

THE 2010 MAZDASPEED3: TAKING SIBLING RIVALRY TO THE EXTREME

The performance car for enthusiasts with active lifestyles

It's an unwritten law of nature. When two parents have kids, more often than not, their offspring will be quite different. One will have Dad's eyes, another, Mom's nose. Some will be mild-mannered, happy and always smiling, and others, well – they will be wicked. Enter the all-new 2010 MAZDASPEED3. From a distance, it may look like its MAZDA3 siblings, with its five-point grille and sleek lines, but one minute behind the wheel will prove otherwise.

For 2010, the MAZDASPEED3 blends the five-door functionality of the all-new MAZDA3 5-Door with bolder, more aggressive styling and exhilarating performance to meet the needs of driving enthusiasts with active lifestyles. Carrying forward the award-winning MZR 2.3-liter DISI Turbo engine, the new MAZDASPEED3 builds on the legendary performance of the original while adding a fresh new look and even better handling.

Expressive and Dynamic Design

The design of the all-new MAZDASPEED3 evolves the model's visual identity to create a sportier, more aggressive appearance. The result is a more emotional design that takes the sporty, agile nature of the all-new MAZDA3 5-Door to a new level.

The MAZDASPEED3 is easily distinguished from its siblings. Start at the front, where a lower air dam and round fog lights frame an organic, metallic-black grille. The hood now houses an intercooler scoop to improve charge air cooling, and the front fenders are flared to contain the car's wider tires.

From the side view, the new 18 x 7.5-inch aluminum wheel design is unique, but modeled closely on the deeply sculpted, expressive, and very lightweight 19-inch forged wheels on the RX-8 R3. Sculpted side skirts and a lower stance also give away the MAZDASPEED3's sinister motives. From the rear, larger dual exhaust tips, a rear valance painted the same metallic black as the grille, and a larger, roof-mounted rear wing give it away.

Nagare-inspired design defines the exterior and continues into the cabin, which features color coordination and materials chosen to excite the driver and passengers every time they take a seat. Black is the keynote color employed throughout the interior, while the seats and trim fabric have an organic red graphic design. This MAZDASPEED3-exclusive design is distributed

throughout, with red stitching enhancing the sporty interior character on the steering wheel, seats, door trim, shift lever boot, and center armrest.

The dashboard of the new MAZDASPEED3 is designed to give a roomy feel while displaying critical information up high and deep into the dashboard, closer to the driver's field of vision and focal point. The instrument cluster for the all-new MAZDASPEED3 also includes a new LED turbo boost gauge positioned between the meters.

The driver's seat is especially critical in any performance car. Without solid lateral support, a driver loses the focus, control and precision needed to really enjoy driving. The all-new MAZDASPEED3 seats are designed to provide that support without compromising everyday comfort.

Exhilarating Performance

The all-new MAZDASPEED3 continues to use Mazda's award-winning MZR 2.3L DISI Turbo powerplant. Delivering 263 horsepower at 5,500 rpm and 280 lb.-ft of torque at 3,000 rpm, it made the original MAZDASPEED3 the most powerful front-drive performance car under \$25,000, and remains one of the strongest engines in its class today.

With no need to increase power, the development team focused on harnessing that power more effectively. Engine output itself is more consistent, thanks to the hood-mounted intercooler scoop that not only improves intercooler airflow over the grille-mounted intercooler duct of last-year's car, but also frees up grille space for a fresh-air duct to feed the engine's intake. Breathing cooler air improves efficiency, boosting both real-world power and fuel economy.

The gear ratios in the compact, three-shaft gearbox have also been revised, with 2nd through 5th gear all getting slightly taller to make better use of the engine's abundant torque. The new gear spacing and refined engine calibration are focused on providing more linear, seamless power delivery. The advanced torque management system, which minimizes torque steer by adjusting torque output based on gear position and steering angle, has also been recalibrated.

The new gear ratios allow more of the engine's torque to be utilized in the lower gears while still keeping torque steer at a manageable level.

Handles Like a Mazda

The new MAZDASPEED3's body shell benefits from a focused effort at strengthening the most important parts of the structure. The use of high-strength and ultra-high strength steel in the safety structures like bumpers and side impact beams has nearly doubled, making these areas both stronger and lighter. The suspension mounting points all gain rigidity from the use of thicker sheet metal in high-stress areas and extensive use of weld bonding, a hybrid joining technique combining conventional spot welds with structural adhesives. Torsional stiffness around the rear suspension mounts is improved roughly two percent, while deflection around the rear liftgate is reduced nearly 40 percent.

In general, a stiffer structure allows firmer suspension tuning without compromising ride comfort. In the case of the new MAZDASPEED3, that firmer suspension was accomplished with stiffer springs, higher damping rates, and revised mounting points for the front stabilizer bar that reduce bushing deflection and increase the bar's effectiveness. Combined with wider, higher-grip 225/40R18 Dunlop SP Sport 2050 performance tires, the MAZDASPEED3's new suspension tuning marries unflappable control with a comfortable everyday ride.

