

# ALL-NEW MAZDA3 BOOSTS THE SPORT COMPACT BAR TO UNPRECEDENTED HEIGHTS

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DETROIT, January 11, 2009 - In sync with consumers' mindset-change toward affordable, efficient, yet high-quality automobiles, Mazda presents the all-new 2010 MAZDA3. This redefined, reengineered, and restyled sport compact climbs atop its predecessor's tall shoulders to deliver improved appearance and performance, fresh features, and an unmatched level of refinement.

Like all Mazdas, the 2010 MAZDA3 has the soul of a sports car, ensuring that driving enjoyment is a top priority. In response to the rising expectations of a dedicated sport-compact customer base and new consumers attracted to a fuel-efficient yet highly versatile 4- or 5-door sedan, this second-generation model also offers:

- A more sophisticated and exciting exterior hinting at Mazda's Nagare (motion and flow) design philosophy
- Elevated driving dynamics attributable to comprehensive body, chassis, and powertrain enhancements
- Key safety and environmental upgrades
- A higher level of standard and optional equipment
- An overall sophistication that ventures beyond the sport-compact segment to rival import models costing thousands more

The MAZDA3 is Mazda's most gratifying success story. The first generation sold for the past five years exceeded the expectations of nearly 2-million owners around the world while earning 90 major awards from car critics and enthusiast magazine editors. America's leading consumer publication listed the MAZDA3 as one of the best vehicles costing less than \$25,000. Reader surveys gave this car top scores for reliability and low operating expense, two additional reasons why it earned a "RECOMMENDED" rating.

One out of every three Mazdas sold worldwide is a MAZDA3. In the US, its sales increased each year for the last five years. In 2008, the last year in the first generation MAZDA3 lifecycle, it singlehandedly represented 44 percent of Mazda North American Operation's sales volume.

MAZDA3 is a favorite for consumers shopping for their first new vehicle. MAZDA3 buyers are typically the youngest, both in their segment and among the greater Mazda family. By consistently exceeding ambitious wants and needs, the MAZDA3 continues to earn the loyalty of its youthful customer base. Offering two bodystyles, three trim levels, and four separate powertrain options, the new MAZDA3 is expected to spread the Zoom-Zoom spirit far and wide.

According to David Matthew, MAZDA3's vehicle line manager, "This product has earned its stripes as a high quality and exciting sport compact. Our customers voice four reasons why they choose this product over direct

competitors as well as alternatives outside the sport-compact segment:

- **Zoom-Zoom Design**-MAZDA3's dynamic styling stands out from the small-car crowd to provide customers lasting pride of ownership.
- **Zoom-Zoom Performance**-This car's driving character is steeped in vigor and exhilaration, the sheer joy of motion. It delivers on the visual promise provided by its distinctive exterior. Long after the new wears off, MAZDA3 continues putting a smile on its driver's face.
- **Exemplary Quality and Craftsmanship**-Every see and touch point is finished to a level of perfection unmatched in the compact class. MAZDA3's interior design and execution goes beyond Japanese competitors to rival more expensive European brands.
- **Insightful Features**-Several of MAZDA3's rivals-Civic, Focus, Sentra-skip the versatile 5-door bodystyle, a configuration one third of the MAZDA3 customer base prefers. Mazda also pioneered the availability of upmarket features such as a navigation system, leather trim, xenon headlamps, electronic stability control, and rain-sensing wipers. MAZDA3 is well known for offering the creature comforts and equipment savvy buyers are seeking in a small, affordable, and highly maneuverable sedan.

### ***ZOOM-ZOOM NEVER SLEEPS***

Success has been good to the MAZDA3. The customer devotion it achieved spurred Mazda's engineering team to design and develop a successor capable of making major strides in driving enjoyment, fuel efficiency, ride poise, occupant protection, and all-around user friendliness.

According to Program Manager Yoshiyuki Maeda, "We had no intention of merely protecting the position we held. Instead, our task was to keep the target moving for our competitors by further exceeding customer expectations. Our goal was to create a sport compact capable of advancing driving pleasure to new heights. This is the essence of Mazda's Sustainable Zoom-Zoom credo and what separates our company and our products from other cars and brands.

