

2018 MAZDA 6





THE MAZDA6 STORY



魂動
KODO: SOUL of MOTION

SKYACTIV[®]
TECHNOLOGY

Mazda is clear in its purpose as a car company, to bring smiles to people and brighten their everyday lives.

This is why Mazda exists in the world, the reason Mazda builds cars.

Our never-stop-challenging spirit is what drives Mazda to develop these cars.

Mazda believes that there are still people who care about their cars. There always will be.

That is why the idea of the car as a transportation tool with no soul and no passion could not be further from the cars Mazda builds today.

Our lineup continues to deliver Mazda's driver-first DNA—but it is also being recognized today for its design and quality.

This is because the brand's evolution is built on the pillars of KODO design and SKYACTIV Technology.

This is what we call Mazda Premium. Mazda vehicles compete in a class above, at a price that is readily affordable. But above all else, we offer a depth of engagement with owners that satisfies at every step in the customer journey.

History of the Mazda Flagship Sedan

Mazda has been building flagship sedans for decades—cars that make the driver feel special and serve as a beacon for the Mazda brand through their sophisticated design and technology. With the introduction of the 2018 Mazda6, Mazda is going even further than ever before, adorning the interior with Japanese Sen Wood, Nappa leather and other luxuries to go along with its new turbo engine.

Mazda has always aimed high...and it always will. But it started a long time before 2018.

1966-1973 MAZDA LUCE



Pronounced loo-chay, Mazda's first flagship sedan entered the Mazda family in 1966, joining a lineup consisting of the Carol (subcompact car), Familia (compact car) and Capella (midsize car). It was sold in the U.S. for just three model years, known as the Mazda 1500 or 1800 in some markets, from 1971 to 1973.

The Luce was designed by famed designer Giorgetto Giugiaro, who penned many Lamborghinis, Maseratis and even a Nikon camera.

Later in the model's life, Mazda built a two-door version called the R130, dropping its standard four-cylinder engine and rear-wheel drive for a two-rotor engine and front-wheel drive, completely re-engineering the car. Fewer than 1,000 were built, all for right-hand-drive markets, securing collector status for truly discerning enthusiasts. Just two Luce R130s are known to exist in the U.S.; Mazda North American Operations owns one in Irvine, California.

1972-1977 MAZDA RX-4



With the Luce still on dealership floors, Mazda launched the next boundary-pushing sedan called the RX-4, Mazda's first rotary powered sedan.

Available as a sedan, coupe or station wagon, the RX-4 was known for its power, driving engagement and the smoothness of its rotary engine. In the era, it was marketed as a car that went "hummm" when piston engines went "boing boing."

The 1970s were nothing if not great for the rotary engine. Almost everything Mazda sold in North America featured the engine. Unfortunately, they weren't the most fuel-efficient cars on the road, which left a wide opening for the start of Mazda's era of piston-engine cars, starting with the hyper-efficient GLC compact car in 1977.

1988-1992 MAZDA 626



The fourth-generation Mazda 626 was crucial to both Mazda's sales success and its business strategy. A commercial success, the Mazda 626 was available as both a four-door sedan and five-door hatchback in the U.S. The 1989 model would herald Mazda's first four-door produced at its Flat Rock, Michigan, facility.

The plant would produce various Mazda models from the MX-6 sports coupe in 1987 until 2012.

The fourth-generation Mazda 626 sedan was also noteworthy for another reason: The one-year-only 1988 626 Turbo. A technological showcase, the Mazda 626 Turbo featured four-wheel steering, a turbocharged, 2.2-liter engine and all sorts of technological gadgetry that put it ahead of its time.

1992-1995 MAZDA 929



The original concept for the final 929 to be sold in the U.S. was a car that was dignified for royalty and Japanese government officials. It competed against the luxury makes of the day, equipped with a 200-horsepower, 3.0-liter V6 engine, a solar panel that was used to power an interior ventilation fan, four-wheel

steering and even standard leather seating surfaces. Much like today's Mazda CX-9 crossover SUV, its engine was marketed as one with readily usable power and an abundance of amenities.



Replacing the Mazda 929, the Millenia was a true premium sedan, packed with many engineering firsts. Perhaps the most intriguing was its 2.3-liter, supercharged Miller Cycle V6. Ahead of its time by a decade, the Miller Cycle engine pumped out 210 horsepower, yet returned respectable fuel-efficiency and spirited performance.

The Miller Cycle, which is similar to the Atkinson Cycle, keeps intake valves in the engine open longer than normal in order to facilitate smoother airflow throughout the engine—learnings still used in today’s SKYACTIV engines and tomorrow’s SKYACTIV-X compression-ignition engine. The engine won a Wards 10 Best Engine award four years in a row.

The car wrapped around the engine drew plenty of praise, too.

**1995-2002
MAZDA MILLENIA**



The Mazda6 merged learnings from the midsize 626 and premium Millenia, returning to form with a car that truly reinvigorated the midsize sedan segment. It was sportier and more expressive than its competition. It even came in a color in a segment that was literally full of beige cars. The Mazda6 was exactly what Mazda

needed, bringing an exciting flagship to a brand that was about to become chock-full of award-winning cars like the Mazda3 and RX-8.

**2003-2008
MAZDA 6**



A larger, more sumptuous Mazda6, it is perhaps the oddest sedan Mazda had sold because of its unique configuration. The Mazda6 sold in North America was both longer and wider than the Mazda6 sold elsewhere, stemming from the need to compete against larger midsize cars sold on the continent.

An added benefit was the addition of a 3.7-liter V6 engine, built specifically for North America.

As with the first-generation Mazda6 and the models that have come since, the goal has been to position the car in a class above its competition, including interior design and comfort. But, Mazda continues to offer a manual transmission for those who prefer DIY shifting.

**2009-2013
MAZDA 6**



One of the first all-new Mazdas from the ground up since the brand regained its independence, the 2014 Mazda6 was a global midsize sedan that was aimed toward the premium end of the segment. Featuring SKYACTIV Technology, the new Mazda6 was markedly more efficient than its immediate predecessor,

as well as more elegant, featuring design cues from Mazda’s SHINARI (2010) and TAKERI (2011) concept cars.

Unique to the Mazda6, the car received substantial upgrades during every year of its model life, whether an all-new interior, added sound insulation, a new infotainment system, Nappa leather, upgraded safety systems or even a switch from available high-intensity xenon headlights to LED units that emit greater light intensity, yet are also more energy-efficient. No wonder, then, that it continued to win comparisons and critical praise throughout its model life.

**2014-2017
MAZDA 6**

It may look much the same as its immediate predecessor, but the entire chassis has been re-engineered to deliver greater refinement, better handling and improved ride. Inside, passengers enjoy truly luxury-car levels of accommodations, complete with Mazda’s first-ever available ventilated front seats, Japanese Sen Wood interior trim, Nappa leather and heaps of technology.

Perhaps the most dramatic departure for the Mazda6 is its melding of customer wants and needs, blending the sportiness for which the Mazda6 is known with a new direction that’s more sophisticated and effortless. That led Mazda’s engineers to add the award-winning SKYACTIV-G 2.5T turbocharged engine to the options sheet, representing the first Mazda sedan with turbocharging since the MAZDASPEED 6 of the mid-2000s. However, whereas that sedan was visceral, this one is all about delighting the senses, wrapping the driver and passengers in a sedan in the traditional of a grand tourer. The result is a rethink of Mazda’s midsize sedan, elevating it beyond its mainstream competitors to challenge premium sedans without any pretenses.

**2018
MAZDA6**





Message from the Program Manager
Hideki Matsuoka

Mazda's Newest Flagship For People Who Love Cars

At Mazda we love cars. We want our cars to help people live more fulfilling and vibrant lives. We also want customers to feel a strong bond with our brand. That is the foundation of our corporate vision.

So Mazda's cars must be more than just a means of transportation. They must offer Zoom-Zoom, driving pleasure that energizes people both mentally and physically.

