

A COHESIVE VEHICLE ARCHITECTURE MAXIMIZE THE JOY OF DRIVING

Mazda 3 Hatchback

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Mazda believes driving should be an energizing experience, one that puts the driver in control. When a vehicle preforms proportionally to a driver's inputs, it feels like a natural and intuitive extension of the driver—it becomes nearly effortless. At Mazda, that realization is not coincidental; it's the result of decades of precision engineering and meticulously realized details.

To create a car that is as much fun to drive as it is to look at, Mazda engineers approached the development of the new Skyactiv-Vehicle Architecture in [Mazda3](#) from a holistic approach. They focused on how the complete vehicle performs and feels and how everything works together, rather than simply maximizing each individual system.

THE SEATS

The seats in the [all-new Mazda3](#) firmly support the pelvis in an upright position such that the occupant's spine maintains a natural S-shaped curve. This seated posture is the same as that which a person naturally assumes when walking. By moving the pelvis and spine to maintain balance, the body absorbs input from the road surface and stabilizes the head. Because this posture requires no extra exertion to support the body, the seats help occupants feel less fatigue, allowing them to enjoy greater comfort, even on longer drives.

THE BODY

The vehicle body further evolves Mazda's concept based on straight framework and continuous ring structures. This contributes to a more natural and consistent vehicle behavior and overall a more pleasing driving experience.

THE SUSPENSION

The all-new Mazda3 suspension system uses MacPherson struts in the front and a torsion beam setup in the rear. The system was carefully developed and built to respond immediately to input from the ground. Adding a new layer of precision to what Mazda has long strived to offer—controllability that meets the driver's intentions—this new suspension system realizes handling stability that offers more comfortable and natural driving experience

Mazda 3 hatchback and sedan AWD bose speakers

I-ACTIV AWD®

Mazda's evolved i-Activ AWD® adds four-wheel vertical load detection and works in harmony with G-Vectoring Control Plus (GVC Plus) to control torque distribution between the front and rear wheels. This helps the vehicle respond faithfully to the driver's intentions, regardless of the driving situation. It also reduces overall mechanical loss by approximately 60 percent over the current i-Activ AWD system. GVC Plus also adds direct yaw moment control via the brakes. This enables the car to better handle emergency avoidance maneuvers and offers more confidence-inspiring controllability in various situations, including lane changes at high speeds and driving on slippery roads.

The result of rethinking how all of the elements of the Skyactiv-Vehicle Architecture work together creates a greater feeling of oneness between driver and vehicle, helping shield the driver from all that is unnecessary, so they can focus on one thing: exceptional driving. From the tires, through the suspension, body structure and seat, the entire system works together so that the driver can intuitively and naturally understand the dynamic road inputs. From the moment the driver pushes the start button, grabs the wheel and takes off, a sense of joy can be felt instantly.

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DISCOVER THE ALL-NEW MAZDA3

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