Steering feel and response have been improved through more rigid 3-point mounting of the steering rack, compared to the previous 2-point system. The hydraulic power steering pump has also been removed from the engine and is now driven by an electric motor. This electro-hydraulic power assisted steering (EHPAS) reduces parasitic drag on the engine, lowers power steering fluid temperature, and gives much more flexibility for the development team to dial in steering feel. Rigid high-speed steering feel can now be accomplished without suffering heavy steering at low speeds.

Brake feel in hard braking has been improved through the upgrade of the brake assist from mechanical to a new electronically-controlled system. Brake assist shortens stopping distance in panic-stop situations by applying full brake pressure during the moment of hesitation that most drivers exhibit in the instant after first hitting the brakes. The new electronically-controlled system is better at differentiating between true panic-stop situations and, for example, braking hard for turn 11 at Mazda Raceway Laguna Seca.

Features and Options – Everything You Want, Nothing You Don't Need

The 2010 MAZDASPEED3 is loaded with all the goodies a driving enthusiast wants, but without anything that would add undue weight. Standard features and equipment include variable intermittent windshield wipers, roof-mounted aerodynamic antenna, illuminated vanity mirrors, electroluminescent gauges, aluminum pedals, MAZDASPEED –branded black/red cloth seats, door trim, interior trim, floor mats, scuff plates and black/red decoration panel; and dual-zone climate control. An available MAZDASPEED3 Tech Package offers advanced keyless entry, push-button start, a compact full-color navigation system, Sirius satellite radio with six months of free service, a perimeter alarm, six CD changer, and BOSE® Centerpoint® surround sound – a five-channel surround system engineered cooperatively with BOSE® that enhances the listening experience thanks to a digital amplifier, noise cancellation technology and 10, strategically placed, premium speakers. Because the weight and structural penalties would compromise the pure driving experience, the MAZDASPEED3 is not available with a moonroof option.

The MAZDASPEED3 is the third model in the 2010 MAZDA3 lineup, joining the MAZDA3 5-door, which made its North American debut at the North American International Auto Show earlier this year, and the 4-door sedan, which made its world debut at the Los Angeles Auto Show last November.

Headquartered in Irvine, Calif., Mazda North American Operations oversees the sales, marketing, parts and customer service support of Mazda vehicles in the United States, Canada, Mexico and Puerto Rico through more than 850 dealers. Operations in Canada are managed by Mazda Canada, Inc., located in Ontario, Canada, and in Mexico by Mazda Motor de Mexico in Mexico City.

2010 MAZDASPEED3 AT A GLANCE:

Exterior

- Design based on the all-new MAZDA3 5-Door, evolved for a sportier, more aggressive appearance
- New air intake to optimize intercooler efficiency

- Front fender and front bumper designs exclusive to *MAZDASPEED*
- The front grille and lower bumper sections share the same black metallic paint finish
- Wedge-shaped, curving character lines on the side panels and side under spoiler for a lower-looking center of gravity
- New, large floating rear spoiler
- New 18-inch aluminum alloy wheels with the same three-dimensional design theme as the Mazda RX-8 R3 wheels

Interior

- Driver-oriented dashboard design gives a roomy, wrap-around, sporty feel
- New tachometer with red *MAZDASPEED* logo
- New LED turbo boost gauge between the driver meters
- Semi-bucket front seats with superior fit
- Seat upholstery in black base color with a red graphic design and red stitching
- Black interior color with an organic red graphic design throughout the cabin and red stitching for the steering wheel, shift boot, door trim, center console

Powertrain

- Acclaimed MZR 2.3L DISI Turbo producing high power of 263 horsepower at 5,500 rpm, and 280 ft.-lb. of torque at 3,000 rpm
- In-cylinder cooling effect from direct injection realizes ca. 10 percent more torque compared to conventional-intake turbo engines
- Top speed of 155 mph
- The world's first single-nanotechnology catalytic converter helps to reduce the amount of precious metals needed
- Advanced boost pressure control suppresses sudden torque peaks for linear torque development
- Left and right drive shafts optimized to minimize torque steer
- Torque-sensing conical limited-slip differential (LSD) standard
- Specially-designed, 6-speed manual transmission with wider gear ratio than before
- Triple-cone synchronizers for first, second and third gears and a double-cone synchronizer for fourth gear for optimized gearshift operation
- Low-viscosity transmission fluid reduces shift effort when the engine is cold

Chassis & Safety

- Special reinforcements inside the front cowl member gussets and a large tunnel member for increased body stiffness
- Modified coil spring rates for MacPherson strut front suspension and multi-link rear suspension
- Larger diameter stabilizers with longer mount spans achieve greater roll linearity
- Special dampers with increased damping strength contribute to higher roll stiffness
- Now three highly rigid steering gear mount bushings instead of two used on the previous model for improved response to steering wheel action
- New wider Dunlop 18-inch tires with improved grip, more rigid sidewalls and damping strength for more direct steering feel and a stronger one-with-the-car feel
- Electro-hydraulic power assisted steering (EHPAS)
- Large diameter 12.6-inch ventilated front disc brakes and 11-inch rear solid discs, 8+9-inch tandem brake booster and 1-inch large diameter master cylinder for powerful and stable braking
- Newly-introduced electronic brake assist added to four-wheel ABS and DSC as standard equipment

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