

For Immediate Release

Contacts: Jeremy Barnes, Mazda North American Operations, 949.727.6844
Danica Laub, Mazda North American Operations, 949.727.6220
Tim Gilman, Mazda Information Bureau, 949.223.2313

2007 MAZDA MX-5 MIATA POWER RETRACTABLE HARD TOP

The two-seat roadster elevated to the next level of refinement

Adding a new dimension to the Mazda MX-5 without diminishing its driving joy is no mean feat. The MX-5 is, after all, the icon of two-seat roadsters, the car that reinvented the category in 1989 and nurtured the elemental sports car through three generations. Fiddling with the MX-5 – the world’s best-selling two-seat roadster – is like messing with the Mona Lisa: tidy brush strokes hold the only hope of success.

While the third-generation MX-5 has earned more than its share of praise – including dozens of magazine and newspaper awards – Mazda is vigilant for opportunities to extend the reach of the car that sets the Zoom-Zoom tone for its entire range of vehicles. That’s why there’s a new MX-5 kid on the block. This addition to the lineup builds on the soft-top two-seater’s zest for life by enhancing year-round comfort and security with a new Power Retractable Hard Top (PRHT).

MX-5 Program Manager Takao Kijima, who has helped mind Mazda’s roadster from the program’s inception, set lofty standards for the PRHT edition. After sweating each and every gram of the third-generation’s mass, Kijima-san wasn’t about to condone any significant increase in curb weight. Nor would he stand for any deterioration in structural stiffness because chassis rigidity is also key to the MX-5’s vitality. Since the MX-5’s soft top is one of the handiest folding roofs ever invented, and remains the industry-standard for manual folding tops, the PRHT engineering team identified operating convenience as the third tall peak they would climb.

Fortunately, Mazda engineers can draw from a wealth of convertible experience. The firm's first soft-top model was the Familia Cabriolet, introduced in 1985 for sale in Japan, but never sold in the U.S. Its manual-folding soft top was an advanced three-layer piece, offering durability and the feel of a closed car, top up. The Familia Cabriolet also featured Mazda's first effort at a wind blocking device, as engineers determined that it was the intrusion of air from behind the seats that limited how late into the season it was comfortable to drive with the top down.

Mazda's next convertible was based on the second-generation RX-7, and was distributed globally beginning in 1988. In addition to developing an innovative power soft-top that featured a solid targa-style removable center panel, Mazda RX-7 engineers also introduced to the world the Windblocker™. This unique hard folding panel behind the seats dramatically reduced cockpit turbulence, and has become standard or optional since on virtually every convertible sold.

One year later, the original MX-5 Miata was born to universal acclaim. The first-generation Miata featured a simple-to-operate top that could be folded in seconds, from the driver's seat. Simply unzip the plastic rear window, release the two windshield header latches and push the top back. What could be easier? A simple vinyl boot cover was used to protect the lowered top.

Only the second-generation Miata could have been more simple, as the introduction of a heated glass back-window meant the window no longer had to be unzipped before dropping the top. Now all you had to do was unlatch from the windshield header and push the top back. The simple boot cover was carried over.

And then, of course, the third-generation Miata – the all-new-for-2006 MX-5 reinvented the concept of easy-to-use tops, as its innovative top eschewed even the need for a boot cover. Absolutely the finest soft top in the industry.

Folding hard tops have existed in various forms since the 1940s. In exchange for their smoother appearance, tighter sealing, quieter cockpit and increased security, they have historically imposed significant penalties. The roof itself is generally heavier and the motors and mechanisms used to automate its operation increase weight, cost and complexity. Usually, it's necessary for the driver to secure a partition in the trunk to make sure that luggage doesn't foul the folded top. But the dearest sacrifice of all is to luggage room: some folding hard tops consume practically all the luggage space in exchange for letting the sun shine on the cockpit.

To preserve the MX-5's fun-loving spirit and love of weekend getaways, the new PRHT performs what seems like a magic trick: disappearing on cue when the 'open' button is pressed. The MX-5's trunk provides a just-right 5.3 cubic feet of capacity whether the roof is hard or soft, stowed or over head.