"The renewal process began by identifying exactly what made the existing MAZDA3 such a global overwhelming success. The Zoom-Zoom driving experience rose to the forefront as our standout attribute. With that in mind, we set to work creating a new generation capable of delivering even more driving enjoyment. Instead of altering the size and general makeup, we focused on implementing improvements throughout the body structure, powertrain, and chassis that would be immediately apparent to the driver and appreciated by every MAZDA3 occupant.

"Realizing that the Zoom-Zoom emotional spirit is both static and dynamic, we gave the new MAZDA3 a more expressive and sophisticated interior and exterior with added sportiness. With consumption and environmental stewardship concerns growing around the globe, the MAZDA3 also provides an excellent opportunity to showcase our latest gains in fuel efficiency and exhaust emissions.

"New features-many of which are borrowed from the new MAZDA6-are also introduced here with the aim of exceeding constantly rising customer expectations. Ultimately, we designed and engineered a whole new MAZDA3 that blends the best of the previous model with large and small refinements in countless areas."

### ***BOLDER, MORE BEAUTIFUL EXTERIOR***

Chief designer Kunihiro Kurisu describes the design concept as "inheriting MAZDA3's established identity while making it more expressive." He continues "I wanted to strengthen the Mazda brand with the all-new MAZDA3 design. Key designers from not only Japan but also Mazda North American Operations and Mazda Motor Europe worked very closely to create a more emotional design with an even richer expression."

Jonathan Frear, who worked on the MAZDA3's design for two years at Mazda Motor Europe, before joining Mazda North American Operations last April, Carlos Salaff, a senior designer who made major contributions at the quarter-scale model stage, and Jordan Meadows, Mazda North American Operations' design manager, are all proud of what they have collectively achieved. "The new MAZDA3 provided us an opportunity to translate new design cues into the reality of a car which Mazda customers can own, drive, and enjoy," notes Meadows. "You may note some first hints of Nagare design appearing."

"It's all about the thought processes," adds Frear. "There are strong similarities between recent concepts and the new MAZDA3 in the grille execution, the front and rear lamp treatments, and the deep creases that play an important role in the front fender design. New lighting technology has given us the opportunity to express motion and flow in more interesting and exciting ways. So all of the MAZDA3 fans who love their current cars will surely appreciate the dramatic fashion statement we've designed into this new edition."

It begins with a bold grille that is purposely polarizing. "Mazda has never been afraid of taking design risks," says Salaff. We always strive to push our exterior, to stretch what is considered normal. We wanted the MAZDA3's dominant grille design to be bold because that will separate this car further from the blasé competitors and, by leaping ahead of the crowd, keep us looking fresh even late in this product's life."

"The MAZDA3's new face also helps distinguish it from the new MAZDA6," adds Frear. "However, the five-sided opening is still instantly recognizable as a strong Mazda design cue. Likewise, the aggressively sculpted front fenders and hood share a clear family resemblance with the MAZDA6 and RX-8. Our 'soul of a sports car' mantra isn't restricted to powertrain and chassis attributes."

Combining the two medium-sized grille openings used previously into one larger opening also pays functional dividends. Frear explains: "Shifting the air-intake lower on the car increases the pressure of the flow. As a result the actual grille opening is 20-percent smaller than what was necessary with the previous generation MAZDA3. Most of the air is routed over the hood or around the sides of the car, yielding a significantly lower drag coefficient. (The previous drag coefficient ranged from 0.30 to 0.32, depending on bodystyle and tire size, and has now been reduced from 0.29 to 0.31.) Cars equipped with an automatic transmission have a second driver's-side inlet opening that routes air through a heat exchanger.

"It's important to note that we have used the front bumper surface as a key MAZDA3 design element," adds Frear. "The grille and various elements within its periphery are three dimensional so they literally flow into the surrounding surfaces. The Mazda identification badge is larger and prominently raised above the front body surface.

