

06 **mazda** *RX-8*

A SPORTS CAR

LIKE NO OTHER

zoom-zoom



A REVOLUTION

FUELED BY INNOVATION.

REVOLUTIONARY DESIGNS ARE A MAZDA TRADITION. AND THE 2006 MAZDA RX-8 IS QUICK TO PROVIDE COMPELLING PROOF. EMERGING FROM THE SAME POTENT GENE POOL THAT GAVE BIRTH TO THE LEGENDARY MAZDA RX-7 AND ORIGINAL MAZDA MX-5 MIATA, THE RX-8 IS A UNIQUE FUSION OF IMAGINATION AND INNOVATION. FACT IS, ITS INGENUOUS POWERPLANT IS A DESCENDENT OF THE ROTARY-POWERED MAZDA 787B, THE FIRST AND ONLY JAPANESE ENTRY EVER TO WIN THE HISTORIC 24 HOURS OF LE MANS. YET IT ALSO BREAKS SIGNIFICANT NEW GROUND OF ITS OWN—AS THE WORLD'S FIRST AND ONLY ROTARY-POWERED, 4-PASSENGER SPORTS CAR. WITH ITS ICONIC STYLING, VERSATILE INTERIOR AND INSPIRING PERFORMANCE, THE RX-8 RECALIBRATES TRADITIONAL SPORTS-CAR PARAMETERS TO TARGET TODAY'S NEEDS. AND PROVES THAT IT'S A SPORTS CAR LIKE NO OTHER.





Mazda RX-8 shown with Genuine Mazda accessories.

ITS POWERFUL PRESENCE



INSPIRES MORE THAN MERE ADMIRATION.

Don't look here if you want to look like everyone else. Because the Mazda RX-8 is without peer. Its profile is provocative—even predatory. Its high-revving RENESIS rotary engine rockets from 0 to 60 mph in a scant 5.9 seconds.* Even its cabin raises the bar by easily accommodating 4 adults. No wonder the RX-8 has been named a *Car and Driver* "10Best" every year since its introduction.



