, the framework is designed to be a straight as possible. These technologies not only ensure the Mazda CX-60 has outstanding forward collision resistance, but also support its design by contributing to a class-leading short front overhang of only 842 mm.

## Side Impact Protection

The frame connections, which are traditionally a weak point in terms of bending and twisting, have been strengthened to distribute the load. An 1,800 MPa grade high-strength material made using Mazda’s new moulding technology has been combined with conventional 1,300 MPa grade material in the same parts to enhance strength in non-bending areas whilst reducing it in bending areas, achieving an ideal deformation mode whilst reducing weight.

The roof design marries the open, airy feel of a panoramic roof with the strength required in the event of a roll over. The open feel has been maintained by adopting a thin roof bow, adjusting the roof cross-section, and using stronger materials for the bow itself – 980 MPa as opposed to 500MPa- to make the roof stronger.

Cabin occupant protection in the event of a side impact is further enhanced by the fitting of both centre airbags and rear seat side airbags.

## Rear Impact Protection

The Mazda CX-60 is designed to absorb twice as much rear impact energy as the current CX-5. To date, Mazda vehicles have absorbed energy by the bending and deformation of the rear frame. However, the Mazda CX-60 uses axial deformation of the rear side frame to absorb double the energy. At the same time, the thickness of the side frame has been reduced to effect further weight saving.

## High Voltage Protection

e-Skyactiv PHEV versions of the new Mazda CX-60 are equipped with comprehensive high voltage protection measures to protect vehicle occupants from the risk of electric shocks. In addition to the strength of the vehicle body, physical protection has been added to the battery itself, ensuring both direct and indirect contact protection as well as insulation resistance.

Specifically, this involved using malleable aluminium -an extremely strong, crack-resistant material- for the battery housing, as well as adding energy absorbing material to the outside of the housing to prevent it from breaking.

Multiple measures based on different electrical principles have also been implemented to cut off parts other than the battery from the high voltage system in the event of a collision. A circuit interrupter and voltage reducer are used to shut off the flow of electricity that would cause power dissipation.

## Pedestrian Injury Mitigation

As 70% of pedestrian fatalities and serious injuries from car accidents involve injury to the head, legs, or hips, the Mazda CX-60’s bonnet and front bumper face have been designed to protect these areas.

The bonnet achieves both pedestrian head protection and rigidity in a single structure by adopting a cross-sectional structure that divides the panel into an upper section that absorbs energy and a lower section that provides rigidity. In addition, the design ensures there is sufficient space between this structure and rigid under-bonnet parts such as the engine.

In addition, the front fenders have been given enough height to expand the bonnet crush zone so that it will gently absorb head impact in the case of a collision with a pedestrian.

The front bumper face ensures ample space between the bumper cover (design surface) and the bonnet and bumper beam. The weight of the internal structure of the bumper face has been carefully controlled so that it will gently absorb leg and hip impact. And the internal structure of the bumper face is divided vertically to absorb energy from straight ahead and above, while the inclusion of a support bracket helps prevent bumper hanging.

1. TECHNICAL SPECIFICATIONS All-new mazda cx-60

## DIMENSIONS

|  | 2.5 e-Skyactiv PHEV 327ps 8-speed AutomaticAWD |
| --- | --- |
| **Exterior** |
| Overall length with number plate holder | mm | 4,745 |
| Overall width | mm | 1,890 |
| Overall height - 20" wheels | mm | 1,685 |
| Wheelbase  | mm | 2,870 |
| Ground clearance between the axles – (20'' tyres) | mm | 175 |
| Front track |  | 1,640 |
| Rear track |  | 1,645 |
| Curb-to-curb turning circle radius (m) | m | 5.4 |
| **Interior** |
| Front head­room – without sun­roof  | mm | 1,004 |
| Front shoulder room | mm | 1,504 |
| Front legroom | mm | 1,058 |
| Rear head­room -without sun­roof | mm | 984 |
| Rear shoulder room  | mm | 1,441 |
| Rear legroom  | mm | 990 |
| **Cargo area** |
| Cargo Volume (all seats up to beltline) / including underfloor storage | l | 477 / 570 |
| Cargo volume to ceiling (rear seats folded down) including underfloor storage | l | 1,726 |
| Height, floor to tonneau cover  | mm | 498.5 |
| Load floor length after 2nd row | mm | 975 |
| Width between rear tire house | mm | 1,130 |
| Width at floor | mm | 1,275 |
| Boot opening threshold height, distance from ground | mm | 740 |