"Other Nagare-like flow lines are evident in the hood, down the sides of the car, and in the center of the decklid. MAZDA3 is very much a preview of coming attractions.

"The front-to-rear rise of the beltline gives the MAZDA3 a crouched, expectant look of a predator ready to

pounce. This treatment also provides functional benefits. The low-in-front window opening provides excellent outward visibility. The driver can easily spot lane markings and the road surface close to the car. But a higher belt line in the rear seat area gives occupants a greater sense of security. Likewise, the elevated decklid surface is both an aerodynamic aid and a means of maximizing trunk room."

Meadows adds, "designers always attempt to build a strong emotional connection with their customers. We do it through their hearts-by giving them cars they are genuinely proud to own. They appreciate the quality, they're pleased with a reasonable price, but Mazda owners are most proud of how their cars drive and the attractive appearance. They expect their cars to be a reflection of their personalities, so Mazdas are purposely youthful and outgoing. Those character traits read through loud and clear in the MAZDA3's design language."

"We're also conscious of the fact that this sport compact is likely to spend major portions of its life in urban areas. So the front end is purposely configured to connote the soul of a sports car. Those who pull up from behind or get passed by the MAZDA3 see the vivid taillamp execution and dual exhaust pipes in the case of the 3s model. The precision and attention to detail suggests a much more expensive automobile. And in the side surfaces, there's ample evidence of our Zoom-Zoom spirit as interpreted by the Nagare design aesthetic."

### ***STRAIGHT AS AN AERO***

To maximize fuel economy while hushing wind noise, extra effort was invested in trimming the new MAZDA3's aerodynamic drag. Subtle reshaping of the front bumper beam greatly diminishes the turbulence of air passing through the grille. Several speed flaps located in the radiator shroud automatically open at highway velocities to allow some air to bypass the cooling fan.

Wind tunnel testing revealed that small deflectors located near the front tires and subtle adjustments to the upper-forward corners of the A-pillars, outside mirrors, windshield wipers, and taillamps also helped smooth air flow along the sides of the car. The net gain was a six-percent reduction in wind noise. In terms of aero performance the new MAZDA3 is one of the most efficient entries in its segment.

### ***DRIVER-ORIENTED, PREMIUM-QUALITY INTERIOR***

The new MAZDA3's cockpit is configured to support the driver in a more dedicated manner than any sport-compact competitor. Two large instrument clusters are carefully positioned and clearly marked to deliver engine and road speed information. Key controls are located in the steering wheel spokes where they can be reached with minimum distraction. A new Multi-Information Display screen containing navigation, audio, and trip information is positioned high on the instrument panel to avoid the need for the driver to refocus vision off the road ahead. A second screen slightly to the right provides station frequency and climate control setting information.

Mazda's Human Machine Interface approach breaks the interior into three key zones: displays and controls used most frequently are located high and close to the driver to significantly reduce eye motion and refocusing; audio and climate controls are also elevated in the center stack to minimize the amount of head motion needed to change any setting; switches located on the door arm rest, steering column, and steering wheel are designed for intuitive operation so they can often be activated with no need for head or eye motion. Responding to the knowledge gained from human-machine studies, the new MAZDA3's center console was elevated to shorten the reach to the shift lever and parking brake more by than two inches.

In keeping with the Zoom-Zoom philosophy, the interior of every Mazda is not just a place to sit and travel, it's the location where the joy of driving and the satisfaction of owning something special are delivered. From the pleasant sound of the entry chime to the gradual rise of interior illumination, every MAZDA3 interior design detail is carefully conceived and executed with high quality in mind. Roof pillars and the beltline are designed to maximize outward visibility and the feeling of roomy openness.

The new instrument panel top cover is a padded, seamless, and elegantly grained surface that sweeps from the center console to both A-pillars. The center console provides two cupholders, a sliding armrest, and a roomy storage box, before blending in a continuous curve into the instrument panel. HVAC and audio controls are large, properly textured and illuminated to provide a visual feedback that a command has been received. A damper is included to smooth the opening and closing of the small compartment built into the instrument panel, the overhead sunglasses storage box and the roomy glove box.