To achieve this, we pursue human-centered vehicle design based on extensive research into human traits and sensibilities, and then apply our newest and most advanced technologies throughout our entire lineup. We will continue this approach not only with our current lineup but also with the forthcoming generation of Mazda cars. We aim to live up to customers' expectations of Mazda and become a brand they can choose with pride.

Based on this idea, we have re-engineered and refreshed much of our brand's flagship model, the Mazda6, for the third time and made the most extensive changes yet.

In the previous two updates, we conveyed our desire to continue enhancing the Mazda6 to achieve the ideal in driving pleasure.

The refined beauty and dynamism of this model reflect its owner's lifestyle, values and sense of style, and the car has been acclaimed around the world.

In updating the model for the third time, the development team made it their goal to please customers who love cars, enabling them to spend quality time with their families and friends and to live rich, hopeful lives.

In order to do that, we focused on providing an effortless driving ability that allows a relaxed drive. Power is needed when starting off, merging onto the highway, passing, or changing lanes. We wanted to offer responsive power the instant the driver needs it and give the feeling that the car has more still in reserve. This allows the driver to relax and enjoy the drive even more.

The highly responsive handling of the Mazda6 means the car moves exactly as the driver intends, inspiring confidence and peace of mind. The body is more rigid, the ride quieter, and the suspension system has been redesigned to take the driving pleasure of the Mazda6 to a new level.

In terms of safety, the updated Mazda6 offers a wider range of driver support than ever, adopting advanced i-ACTIVSENSE safety features like Mazda Radar Cruise Control with Stop & Go and updated Adaptive LED Headlights.

With a newly designed front grille, we have created an exterior with a dynamic yet dignified beauty that befits the Mazda6. The interior, including the instrument panel, has undergone major changes for more elegance and a higher quality feel. The latest cockpit, featuring a windscreen-projected Active Driving Display and more comfortable seats, demonstrate our focus on enhancing the comfort and security of the driving environment.

Also with this update, we have created a new interior specifically for our highest grade models. Designed to stimulate the senses, it combines some of Mazda's finest materials, including real wood trim and suede. We aimed to offer the ultimate in refinement so customers who resonate with the way Mazda pursues its own ideals can face new challenges with a sense of confidence and pride in their choices.

We have attempted to refine and develop the Mazda6 in all areas, and the car's appeal has been taken to the next level. We are confident that we have made a product that will offer customers who love cars value beyond that indicated by the price tag.

We want to be an essential part of our customers' lives, and we hope the Mazda6, which will continue to drive the growth of the Mazda brand, will remain a great partner in our customers' vibrant everyday lives.

ENGINEERING:
**INNOVATIONS AND
REFINEMENTS**





JINBA ITTAI

The literal translation is horse and rider as one body, but the concept and meaning comes from Yabusame, an ancient form of Japanese horse archery dating back to the late 1100s. In Yabusame, the Samurai archer shoots at a stationary target while standing astride a galloping horse. This marriage of speed and precision requires an uncanny connection between the horse and the rider. The horse needs to read the rider's intentions through nothing but subtle weight shifts, and the archer needs to know and anticipate every movement of the horse, to recognize the moment of calm in each stride where a shot can accurately trace its intended path.

The connection goes beyond the mechanical connection at the rider's feet, and the technical understanding of the horse's gallop. It both requires and creates a deep trust between two beings working together toward the same goal. It is this deep, emotional connection, aiming for intuitive responses and a sense of connection rather than arbitrary performance statistics, that is true meaning of Jinba Ittai, and this has been the guiding principle at Mazda since long before it was first used as a rallying cry for the first MX-5 engineering team in the mid '80s.

The quest for Jinba Ittai leads Mazda engineers to think differently and focus on different things. To truly understand how to make a car feel intuitive, we have to study humans more deeply, understanding the fundamentals of human perception that underlie the sense that a car just feels right.

Human-Centric Engineering



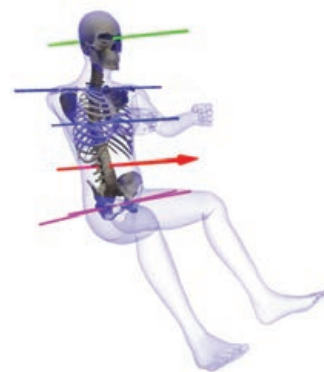
To consistently achieve a sense of Jinba Ittai, we've put increased effort into understanding the human side of the human-machine interface. Recalibrating the driving experience started with understanding fundamental truths common to all people.

At the most basic level, all humans must do the same instinctual thing when driving or riding in a car: balance their body against external forces from acceleration, braking, cornering and ride motions.

The human body has not evolved to balance against any external forces while sitting in a chair.

Both our musculoskeletal structure and the subconscious balance centers of our brains are tuned for walking upright. If you imagine a walking person in two parts, you can see a relatively stationary upper body balancing upright and riding on top of a two-legged suspension system.

The two principles we take from this are designing a seat that holds the upper body in a similarly upright position, and designing both powertrain and suspension systems to mimic the same kinds of motions delivered by our legs.



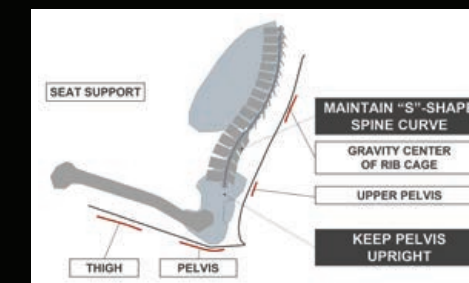
Balanced Seating

The simple objective of our new seats is to hold the pelvis upright and keep the spine in the same S-shaped posture we see when standing or walking. Although a more slouched, C-shaped posture may feel good when flopping into a lounge chair, it's significantly more difficult for your body to counteract the natural g-forces of driving from a slouched position. Mimicking a standing posture ultimately leads to less fatigue when driving or riding in a car. Additionally, by allowing your body to naturally balance itself, we don't need as much assistance from aggressive side bolsters, giving more design freedom for seat comfort.

Our new seat design focuses on getting the pelvic bone to sit upright, as it would be when standing. This naturally puts each individual person's spine in their own natural standing posture, so no matter who sits in the seat, it feels custom made for them.

One key to achieving this s-shaped posture was re-contouring the bottom cushion to prevent the bottom of the pelvic bone from sliding forward. This included tilting the front of the seat bottom up more, and, in most trim levels, adding adjustment to that tilt. This serves two purposes, helping keep the pelvis and lower back pressed against the backrest and distributing weight more evenly across the seat bottom, eliminating pressure points.

On the back rest, support is focused lower to push the pelvic bone upright.





Human Acceleration

In evolving to walk upright, our bodies have adapted to move and balance simultaneously. Each motion we make follows the same predictable profile; accelerating and decelerating as smoothly as possible. This is something we can see in the bell-shaped increase and decrease of muscle voltage on an electromyograph, or the similarly bell-shaped trace of acceleration at our extremities. We're also adapted to always keep our head level and our eye-line stable.

To keep our head level while walking, our neck muscles automatically tense and release in rhythm with each step. Each smooth, bell shaped contraction of the calf muscles accelerates the body and that acceleration is countered with a matching contraction of the neck muscles.