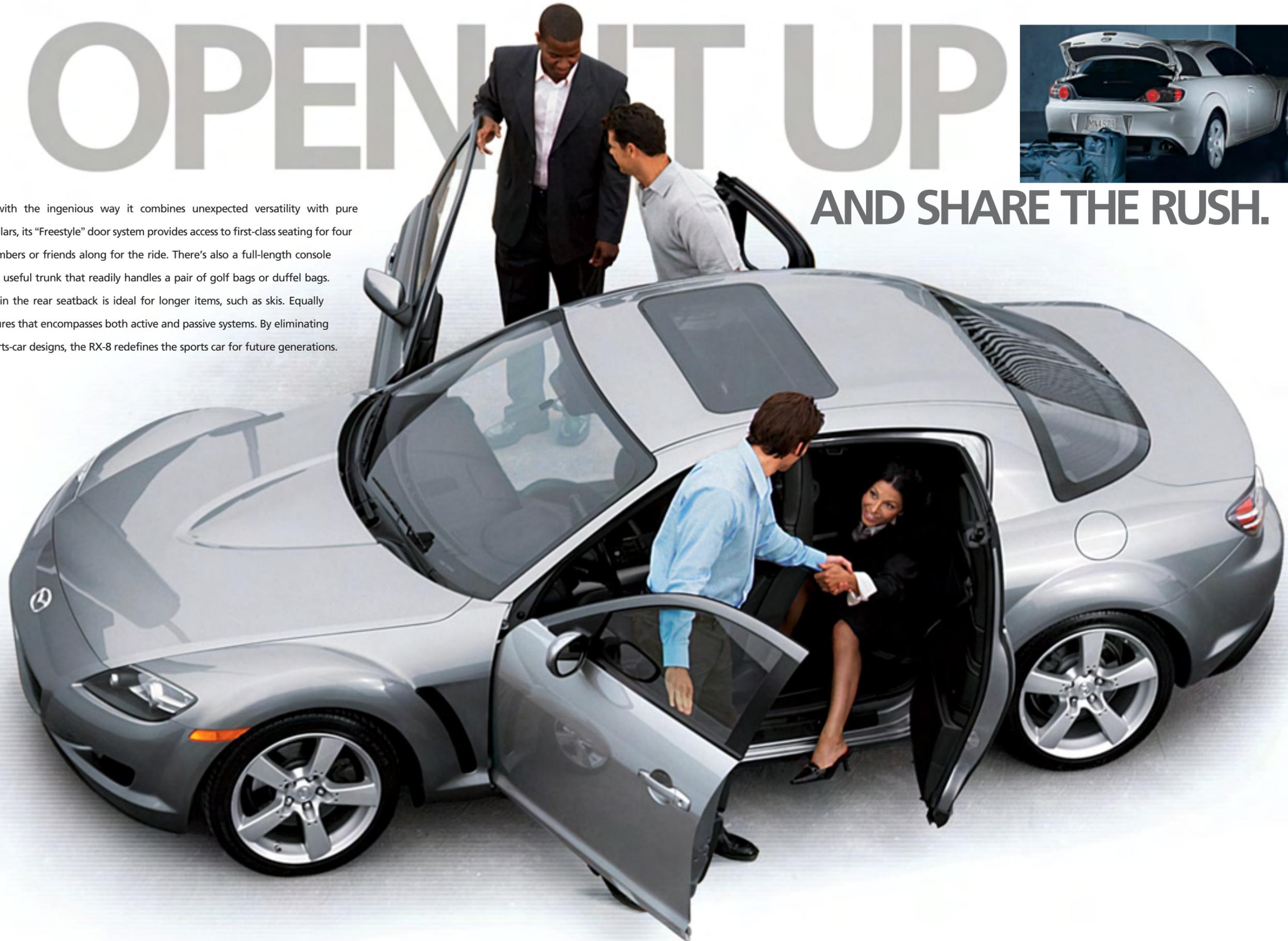
*Road & Track (4/03)

OPEN IT UP



AND SHARE THE RUSH.

In a Mazda RX-8, the real exhilaration begins with the ingenious way it combines unexpected versatility with pure sports-car performance. By eliminating both center pillars, its "Freestyle" door system provides access to first-class seating for four adults—allowing you to easily take three family members or friends along for the ride. There's also a full-length console with a built-in armrest and storage area. Plus a truly useful trunk that readily handles a pair of golf bags or duffel bags. Or weekend luggage. A handy cargo pass-through in the rear seatback is ideal for longer items, such as skis. Equally compelling is its comprehensive matrix of safety features that encompasses both active and passive systems. By eliminating the trade-offs typically found in more traditional sports-car designs, the RX-8 redefines the sports car for future generations.



A. Extensive safety features include a full array of dual front air bags,* front seat-mounted side-impact air bags* plus side-impact air curtains with coverage for both front and rear seats. B. Power-assisted 4-wheel disc brakes, including massive 11.9-inch ventilated rotors, plus an Anti-lock Brake System (ABS) with Electronic Brakeforce Distribution (EBD), help promote linear, fade-resistant stops. C. Side reinforcement beams in all four doors help deflect side-impact energy. The RX-8's rear doors also utilize vertical reinforcement beams with special top-and-bottom latch mechanisms to provide excellent side-impact protection.

*Always wear your safety belt and secure children in the rear seat.



ONE SIZE

FITS ALL.

IT FOLLOWS

DIRECTIONS WELL.