Improved seating comfort is the result of front cushions extended by 0.8-inches for enhanced thigh support. Seatbacks are reshaped for more lumbar support and extended by 1.4-inches for added shoulder support. Optional sport-seat upper bolsters are canted inward more aggressively for added restraint during hard cornering. A segment-first eight-way driver's seat with memory has been added to the optional features list. Dual-zone automatic temperature control, heated seats, and a BOSE® Centerpoint audio system are other new features also not offered by other sport compact competitors. The five-channel surround sound system engineered cooperatively with BOSE® experts includes digital amplifier, noise cancellation technology, and an array of ten premium speakers.

Top versions of the MAZDA3 have a small-diameter leather-wrapped steering wheel and soft-touch surfaces finished with French-stitched seams. Seating areas are available in black or dune colors in both cloth and leather.?

The MAZDA3's new Multi-Information Display (MID) is patterned after the compact aftermarket navigational devices that provide guidance at an affordable price. Controls located on the steering wheel select the information to be displayed on the 4.1-inch LCD color screen. In addition to maps and turn-by-turn guidance, the screen conveys MP-3 and i-Pod program information, trip data including fuel economy, plus various maintenance and alert messages. A monochromatic readout MID is also available without the navigational functions.

Advanced keyless entry allows a MAZDA3 driver to unlock the doors and start the engine with the key fob carried in a pocket or purse. A discrete door handle button and a start button on the dash are used in lieu of a key.

The addition of Bluetooth® capability in the new MAZDA3 provides wireless mobile phone and audio player connections and hands-free operation. Instrument panel and steering wheel switches can be used to sort through music selections.

### ***ACTIVE AND PASSIVE SAFETY SYSTEMS***

Steering and braking accuracy and feedback that leads to avoiding collisions is one of the best ways to avoid calamity and injury. Towards that end, the MAZDA3 excels in agility, maneuverability, and ease of control at the limits of braking and cornering adhesion. Powerful disc brakes, ABS and electro-hydraulic power steering are standard equipment. Dynamic Stability Control and Traction Control are standard on most models.

The MAZDA3s is the first compact on the market with an Adaptive Front-lighting System (AFS) containing self-leveling bi-xenon (high and low beam) headlamps. Standard equipment in the top Grand Touring trim level, the inner beam of this system steers up to 15 degrees into the turn to expand the illumination pattern.

To minimize the likelihood of injury when a collision cannot be avoided, the MAZDA3 uses a technology called Triple-H unibody design. Efficient H-shaped reinforcements in the floor, roof, and sides of the body structure resist intrusion and support crush zones at both ends of the vehicle. Six airbags and active head restraints are also standard MAZDA3 equipment. Side-curtain air bags, which help protect all outboard occupants, are a new fast inflating design with 40-percent larger coverage area.

### ***POWERTRAINS THAT STIR THE SOUL WITHOUT WOUNDING THE WALLET***

Mazda's MZR engine family is widely regarded as one of the world's most advanced forms of fuel-efficient, high-energy propulsion. As before there are two distinct MZR four-cylinder engines available in the MAZDA3, both of which offer outstanding performance and efficiency.

MAZDA3i models are fitted with the MZR 2.0-liter engine, providing 148 hp at 6500 rpm and 135 lb-ft of torque at 4500 rpm. It features compact and light aluminum block and head construction with two chain-driven overhead camshafts operating four valves per cylinder for complete combustion, maximum efficiency, and minimal exhaust emissions. (PZEV versions of this engine, sold in California and select other states, produces 144 hp @ 6500 rpm and 132 lb-ft of torque at 4500 rpm.) Variable intake valve timing provides robust low-rpm performance with strong high rpm pull, all the way to the 6500 rpm redline. A light-weight nylon-reinforced intake manifold offers dual-mode flexibility with runner lengths ideally suited to both low- and high-rpm operation. A new front mounted air pickup system feeds the 2.0-liter engine cooler air for combustion.