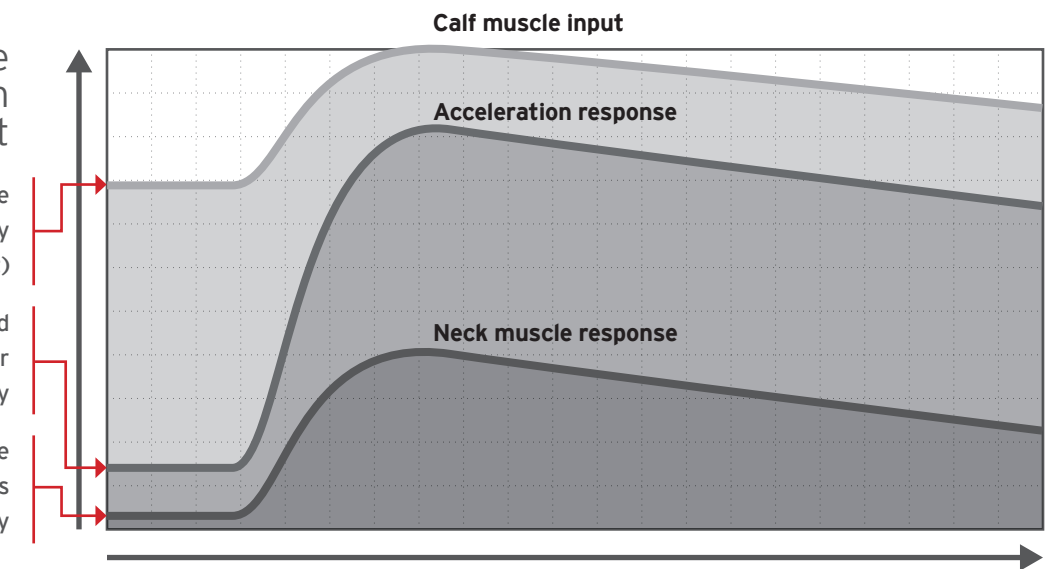
These instincts still apply in the driver seat, even though the connection between calf and neck muscles is more circuitous. Tension in the calf muscle presses the accelerator, generates torque, accelerates the car, and requires a balancing response from the neck muscle. When we walk, there is no response delay between pushing against the ground and the resulting acceleration. This is what our instincts expect, so this is what we strive to make our powertrains deliver.

Acceleration response
should match
the drivers input

Input from the driver to the
accel pedal (represented by
calf muscle effort)

Vehicle acceleration should
respond in the same manner
(shape) without delay

When acceleration matches the
drivers input, the neck muscles
can stabilize the head naturally



Torque and Response

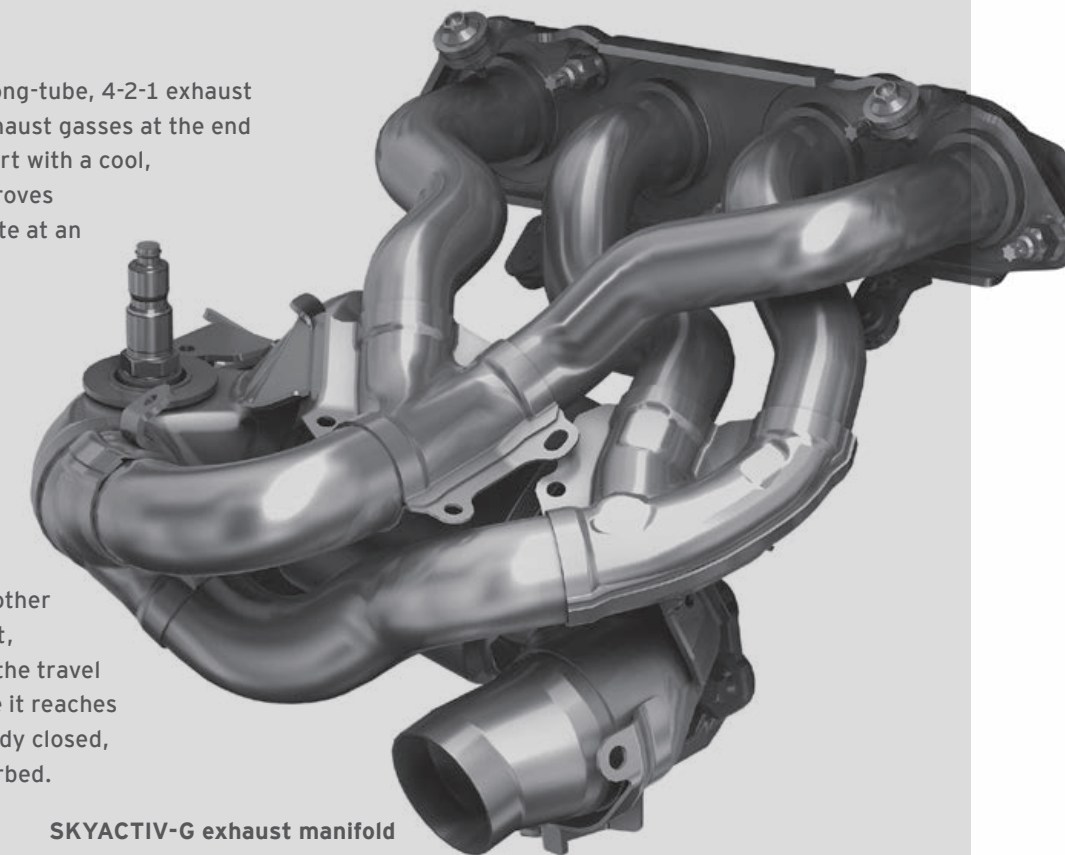
Focusing on our instinctive need for direct response led to an unusual powertrain solution. While small, turbocharged engines and 8- or 9-speed transmissions are a common solution to balance performance and fuel economy needs, the need for direct response led us to a larger-displacement turbo-four and a transmission with fewer gears. The first goal was to design an engine that delivers peak torque at the same low engine speeds where the engine is usually cruising, reducing the need for downshifts to respond to small changes in acceleration demand. Each downshift, no matter how quick, is an interruption in the direct response our subconscious is expecting, so limiting the number of overdrive gears makes it possible to match cruising RPM and peak torque RPM. The second goal was immediate and smooth boost response, especially off idle where turbocharged engines mated to automatic transmissions struggle the most to deliver direct response.

The need to deliver high torque at low RPM while maintaining exceptional efficiency led to a unique exhaust manifold solution. To maintain efficiency, we want to maintain the highest compression ratio possible (10.5:1 in this case), but both high compression and high boost pressures lead to knock, especially at low engine speeds where the air/fuel mixture spends more time in a hot, high-pressure condition.



In our naturally aspirated SKYACTIV-G engines, a long-tube, 4-2-1 exhaust manifold is used to more thoroughly extract hot exhaust gasses at the end of each combustion cycle so each new cycle can start with a cool, undiluted charge of fresh air. This dramatically improves knock resistance and allows those engines to operate at an unprecedented 13:1 on 87 octane fuel.

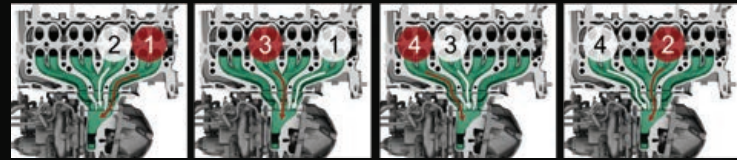
But this long-tube manifold isn't feasible when a turbocharger needs to be packaged as close to the exhaust ports as possible. A long-tube exhaust manifold is effective because of the way exhaust pulses interact in a four-cylinder engine. With a short exhaust manifold, the pressure pulse from an opening valve on one cylinder can bounce up an adjacent exhaust port and push back on the low-pressure gas trying to exit at the end of another cylinder's exhaust stroke, trapping it, and its heat, in the cylinder. A long-tube manifold simply makes the travel time for that pressure wave too long, so by the time it reaches any other cylinder's exhaust port, the valve is already closed, and the last of the hot gas was able to exit, undisturbed.



SKYACTIV-G exhaust manifold

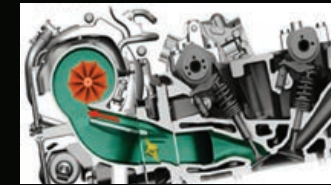
To accomplish this same exhaust extraction in the inch-long manifold between the cylinder head and turbo, a completely different principle is used. The high velocity exhaust pulse of one cylinder is used to draw out the low-velocity end gasses of another cylinder in the same way that a high-velocity stream of air is used to draw paint out of an airbrush.