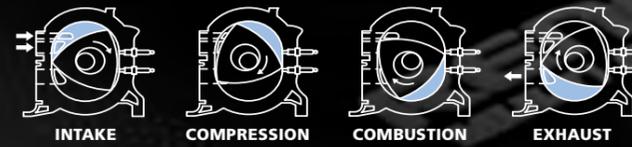


To promote clear communication between man and machine, the Mazda RX-8 rewards its pilot with a cockpit painstakingly designed to be driver-centric. You feel it as you strap yourself into the well-bolstered contours of the driver's seat. You see it as the electroluminescent tach skyrockets to its 9000-rpm* redline. You value it as you adjust steering-wheel-mounted controls for both the cruise control and audio systems. You hear it as the available SIRIUS Satellite Radio† receiver and 9-speaker Bose® sound system fill the cabin. And you marvel at it as the available DVD-based navigation system's 7-inch retractable LCD screen displays the most direct route. As your feet dance across the racing-inspired aluminum foot pedals that distinguish every RX-8 equipped with a 6-speed manual gearbox, one conclusion is inescapable: The RX-8 is taking the sports-car experience in bold, new directions.

*7500-rpm paired with 6-speed Sport AT automatic.

SIRIUS
† SATELLITE RADIO reception requires a subscription and Mazda satellite radio receiver accessory kit. Available only in the U.S., except Alaska and Hawaii.

Assertively concealed under the aluminum hood of every Mazda RX-8 is a hand-assembled RENESIS rotary engine that's so advanced, it has no cylinders, pistons or valves—just three major moving parts and an outrageously broad powerband. Lighter and more compact than a piston engine of comparable power, the rotary's superior horsepower-to-weight ratio makes it an ideal powerplant for sports cars. Its compact size also pays off in extra cabin room. And even allows the engine to be positioned well behind the front axle endowing the RX-8 with all the handling advantages of an advanced front-mid-engine layout.



HOW A ROTARY WORKS: Instead of pistons inside cylinders, two triangular rotors spinning within their own oval housings, and around a common output shaft, smoothly generate all power. **INTAKE STROKE:** As an apex of the rotor passes the intake port, fuel-air mixture is drawn in. **COMPRESSION STROKE:** The intake port is blocked, and the fuel-air mixture is compressed. **COMBUSTION STROKE:** The compressed fuel mixture is ignited by two spark plugs. The force created by this combustion spins both rotor and shaft. **EXHAUST STROKE:** The rotor's continuing orbit forces exhaust gases out the exhaust port. The cycle is then repeated. **ROTARY EXPERTS:** Since 1961, Mazda has designed and built more than 80 different rotary engines in 2-, 3- and 4-rotor configurations. Mazda has also sold nearly 2 million rotary-powered vehicles worldwide—including three generations of the immediate predecessor to the RX-8, the legendary Mazda RX-7.



CATCH THIS

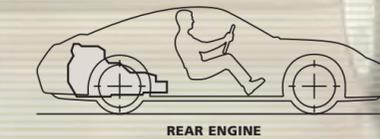
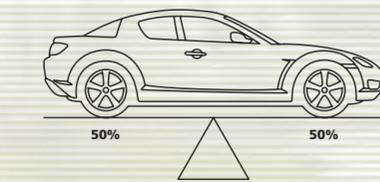
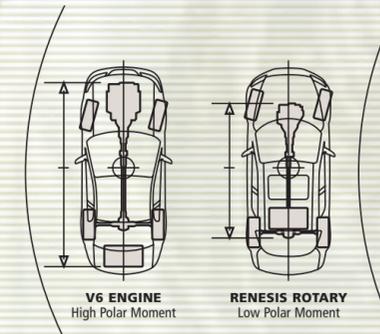
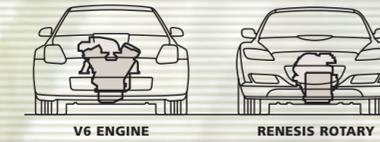
NONSTOP FLIGHT TO 9000 RPM.