Two transmissions are offered in the MAZDA3i: a smooth-shifting manual box or a sophisticated, electronically controlled automatic with a manual-shift mode. Both are fitted with five forward speeds. Engine calibration changes and aerodynamic improvements yield a gain of one mpg in both city and highway driving with the manual transmission (25 city, 33 highway). The wider ratio spread provided by the new 5-speed automatic enhances both acceleration and mileage. On EPA test cycles, the MAZDA3 automatic achieves 24 mpg in city driving-a one mpg improvement-and 33 on the highway-an impressive 3 mpg (10 percent) gain.

MAZDA3s customers benefit from a healthier injection of Zoom-Zoom attributable to a move from 2.3 to 2.5-liters of displacement. This new engine is similar in most details to that found in the all-new 2009 MAZDA6.

Changes from the previous 2.3L unit include a fatter bore and a longer stroke packed into a cylinder block with unchanged external dimensions by using cylinder-bore liners made of a steel-molybdenum alloy offering strength and stiffness increases of 30-percent. A forged-steel crankshaft provides the necessary stamina. Twin balance shafts located in the oil sump cancel second-order noise and vibration, allowing this engine to sing to its 6200 rpm redline.

The deep-skirt block is engineered for extra stiffness and main-bearing caps are integral with a ladder-type lower-block reinforcement.

To minimize the noise and vibration typically found on larger displacement four-cylinder engines, the damper at

the forward end of the crankshaft is equipped with two tuned masses. At the output end, a new flexible flywheel also curbs NVH.

Fuel is delivered to the intake ports by an electronically controlled sequential injection system. Ignition coils are modular units positioned directly above the spark plugs. Shim-less bucket tappets require no maintenance. Light weight pistons are coated with a special anti-friction compound and fitted with low-tension rings for improved gas mileage. Sintered powder-metal connecting rods and lighter full-floating wrist pins minimize the reciprocating weight. As a result, this engine hums as contentedly at 6000 rpm as it does at 2000 rpm.

Like the MZR 2.0-liter, the new 2.5-liter power plant features variable intake valve timing and a two-mode composite intake manifold. A 4-into-1 exhaust manifold improves cylinder scavenging and reduces the time necessary for the catalytic converter to warm to full operating temperature. Dual tailpipes and specially tuned mufflers provide a pleasant exhaust note without a hint of mid-range boom or high-rpm thrash.

Providing 167 hp at 6000 rpm and 168 lb-ft of torque at 4000 rpm, the MZR 2.5-liter engine is available with a six-speed manual transmission or a five-speed electronically controlled automatic with manual shift control - again, borrowed from the larger, up-market MAZDA6. (The PZEV version of this engine sold in California and other states produces 165 hp @ 6000 rpm and 167 lb-ft of torque at 4000 rpm). Despite an increase in power and displacement, fuel efficiency ratings show no loss over the 2009 2.3-liter models, with EPA figures of 21 city and 29 highway with a manual transmission and 22 city and 29 highway with the new automatic.

A uniquely Mazda Active Adaptive Shift protocol provides the new 5-speed automatic transmission with the performance and response that MAZDA3 customers expect. Part-throttle downshifts are delivered in sync with the nudge of the accelerator during passing. When the car is braked aggressively in anticipation of cornering, the transmission also downshifts to add engine braking and to prepare for an expedient exit from the bend. A wider overall ratio spread assists acceleration from rest while also providing quieter and more efficient highway cruising.

### ***COMPREHENSIVELY IMPROVED BODY, CHASSIS***

By refining the strengths of the previous unibody, steering, brakes, and suspension systems - instead of starting over with radically different designs - Mazda engineers delivered major improvements in ride and handling performance while also reducing several pounds from the unibody and chassis weight.

As before, MAZDA3 rides on a 103.9-inch wheelbase. Wheel track dimensions are also unchanged. A three-inch increase in length yields a lower drag coefficient, and additional fuel capacity with the 2.5-liter engine.

Unibody bending stiffness has been increased a significant seven percent by a major gain in the use of high-tensile-strength steel panels, by adding gussets in heavily loaded areas (such as at suspension mounting points), and by strategic increases in metal gauge (thickness).