To ensure the high-velocity exhaust port is always next to a low-velocity port so it can help with extraction, the center two exhaust ports are paired together, leaving only three exhaust ports in the side of the cylinder head. The 1-3-4-2 firing order means those center two cylinders never fire back-to-back, and adjacent-firing cylinders always have their ports side-by-side, like the air and paint ports of an airbrush.

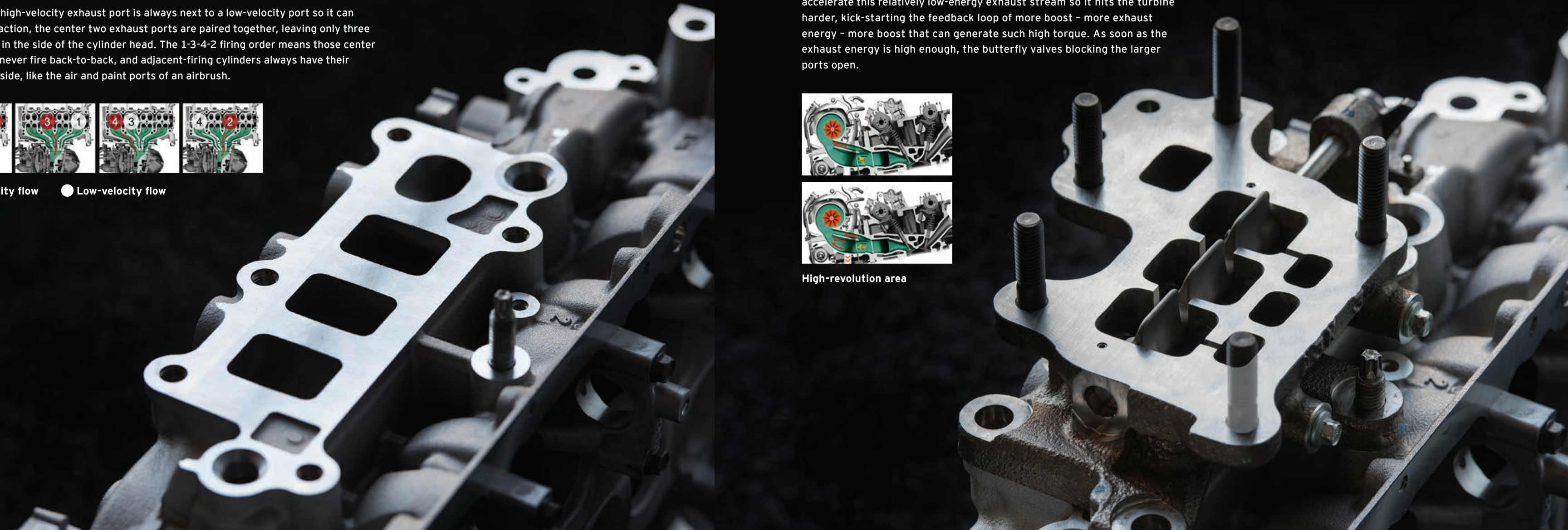


● High-velocity flow ● Low-velocity flow

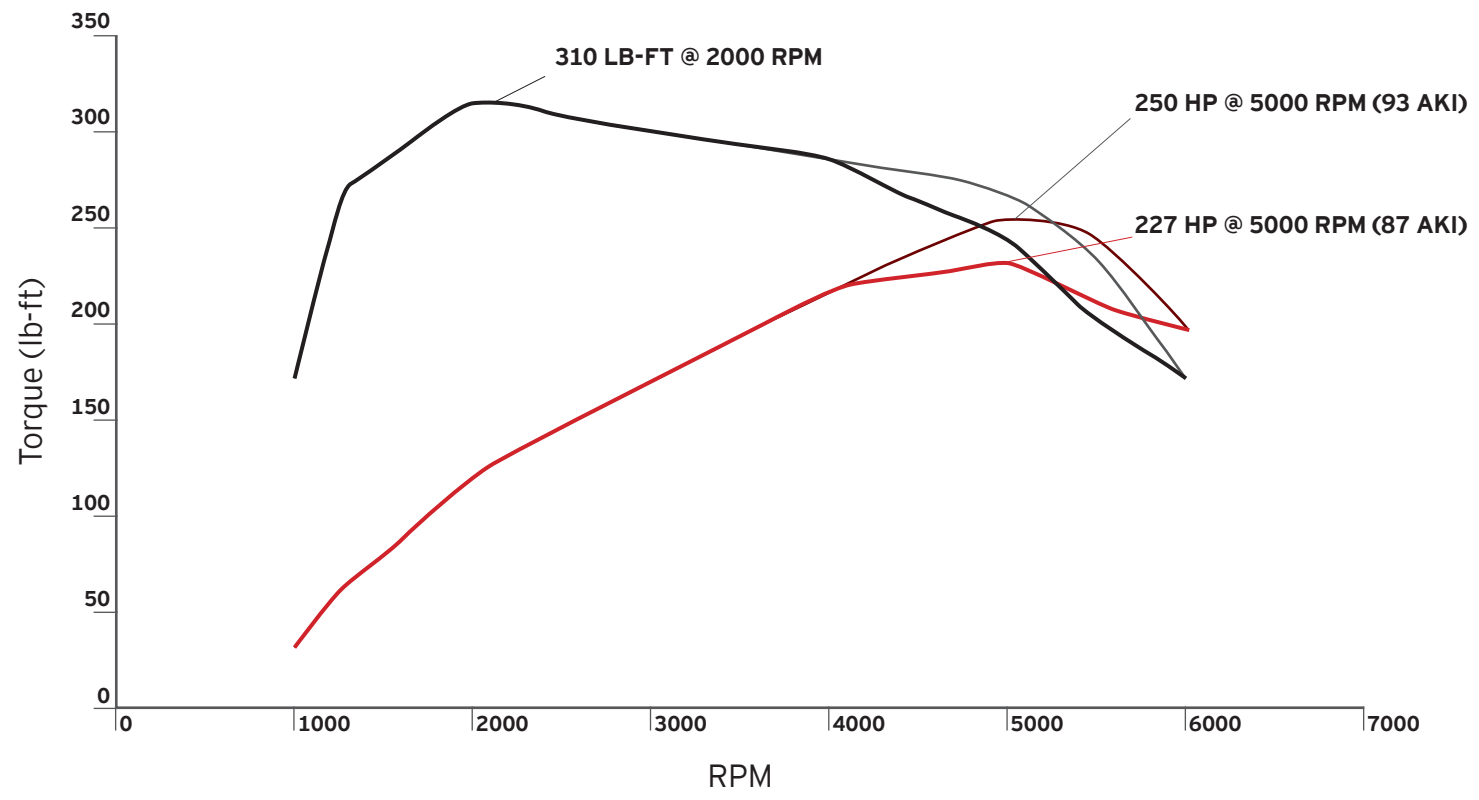
To deliver instant boost response off idle, a second set of smaller exhaust ports is used. Spinning up a turbo at low rpm is difficult because the exhaust stream doesn't have enough energy to accelerate the turbine. Still using the 4-3 exhaust routing of the larger ports, these small ports accelerate this relatively low-energy exhaust stream so it hits the turbine harder, kick-starting the feedback loop of more boost - more exhaust energy - more boost that can generate such high torque. As soon as the exhaust energy is high enough, the butterfly valves blocking the larger ports open.



High-revolution area



With this much low-RPM torque available, almost all of the acceleration demands of normal driving are satisfied without going past 4000 RPM, and the engine can deliver maximum performance in this range on 87 octane fuel. For more aggressive driving, high-rpm performance can be improved with premium fuel. This is why the engine has two horsepower ratings (250 horsepower on 93 octane fuel, 227 horsepower on 87 octane fuel), but only one peak torque rating (310 lb-ft) and only one fuel economy rating (23/31/26).