## Weight

|  | 2.5 e-Skyactiv PHEV 327ps 8-speed AutomaticAWD |
| --- | --- |
| Maximum curb weight without/with 75kg driver - 20" A wheels  | kg | 2,072 / 2,147 |
| Max. permissible weight - total  | kg | 2,667 |
| Permissible front axle weight  | kg | 1,221 |
| Permissible rear axle weight  | kg | 1,446 |
| Permissible tow weight, trailer without brakes  | kg | 750 |
| Permissible tow weight, trailer with brakes (12% slope) | kg | 2,500 |
| Maximum roof load  | kg | 100 |

## ENGINE

|  | 2.5 e-Skyactiv PHEV 327ps 8-speed AutomaticAWD |
| --- | --- |
| Drivetrain |  | AWD |
| Transmission |  | 8EAT |
| Engine type |  | I4 DOHC 16 valves |
| Fuel injection type |  | Direct injection |
| Displacement  | cc | 2,488 |
| Bore x Stroke  | mm x mm | 89.0 x 100.0 |
| Compression Ratio  |  | 13.0 |
| Maximum combined output  | kW@rpm | 241/4,000 |
| Maximum combined torque  | Nm | 500 |
| Maximum engine output  | kW@rpm | 141/6,000 |
| Maximum engine torque | Nm | 261 |
| Maximum electric motor output  | kW | 100 |
| Maximum electric motor torque  | Nm | 250 |
| Fuel tank capacity  | L | 50 |
| Emission control device |  | 3-way catalyst |
| 12 volt battery type |  | Q-85 |
| **PHEV battery** |
| Type |  | Lithium-ion |
| Voltage  | V | 355 |
| Discharge capacity  | Ah | 50 |
| Battery capacity  | kWh | 17.8 |
| Battery Weight  | kg | 175.1 |

## Transmission

|  |  |  |
| --- | --- | --- |
|   |   | 2.5 e-Skyactiv PHEV 327ps 8-speed AutomaticAWD |
| **Gear ratios** |
| 1st  |  | 5,258 |
| 2nd  |  | 3,303 |
| 3rd  |  | 2,129 |
| 4th  |  | 1,705 |
| 5th  |  | 1,300 |
| 6th  |  | 1,000 |
| 7th  |  | 0,822 |
| 8th  |  | 0,628 |
| Reverse |  | 4,034 |
| Final gear |  | 4,444 |

## Performance

|  |  |  |
| --- | --- | --- |
|   |   | 2.5 e-Skyactiv PHEV 327ps 8-speed AutomaticAWD |
|  0-100 km/h acceleration time | s | 5.8 |
| Top speed with limiter  | km/h | 200 |
| **WLTP fuel comsumption** |
| EV driving range – Combined 20'' tyres | km | 63 |
| EV driving range – City 20'' tyres | km | 68 |
| Fuel consumption – 20'' tyres | l/100km | 1.5 |
| **WLTP emission** |
| Combined CO2 emissions – 20'' tyres | g/km | 33 |
| European emission standards level |  | Stage 6 G2 |

## SUSPENSION & WHEELS

|  |  |  |
| --- | --- | --- |
|   |   | 2.5 e-Skyactiv PHEV 327ps 8-speed AutomaticAWD |
| **Suspension** |
| Front suspension type |   | Double wishbone |
| Front suspension type |   | Multi-link |
| **Wheel & Tyres** |
| 20" tyre size | 235/50/R20 |
| 20" wheel size | 20X7-1/2J |

## STEERING & BRAKES

|  |  |  |
| --- | --- | --- |
|   |   | 2.5 E-SKYACTIV PHEV 327PS 8-SPEED AUTOMATICAWD |
| **Steering** |
| Steering type |   | Electric power assisted rack and pinion |
| **Brakes** |
| Brake disc type |   | Ventilated discs front and rear |
| Front disc diameter  | mm | 347 |
| Rear disc diameter  | mm | 328 |
| Parking brake type |  | Electric parking brake |

#MazdaCX60

#Mazda

#DriveTogether

For more information please visit the Mazda Press Portal
www.mazda-press.com

1. With 18-/20-inch wheels [↑](#footnote-ref-1)
2. With 18-/20-inch wheels [↑](#footnote-ref-2)
3. With 18-/20-inch wheels [↑](#footnote-ref-3)