In addition, a technique called weld bonding first used in the new MAZDA6 has also been applied to the MAZDA3's unibody construction. At key locations - such as in the door aperture areas - the combination of structural adhesive and spot welds greatly enhances the unibody's flex resistance. A stiffer structure also provides a quieter ride, improved suspension response to steering and cornering loads, and more stable cruising and braking performance. The savings in weight attributable to the new unibody construction methods is a significant 24

pounds.

Changes to the rubber-isolated front, and the rigidly mounted rear, subframes also enhance rigidity while saving weight. A new instrument panel support structure using two instead of the previous one steel reinforcement tubes saves 4.4 pounds while providing more solid support for the steering column. Adding ribs to the inner door panels and increasing the size of the roof reinforcement bar yield major reductions in NVH.

To improve steering precision and feel, a third mounting point has been added near the center of the electrohydraulic-assisted rack-and-pinion steering gear. The diameter of the rack has been increased from 1.57- to 1.61-inches for improved stiffness and to facilitate more precise calibration of the speed-dependent power assistance.

Because the previous car was so effective, suspension changes are modest. The span between front and rear anti-roll bar support points has been widened by nearly an inch to increase the effectiveness of the bars without raising their weight. Minor changes to the steering geometry and the layout of the multi-link rear suspension diminish understeer during turn-in and oversteer while exiting a bend. Front struts and the rear monotube dampers are recalibrated for this new generation to take advantage of the more robust unibody structure and tire specification changes.

Power-assisted four-wheel disc brakes with ABS, electronic brake force distribution and brake assist are standard MAZDA3 equipment. Rotor sizes are 10.9-inches in front and 10.4-inches in back in the MAZDA3 and 11.8-inches in front and 11.0-inches in back in MAZDA3s models. The vacuum brake booster has been recalibrated to provide a more reassuring response to light pedal efforts without disturbing the direct and highly linear feel available during more aggressive braking. Dynamic Stability Control and Traction Control are now standard on the majority of MAZDA3 models.

As before, all-season radial tires are standard MAZDA3 equipment, though the base size is now 205/55HR-16 on 6.5-inch wheels. The more powerful MAZDA3 models roll on 17-inch wheels and V-rated tires. Changes in tire compound and construction yielded lower rolling resistance.

### ***ENVIRONMENTAL STEWARDSHIP***

Proof that small changes can yield substantial results lies in the combination of lower drag with an extra gear in the MAZDA3i equipped with a 2.0-liter engine and automatic transmission. The rise in highway fuel economy is three-mpg or 10-percent.

In line with European directives regarding disposal at the end of a vehicle's life, Mazda is well on its way to eliminating the use of lead, mercury, cadmium, and hexavalent chromium. Except for parts exempt from requirements, the new MAZDA3 contains none of the above materials.

Another Mazda innovation is the use of the world's first single-nano-particle technology, which significantly reduces the amount of precious metals used in catalytic converters. By inventing a method of controlling precious metal particles less than five nanometers in diameter (one nanometer is a billionth of a meter) as well as a proprietary catalyst material structure, Mazda created the world's first catalyst that features single, nano-sized precious metal particles embedded in fixed positions. With the single-nano catalyst, the underfloor catalytic

converter in the new MAZDA3 certified to comply with U.S. Federal emissions standards requires only 0.15g/L of precious metals, approximately 70 percent less than the 0.55g/L in the previous model. It is also highly durable and effective in purifying vehicle exhaust gases.

New from front to back, from top to bottom, with heavily restyled bodies and updated or all-new powertrains, and a comprehensively revised interior, the 2010 MAZDA3 4-door and 5-door models are ready to protect their ground in the popular and ever-growing sport compact category. The new car offers a level of content, style, dynamics and sophistication simply not seen elsewhere in the segment.

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 nearly 900 dealers. Operations in Canada are managed by Mazda Canada, Inc., located in Ontario; in Mexico by Mazda Motor de Mexico in Mexico City; and in Puerto Rico by Mazda de Puerto Rico in San Juan.

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