Natural Handling

Despite the elaborate motions of our legs and feet, the motions that reach our upper body are generally quite simple. In normal walking, our upper body feels a smooth, sinusoidal oscillation in the vertical axis, and smaller lateral oscillation as we rock from foot to foot. These are the inputs our brain naturally filters out of our perception, so tuning ride motions to mimic these walking motions helps align vehicle behavior with our subconscious expectations. Bigger inputs, like changing direction, stepping over something, or even jumping, all share a common thread: the way we accelerate our body always follows the same bell-shaped pattern we recognized in the calf and neck muscles. By tuning the suspension to move the seats in a similar manner, we can ensure the occupants' subconscious will have an easier time balancing and therefore feel more comfortable.

To achieve this improved ride quality while protecting the handling performance the Mazda6 is known for, significant chassis changes were required.

A softer tire carcass gives improved isolation from sharp road inputs and reduces road noise inputs, but it can also dull steering response. To counteract this, the rubber mounts in the steering rack were eliminated to give a more direct load path from the steering wheel to the tires. New fluid-filled lower control arm bushings help damp the vibrations the rubber steering rack mounts were originally designed to isolate.

To provide the needed body motion control while ensuring the smooth, fluid motions that feel most human, the dampers were redesigned. A range of measures, including new spring perches, damper seals and bushing designs were taken to reduce suspension friction. Larger-diameter pistons now exert more precise control over large undulations and full-body road inputs.

In hard cornering, the outboard suspension is designed to reach the bump stop, which will gradually increase the spring rate and control the total roll angle. But this can also cause more extension of the inboard suspension, making the car feel like its cornering on its toes. The new dampers incorporate rebound springs, which are designed to start controlling the extension of the inboard suspension at the same moment when the outboard suspension starts using the bump stops. This keeps keep roll contained and gives the car a more planted feel though the corner, but without the head toss and restricted articulation of larger anti-roll bars.

Finally, both front and rear suspension geometries were changed to reduce roll understeer. Roll understeer comes when the front toes out under compression and rear toes in, meaning the outer tires both steer out of the corner slightly as the body rolls. Too much roll understeer will make the car body point slightly toward the outside of the corner, giving the driver the sense that they're forcing the car to do something it doesn't want to do. By reducing the toe change, less steering angle is required for the same cornering radius, and the vehicle body points into the corner, aligning the vehicle attitude with the driver's eyeline, leading to a feeling that the car is carving more naturally through the corner.



Peace and Quiet

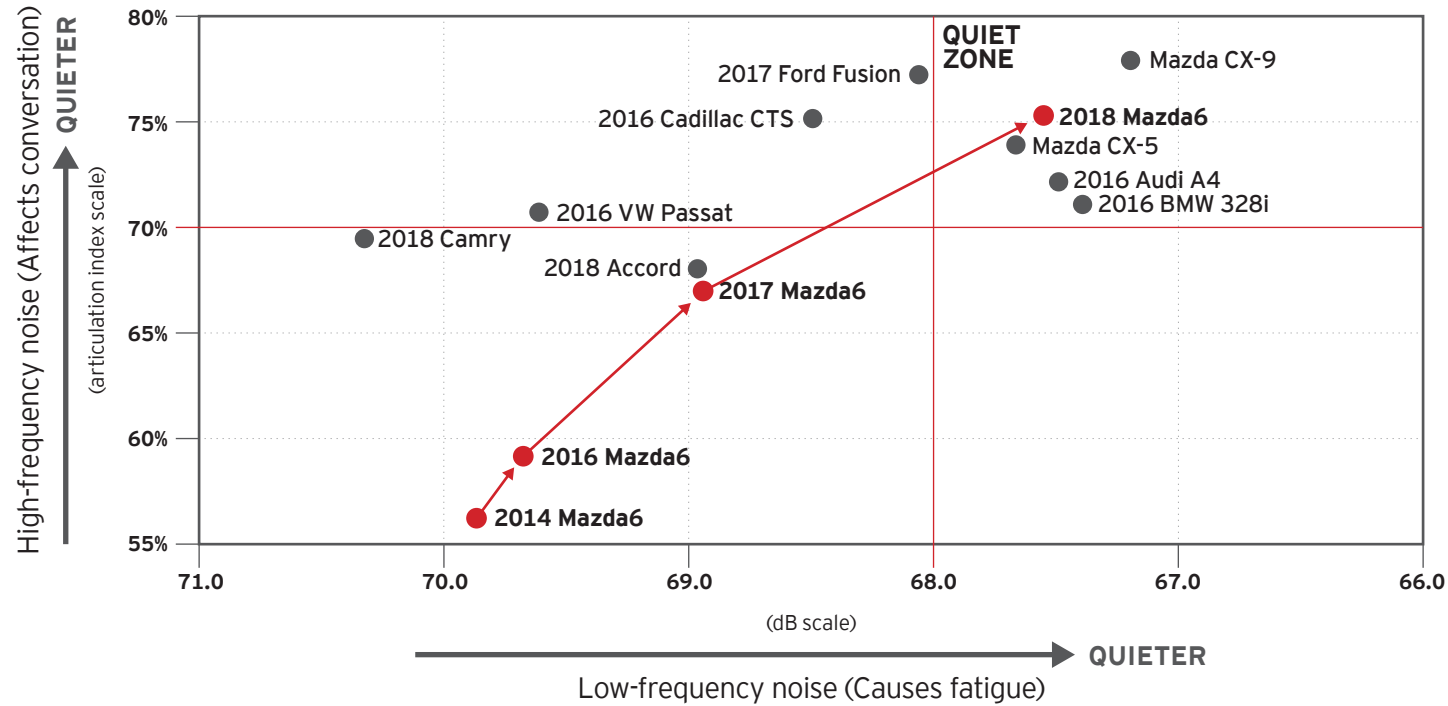
Our NVH efforts are focused on the frequency ranges most relevant to human perception. Higher-frequency noises primarily from wind turbulence and tire tread pattern tend to land in the frequency ranges used in human speech. Background noise in these frequency ranges make conversation difficult and make music sound muddy. The lower-frequency booming and rumble noises coming through the suspension tend to cause fatigue, especially on longer drives.

Like all Mazdas, the Mazda6 has seen continuous improvement since its introduction. We made NVH improvements in 2016 and 2017, but the NVH work done for the 2018 model were far more comprehensive, representing a tires-to-headliner re-examination of noise sources. The result more than doubled the improvements from the first two updates combined. Interior noise levels are now at the level of the 2018 CX-5 and CX-9.

In addition to simply reduced sound levels, the quality of the remaining sound is being addressed by reducing reflections and echoes, so each sound is heard as a single, clear sound.

NVH reduction is a game of details, and more than 70 details, big and small, contribute to this new sense of calm.

Interior noise (Driver's seat)



Road Noise:

- Quieter tires and stiffer wheels
- Thicker floorpan and rear wheel well sheet metal
- Reinforced suspension mounting points
- Strategically placed damping pads added to body sheet metal in fenders and center tunnel
- Re-tuned harmonics of every suspension component using various combinations of dynamic dampers, mass and stiffness changes to reduce transmission of unwanted frequencies

Wind Noise:

- Thicker windshield and acoustic glass front side windows (except Sport trim)
- Tighter-fitting window channels and re-contoured door seals
- Lower-profile wipers that avoid the high-velocity air flowing off the back of the hood
- Re-contoured exterior B-pillar trim that's now sealed against the body

Acoustic Isolation:

New seals added between interior and body cavities, e.g. seals behind inner door panels and scuff plates

New or additional insulation added behind interior B- and C-pillar trim, behind trunk panels, under the package shelf and along the firewall

Reduced size and number of hidden cutouts in the carpet

New insulation layer between roof and headliner



Sound Details:

Flocking in the center console and glove box, and rubber liners in the door pockets prevent rattle noises when items shift during driving



Audio

With the efforts made to quiet the interior, we also took the opportunity to improve the in-vehicle audio listening experience. In previous model years, the BOSE® audio system in the Mazda6 utilized tweeters in the far corners of the dashboard that were aimed upwards at the windshield, with the sonic output being reflected and scattered by the glass. While it was able to provide depth to the listening experience, the tweeter location made it difficult to accurately create the details in the vocals, guitars, horns, and high notes that make the music come to life. To remedy this, the tweeters have been moved to the sail panels on the front doors. With this new location, the sound stage is noticeably wider and it is now much easier to discern high frequency details.