To achieve this breakthrough in hard-top convertible design, the MX-5 PRHT's roof consists of three major parts—a front section, a middle section, and the rear window—which hinge and move to nest atop one another in exactly the same space as the soft top.

The two roof sections fold like a clamshell; the window separates from the middle section and moves forward to the in-between space. And, rather than consuming interior or trunk room, the folded roof descends into the same storage well located above the rear axle and the fuel tank where the soft top would have resided. A deck cover mates with the top in the closed mode and shrouds the folded top from view in the open mode.

A center locking handle secures the PRHT to the windshield frame. Two buttons positioned at the top-center of the MX-5's instrument panel command the opening and closing operations. Signals sent from those buttons to an electronic control unit (ECU) are forwarded to four small, quiet-running electric motors—two operate the folding hard top, two raise and lower the deck cover. The ECU makes sure the car is stopped, the ignition switch is on, and the transmission is in neutral or park before moving the PRHT. To avoid interference with the top, side windows are automatically lowered several inches. Opening and closing cycles last only 12 seconds, making this the fastest power-operated retractable hard top in the U.S. An indicator lamp and warning beeps advise the driver when the operation is complete.

To keep the PRHT both light and compact, it's constructed of advanced high-strength materials. The front and middle section exterior panels are made of sheet molding compound. Interior panels are glass-fiber-reinforced polypropylene. The assembled panels are barely three-quarters of an inch thick yet they provide an attractive appearance and do an excellent job of blocking wind and road noise. The rear window is glass imprinted with an electric defroster grid.

To maintain body rigidity with an opening that's 1.8-inches wider and 3.2-inches longer than the soft-top's aperture, material thicknesses of the body panels surrounding the opening have been increased and two corner-reinforcing brackets have been added. Closed-section reinforcements also extend from the rear deck along the outer edges of the top storage well. The deck lid changes from aluminum in the MX-5 soft-top to steel for the PRHT to accommodate contours added for an attractive appearance. Altogether, the net weight increase over the soft-top model is only approximately 80 pounds (depending on trim levels), quite reasonable considering the benefits delivered.

Minor suspension adjustments were in order to maintain the quick steering response and predictable handling expected of MX-5. Dampers are firmer, rear spring rates are higher, and the front anti-roll bar has been increased from 0.83-in. to 0.87-in. in diameter.

Like the soft-top MX-5, the PRHT edition has a wind deflector to block cockpit drafts. A 1.3-inch-high air guide runs the full width of the deflector to reduce the energy of the back draft impinging the driver and passenger. With the top raised, interior noise level with the PRHT is reduced in comparison with the soft-top MX-5.

Design changes to accommodate the MX-5's PRHT are especially gentle brush strokes. To integrate the appearance of the deck cover, an accent crease flows from each door over and around the width of the panel. Longitudinal contours molded into the outer edges of the two roof sections add tension at the top of the car. The rear window is larger than that provided in the soft top for a balanced look. Overall height is only 0.39-in. greater than the soft-top MX-5.

MX-5 PRHT models wear a fine chrome ring around the grille opening, bright bezels inside the headlamps and a chrome band in each door handle. A white-lens CHMSL is another distinctive touch.

Two new exterior colors—Stormy Blue Mica and Highland Green Mica—replace Winning Blue Metallic and Nordic Green Mica in the MX-5 palette. Copper Red Mica, Galaxy Grey Mica, Sunlight Silver Metallic, True Red, and Brilliant Black are also offered. Three interior packages—black fabric, black leather, and saddle-tan leather—carry over from the MX-5 soft top.

The Mazda MX-5 PRHT is a more sophisticated two-seat roadster for owners who prize top-down driving but also want the poise and security of a hard roof over their heads during inclement weather. It's the best of both worlds—wind-in-the-hair driving joy plus peace of mind—at the touch of a button.

All 2007 Mazdas come with a roadside assistance program. With a call to a toll-free number, owners can access roadside assistance 24 hours a day, 365 days a year throughout the United States and Canada. In addition, a comprehensive three-year/36,000-mile warranty covers every part on the vehicle except those subject to normal wear. Also, all 2007 models receive a five-year/60,000-mile powertrain warranty and a five-year/unlimited-mileage corrosion warranty.

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 and Mexico through nearly 900 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.

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