Assertively concealed under the aluminum hood of every Mazda RX-8 is a hand-assembled RENESIS rotary engine that's so advanced, it has no cylinders, pistons or valves—just three major moving parts and an outrageously broad powerband. Lighter and more compact than a piston engine of comparable power, the rotary's superior horsepower-to-weight ratio makes it an ideal powerplant for sports cars. Its compact size also pays off in extra cabin room. And even allows the engine to be positioned well behind the front axle endowing the RX-8 with all the handling advantages of an advanced front-mid-engine layout.

If you demand undiluted acceleration and control, there's an RX-8 that serves up a short-throw 6-speed manual gearbox, lightweight carbon-fiber driveshaft and a sky-high 9000-rpm redline. Or, for both convenience and fun, consider an RX-8 equipped with a 6-speed Sport AT automatic transmission that also offers manual shifting plus a 7500-rpm redline. To minimize powertrain twisting and wasted power, both models also utilize a Power Plant Frame (PPF) that marries engine, transmission and differential into a single, super-rigid unit.



A. Steering-wheel-mounted paddle shifters, similar to those on some race cars, are standard on the RX-8 equipped with a Sport AT 6-speed automatic transmission. B. In manual sport mode, the Sport AT allows you the fun of shifting gears via its paddle shifters or console-mounted shifter and delivers a spirited 212 hp. C. The advanced multilink rear suspension of the RX-8 delivers precise camber control, resulting in outstanding grip. In front, its sophisticated double-wishbone suspension design benefits from the light weight and high strength of aluminum alloy upper and lower control arms. A Dynamic Stability Control (DSC) system is also available. The system monitors both throttle and brake functions and includes a Traction Control System (TCS) to enhance the handling and performance of the RX-8 under adverse driving conditions.



THE ROTARY ENGINE contributes to the superb performance and crisp, agile handling of the RX-8 in several crucial ways. Lighter and more compact than piston engines of comparable power, the rotary delivers an impressive power-to-weight ratio for spirited acceleration. And its compact design allows it to be placed lower and well behind the front axle. This helps lower the center of gravity, enhancing the sports car's overall balance, stability and agility.

EXEMPLARY HANDLING is also achieved by positioning much of the mass, including powertrain and fuel tank, near the center point of the RX-8. This gives the RX-8 a "low-polar-moment-of-yaw" inertia, making it highly responsive to changes in direction—left or right. Cars with widely distributed mass have a "high-polar-moment-of-yaw" inertia and tend to be less responsive and harder to control.

WEIGHT DISTRIBUTION significantly impacts a sports car's stability and handling. So the RX-8 is engineered to maintain an approximate 50:50 weight distribution, front to rear, regardless of passenger load. The end result is a remarkably agile, well-balanced design.

THANKS TO MAZDA ROTARY TECHNOLOGY, form beautifully follows function. The relatively compact size and light weight of the rotary engine enabled Mazda engineers to create a rigid chassis and ingenious cabin design for the RX-8 that accommodates four full-size adults. And all within dimensions virtually identical to a Porsche 911.

CATCH THIS **NONSTOP FLIGHT** TO 9000 RPM.



MAZDA CONTINUES TO PUT ITS
UNIQUE SPIN
ON RACING.

The rotary engine's compact size, light weight and high-output reliability make it ideal for racing. All kinds of racing Today, the RENESIS rotary engine found in every Mazda RX-8 can also be found in every open-wheel car competing in the Star Mazda Racing Series. Equally remarkable, during its initial season in American Le Mans Series (ALMS) competition in 2005, a 3-rotor, 400-plus-hp Mazda P2 Class racer amassed eight podium finishes in its first nine races. And in 2004 and 2005, a Mazda RX-8 captured consecutive Grand-Am Cup ST Class Championships—while besting the likes of Audi, BMW and Acura. But then, Mazda's commitment to motor sports is unwavering. A fact now proudly reflected by the historic racing venue that also shares our name—Mazda Raceway Laguna Seca