Comfort

Directly heating or cooling the skin is faster and often more satisfying than first changing the air temperature and waiting for the air temperature to affect the body. Seat heaters are now available in both the front seats and rear outboard seats, as is a steering wheel heater. Ventilated front seats are also available. The seats utilize a suction fan to pull away the hot, humid air trapped between your body and the seat. This strategy (rather than blowing air through the seat) works with your body's natural perspiration response to bring your skin to a comfortable temperature and keep it dry at the same time.





Minimizing Distraction

Driver distraction can be broken down into three basic categories: Visual distraction, where the driver's eyes are drawn away from the road, manual distraction, where the driver's hands are drawn away from the wheel, and cognitive distraction, where the complexity of an in-car task impairs the driver's situational awareness. The MAZDA CONNECT system was conceived at the outset to minimize all these distractions. The screen is placed high and far forward to reduce glance and re-focus times. Controls are all tactile, through steering wheel controls and the console-mounted commander, because most tactile inputs can be done without looking. The graphics are simple, high-contrast and logically placed to shorten recognition time.

Following these same principles, the central MAZDA CONNECT screen is now larger (8 inches), and optically bonded to provide greater contrast, reduced glare and improved visibility in a wider variety of lighting conditions. Optical bonding is the same process used in most top smartphones.

The new instrument cluster replaces the central speedometer with a 7-inch display, but maintains the familiar analog layout that's cognitively simple to process. A press of the INFO button transforms the center of the speedometer to show trip info, i-ACTIVSENSE information, or Maintenance Monitor content.

A larger, multi-color windshield-based Active Driving Display replaces the smaller, monochrome display that was projected on a combiner lens in previous model years. Projecting on the windshield moves the focal length farther away from the driver so that the driver's eyes require less time to focus when moving their gaze between the Active Driving Display and the roadway.

Smartphone Integration

Mazda6 will be the first Mazda vehicle in North America to offer Apple CarPlay™ and Android Auto™ compatibility.

Switching between different user interfaces and managing the different capabilities of each can increase cognitive distraction, so we made mode switching as simple as possible, and even allowed the system to simultaneously perform native functions and smartphone-based functions.

All CarPlay, Android Auto and MAZDA CONNECT functions use the tactile commander interface. At any time, a long press of the Home button will transition between the native MAZDA CONNECT and the CarPlay or Android Auto experience. To leverage the capabilities of Siri via CarPlay or Google Assistant via Android auto, the native MAZDA CONNECT voice recognition becomes inactive whenever a CarPlay or Android Auto compatible device is connected.

If the driver wants to navigate using Apple Maps on CarPlay or Google Maps or Waze on Android Auto, while still listening to terrestrial or satellite radio on MAZDA CONNECT, this is as simple as pressing the Entertainment button to control audio and then the Navigation button to switch back to whichever smartphone-based navigation system he or she is using. Audible turn-by-turn directions can be heard regardless of which screen is active.



DESIGN:
EXTERIOR



Since the mid-2000s, the Mazda6 has served as Mazda's flagship sedan, a beacon for performance-focused, detail-oriented drivers who wanted an elevated experience rather than just another commodity sedan.

In 2012, Mazda aimed its sedan higher, launching the third-generation Mazda6 with striking KODO—Soul of Motion design and SKYACTIV Technology.

KODO embodies the dynamics of motion and life in an inanimate vehicle. Sleek, yet purposeful, KODO emphasized a long hood, short deck, large wheels and a swept back greenhouse.

Launched alongside it was SKYACTIV Technology, a holistic suite of engineering principles and radically new philosophies that allows Mazda's vehicles to become lighter, nimbler, more efficient and more engaging than ever. The two Mazda tenets became a core to the Mazda6's success.

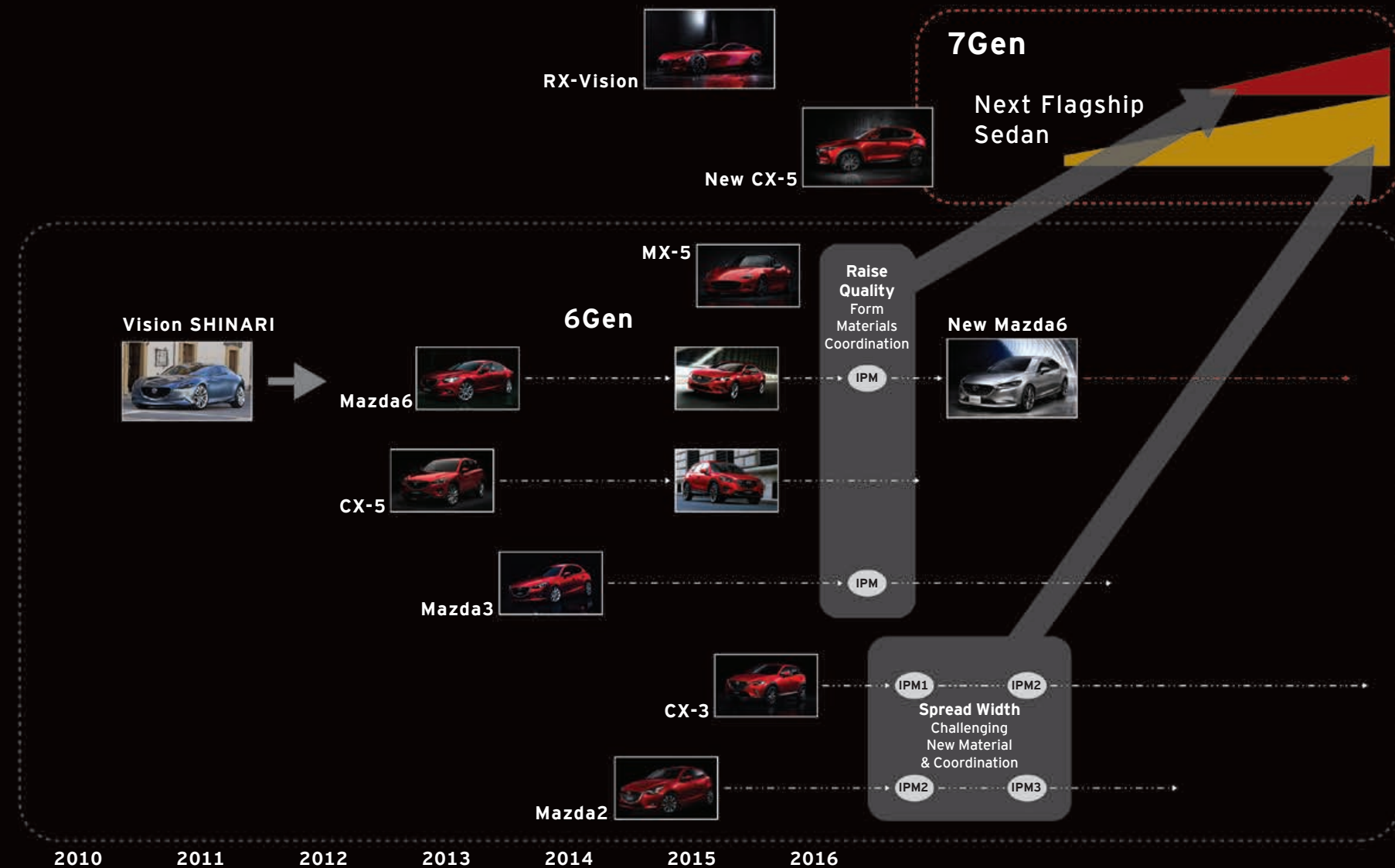
Since then, the overall direction for the Mazda brand has been to aggressively pursue frequent in-cycle product improvements, launching new design and technologies when they became available instead of simply during a single mid-cycle refresh. Whether major or minor, Mazda is always looking to bring some level of changes from model year to model year. In the case of this Mazda6, the 2018 model represented the biggest leap yet.

With the new model, Mazda looked to accomplish a few key strategies:

- Build the bridge of design and technology to Mazda's future
- Take an already great design and further refine the aesthetics and the tactile elements
- Update to have a strong visual impact, achieving this through a sophisticated and clean design approach and not by simply adding more to the design

Steps Toward Next-Generation Vehicles

Pursuing quality enhancements and elevating design expression





Mature Elegance

As the Mazda6 moves up its place among the Mazda brand and serves as a beacon, it's design team chose the theme "Mature Elegance" to describe how they would simplify, yet heighten the design aesthetic.



The design team focused on the three points:

- **Brand Expression:** A more three-dimensional signature wing along with considerably updated lamp detail
- **Lower Centre of Gravity:** The lower fascia is much more grounded, and the brightwork is pushed to the edges
- **Enhanced Craftsmanship:** The Mazda6's mesh grille is upscale in execution but also remains sporty

The fog lamp functionality is now integrated into the main light assembly, so this simplifying the front face and emphasizing beauty through simplicity that is Japanese design.

Previous Model



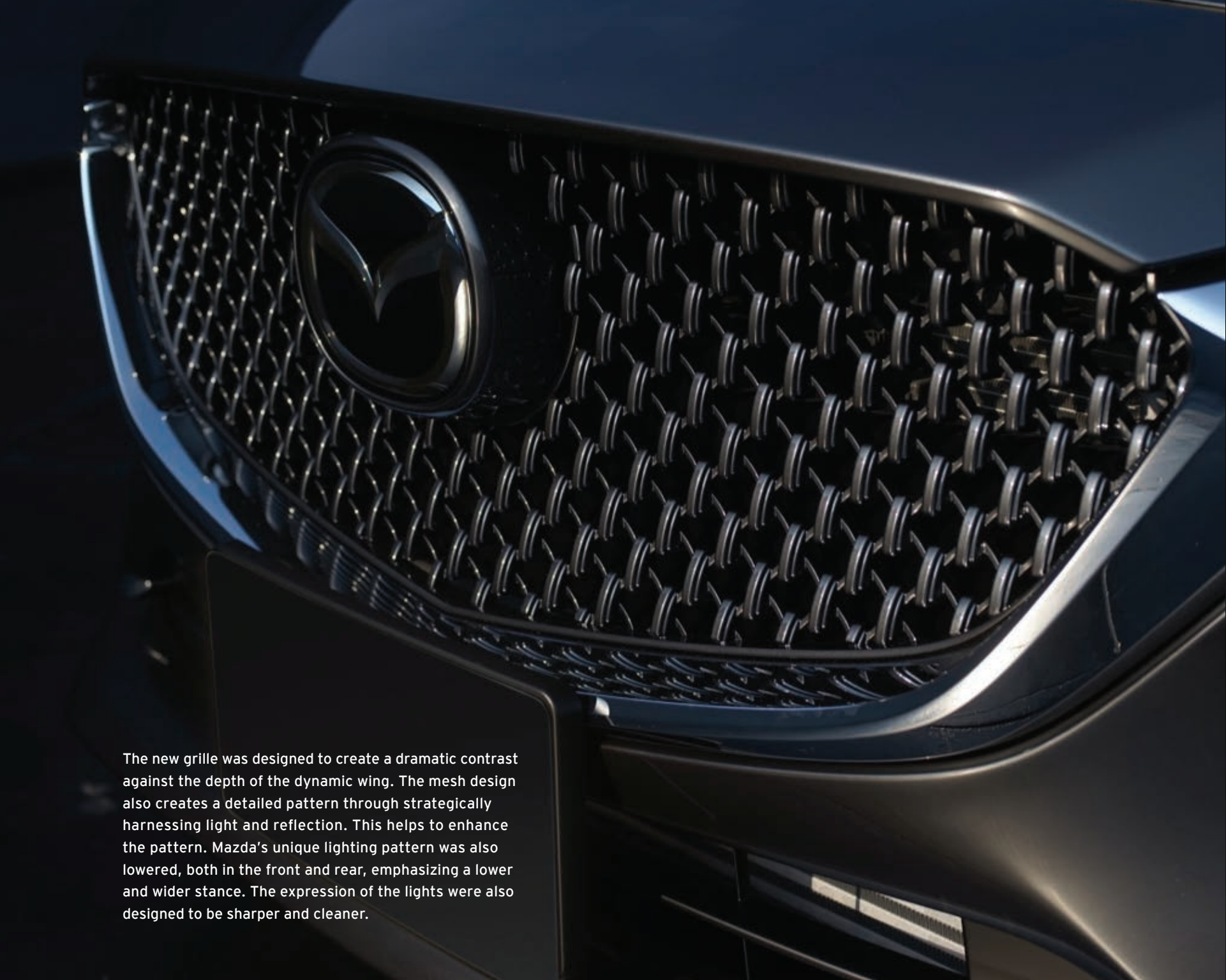
New Mazda6



The improvements made to the design of the Mazda6's rear emphasize a wider and lower aesthetic. Designers simplified the rear panel and made the chrome wing more horizontal, aligning to the brightwork on the lower front fascia. Exhaust outlets have become larger, with considerable sculpting and attention to detail.

The rear combination lamp is more unified in color, simplifying the rear's graphic identity.





The new grille was designed to create a dramatic contrast against the depth of the dynamic wing. The mesh design also creates a detailed pattern through strategically harnessing light and reflection. This helps to enhance the pattern. Mazda's unique lighting pattern was also lowered, both in the front and rear, emphasizing a lower and wider stance. The expression of the lights were also designed to be sharper and cleaner.

Further establishing a look of elegance is our Soul Red Crystal paint, which is deeper and more lustrous than our previous Soul Red color, looking as though it were flowing magma in different light. The Soul Red Crystal darkens in deep shadow areas and enhances the highlights drawing in the eye and never letting it go.

The design is complemented with new 19-inch alloy wheels, whose straight spokes providing strong sense of depth and quality as well as maximizing the perception of a larger wheel.















DESIGN:
INTERIOR





On the left is the outgoing model, and the right is the new model.

There is a sense of width and fluidity in the interior, due to the seamless blend of the middle dash and the door trim. Along with the impression of width, the sculpting still accomplishes a feeling for the occupants that they are being comfortably surrounded by the interior.

In much the same way designers brought a three-dimensional quality to the front grille, the same thinking is brought to the interior, where the air vents mirror this design cue. This can especially be seen when the vehicle door is opened.



The instrument panel and the satin plated accent line creates a main axis running horizontally through the cabin space. The sculpting on the door panels slopes down as it extends to the rear of the vehicle, which imparts a sense of speed.

The Interior Designers on the New Mazda6 considered how the surface contours work with light, strategically creating shadow and highlighted surfaces. What can't be seen in pictures is the quality of the soft touch materials throughout the interior, using UltraSuede Nu as a new material throughout the interior. Whereas previous Mazda6 models had available black or Parchment leather, the new Mazda6 Signature replaces its dark interior option with Deep Chestnut Nappa leather, whose color was inspired by ancient Japanese temples. It is complemented by Japanese Sen Wood accents—traditionally found in Japanese musical instruments.



We've traditionally expressed sportiness by creating a seat that is thinner and taut looking. For 2018, we struck a balance between this and something that appears somewhat wider, thicker and more supportive. This also affords some functional benefits in terms of comfort.

In the Mazda6 Signature, the Nappa leather seats come adorned with a small metallic detail at the top of the seat pleating.

Other bespoke touches include satin chrome power seat switches surrounded by a piano-black bezel. While designers could have finished it with a basic black plastic, efforts like this make for an interior where no detail is overlooked.









MARKET:
**PRICING AND
PACKAGING**





Adorned with authentic materials like our Japanese Sen Wood and Nappa leather, the 2018 Mazda6 elevates its premium positioning above the mainstream fray and into a higher class of competition. New technologies and refinements complement Mazda6's stellar reputation for driving dynamics and design.

Thoroughly re-engineered for 2018, Mazda6 is quieter, more comfortable, carries more standard and available features and even comes with a newly available engine option, the torquey, turbocharged SKYACTIV-G 2.5T.

Every detail has been rethought to polish and elevate Mazda6. Yet, Mazda6 doesn't betray its roots, still available with its six-speed SKYACTIV-MT manual transmission in the entry Mazda6 Sport model as well as an available, quick-shifting SKYACTIV-DRIVE six-speed automatic transmission with Sport Mode that recalibrates the transmission for more spirited driving.

Mazda6 Sport comes with an efficient SKYACTIV-G 2.5 engine, which enjoys a number of refinement upgrades for 2018. Smoother and quieter, the engine now produces 187 horsepower and 186 lb-ft of torque. When paired with its available automatic transmission, Mazda6's 2.5-liter engine comes standard with cylinder-deactivation technology, which shuts off its two outside cylinders in cruising conditions for even more efficiency. Mazda is the only automaker to employ this technology in a four-cylinder engine in North America.

Additionally, Mazda6 Sport comes standard with an electronic parking brake, cloth seats, a six-way manual driver's seat with lumbar support, dual-zone climate control, remote keyless entry, push-button start, a 60/40 split-folding rear seat, cruise control, 17-inch alloy wheels, a six-speaker audio system, Bluetooth phone and audio pairing, MAZDA CONNECT™ infotainment system with and Commander control knob and touchscreen control, rearview camera, a new eight-inch display screen, Blind Spot Monitoring and Rear Cross-Traffic Alert. Other newly standard features include LED headlights and tail lights and Smart City Brake Support, which automatically applies the brakes in emergency stops below 19 mph.

When paired with its available six-speed automatic transmission, Mazda6 Sport can be had with the i-ACTIVSENSE package, further adding Smart Brake Support, Lane-Departure Warning, adaptive Mazda Radar Cruise Control, Lane-Keep Assist, High Beam Control, automatic on/off headlights and rain-sensing windshield wipers.

Mazda6 Touring includes all of the convenience and safety features available in Mazda6 Sport but upgrades to leatherette seating surfaces, standard SKYACTIV-DRIVE six-speed automatic transmission, 19-inch alloy wheels, Advanced Keyless Entry and a six-way power driver's seat. Rear HVAC vents, heated front seats and a power moonroof complement the package.

Turbocharged motivation catapults Mazda6 Grand Touring, equipped with Mazda's SKYACTIV-G 2.5T, which can generate a robust 310 lb-ft of torque from just 2,000 RPM. It offers effortless performance, with power sent through a SKYACTIV-DRIVE six-speed automatic that was developed specifically for high-torque applications. Power comes on nearly instantaneously, courtesy of its innovative Dynamic Pressure Turbocharger, which uses a small valve to create high boost pressure, akin to holding your thumb over the end of a garden hose. Once the engine is up to speed, a secondary valve opens up to allow more airflow through the turbocharger.

Mazda6 Grand Touring also adds an 11-speaker BOSE® Premium audio system, SiriusXM satellite radio with a four-month trial subscription, Mazda Navigation, an auto-dimming interior mirror, auto-dimming driver-side mirror, heated side mirrors and paddle shifters mounted on the steering wheel.

Further upping the ante, Mazda6 Grand Touring Reserve comes with black or Parchment leather-trimmed seats, a windshield-projected Active Driving Display with Traffic Sign Recognition, an eight-way power driver's seat, six-way power front passenger's seat, Adaptive Front-lighting System (AFS), bright silver alloy wheels, rear lip spoiler, windshield wipers de-icer, heated rear seats and a heated steering wheel. Mazda6 Grand Touring Reserve is also the entry point for Mazda's first-ever ventilated front seats, which wick hot air away from the driver and front passenger's backs to keep them cool.

The lineup is bookended with the new Mazda6 Signature, becoming the second Mazda model behind Mazda CX-9 to offer this aspirational trim level, replete with premium amenities. Mazda6 Signature is available with either Parchment or Deep Chestnut Nappa leather seating surfaces, Japanese Sen wood interior accents, gilded UltraSuede® NU whose coloring was inspired by Japanese kimonos, a new 360° View Monitor, front and rear parking sensors, a seven-inch TFT reconfigurable gauge display, frameless rearview mirror and a gunmetal-colored grille.

Thoroughly reworked underneath the sheet metal, Mazda6 integrates many of the learnings introduced in the CX-5 and CX-9 crossover SUVs and goes a step further to build an engaging, confident sedan that only Mazda could build, with as ample a presence at a valet on Rodeo Drive as the snaking roads of Mulholland Drive.

MSRP for the 2018 Mazda6 is as follows:

Mazda6 Sport 6MT	\$21,950
Mazda6 Sport 6AT	\$23,000
Sport i-ACTIVSENSE Package (6AT only)	\$625
Mazda6 Touring	\$25,700
Mazda6 Grand Touring	\$29,200
Mazda6 Grand Touring Reserve	\$31,700
Mazda6 Signature	\$34,750

Premium Paint Colors:

Soul Red Crystal	\$595
Machine Gray Metallic	\$300
Snowflake White Pearl Mica	\$200

Manufacturer's Suggested Retail Price does not include \$895 for destination and handling (\$940 in Alaska) or additional taxes or fees. Dealers set actual sale prices.



**MAZDA'S
NORTH STAR**



MAZDA VISION COUPE PORTENDS NEXT-GENERATION DESIGN

Since 2010, Mazda has striven to create cars that embody the dynamic beauty of life through application of its KODO—Soul of Motion design philosophy. “Breathing Life Into The Car” This is our philosophy—an all-encompassing vision that we intend to carry forward and develop into the future as an ongoing tradition. We will need to develop our aesthetic style still further if we are to continue these values into the future. For the coming generation of Mazda vehicles, we will pursue the expression of a “new elegance” based on Japanese aesthetic sensibilities.

Here, the word “elegance” implies a beauty that is subtle and restrained yet rich and abundant. Within its conveyed impression of dignified tension, next-generation design also allows people to sense a hint of warmth and seductiveness. This is the image of “elegance” Mazda wishes to express in its car designs.

Japanese aesthetics call for a delicate sense of balance rather than a show of ostentation. For this reason, next-generation design aims to breathe life into cars with a “less is more” aesthetic. Eliminating all but the truly essential elements creates precious blank spaces surrounding simple forms. To these, Mazda applies effective use of light and shadow to create subtle details and achieve the desired result.

With next-generation design, Mazda is reinterpreting the very essence of Japanese aesthetics and its subtle beauty, which has been cultivated since ancient times. The goal is to create an elegant and refined atmosphere with a sense of vitality that makes Mazda cars come truly alive.





MAZDA VISION COUPE

The Mazda VISION COUPE perfectly embodies the elegant and refined atmosphere that is the target of next-generation Mazda design.

Within the flowing four-door coupe configuration the strikingly beautiful silhouette gives stirring visual expression to the vehicle's high performance, while the sculpted athletic form is free of all fussy or unnecessary elements, a key factor in Mazda's minimalist design approach.

Strong highlights on the shoulders contrast with continuously changing reflections on the body sides to express a new sense of controlled vitality, giving rise to a uniquely Mazda sense of elegance derived from Japanese aesthetics.

The VISION COUPE sets the stage for the introduction of Mazda's eye-catching, further evolved KODO design. As such, much as sedans that have come before it, from the Mazda Luce to the SHINARI concept, Mazda looks to the VISION COUPE as its north star as it moves toward its next-generation designs and technologies.





Acknowledgements

An important tenet of Japanese culture is that craftspeople inject life into what they make, so objects that receive the love and caring attention of these craftspeople have a vital force; a soul. As we are a Japanese car company, we believe that a form sincerely and painstakingly made by human hands receives a soul.

This book was a passion project to share that soul, to the story of the Mazda6: Its past, present and future.

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