MECHANICAL FEATURES	RX-8 (6-speed manual)	RX-8 (6-speed Sport AT)
Dual engine-oil coolers	S	S
Lightweight carbon-fiber driveshaft	S	—
ⓧ Tochigi-Fuji torque-sensing limited-slip differential	S	P
Rack-and-pinion steering with electric variable assist	S	S
ⓧ Power-assisted 4-wheel disc brakes	S	S
ⓧ Anti-lock Brake System (ABS) with Electronic Brakeforce Distribution (EBD)	S	S
Upgraded brake system with larger front brake discs	S	P
ⓧ Double-wishbone front suspension with light-alloy upper and lower arms, strut-tower brace, coil springs and stabilizer bar	S	S
ⓧ Sport-tuned multilink rear suspension with low-mounted coil springs and stabilizer bar	S	S
Tire-Pressure Monitoring System (TPMS)	S	S

EXTERIOR FEATURES		
Twin bright-tipped exhaust outlets	S	S
16-inch alloy wheels with 225/55R16 high-performance tires	—	S
18-inch alloy wheels with 225/45R18 high-performance tires	S	P
"Freestyle" door system	S	S
Aluminum hood and rear doors	S	S
Flip-out rear quarter windows	S	S
In-glass radio antenna; rear window defogger	S	S
Dual body-color power remote mirrors	S	S
2-speed variable intermittent windshield wipers	S	S
Clear-lens halogen headlights with projector-type low beams	S	S

SPECIFICATIONS	RX-8 (6-speed manual)	RX-8 (6-speed Sport AT)
Engine size and type	1.3-liter RENESIS 2-rotor rotary	1.3-liter RENESIS 2-rotor rotary
Compression ratio	10.0:1	10.0:1
Engine intake configuration	6-port	6-port
Horsepower, SAE Net	232 @ 8500 rpm	212 @ 7500 rpm
Torque, SAE Net lb-ft	159 @ 5500 rpm	159 @ 5500 rpm
Transmission	6-speed manual	6-speed Sport AT automatic
Drivetrain/layout	Front mid-engine/rear-wheel drive with Power Plant Frame	Front mid-engine/rear-wheel drive with Power Plant Frame
Steering ratio	16.4:1 (3.0 turns, lock-to-lock)	16.4:1 (3.0 turns, lock-to-lock)
Turning circle	34.8 feet, curb-to-curb	34.8 feet, curb-to-curb
Front brakes	12.7-inch ventilated discs	11.9-inch ventilated discs (std) 12.7-inch ventilated discs (avail)
Rear brakes	11.9-inch ventilated discs	11.9-inch ventilated discs
Fuel capacity/fuel requirement	15.9 U.S. gallons/premium unleaded gasoline	15.9 U.S. gallons/premium unleaded gasoline
EPA estimated fuel economy, mpg	18 city/24 highway	18 city/25 highway
Curb weight with popular options (lb)	3045	3075

DIMENSIONS (inches)	RX-8 (6-speed manual)	RX-8 (6-speed Sport AT)
Wheelbase/overall length	106.4/174.3	106.4/174.3
Overall width/height	69.7/52.8	69.7/52.8
Track, front/rear	58.9/59.3	58.9/59.3
Front headroom/legroom/shoulder room	38.2/42.7/54.8	38.2/42.7/54.8
Front headroom with moonroof	36.7	36.7
Rear headroom/legroom/shoulder room	36.8/32.2/54.9	36.8/32.2/54.9
Rear headroom with moonroof	36.5	36.5
Trunk volume, cubic feet	7.6	7.6

INTERIOR FEATURES	RX-8 (6-speed manual)	RX-8 (6-speed Sport AT)
ⓧ Dual front air bags*	S	S
ⓧ Front seat-mounted side-impact air bags*	S	S
ⓧ Side-impact air curtains with coverage for front and rear seats	S	S
ⓧ 3-point safety belts for all seating positions	S	S
Rear-seat LATCH tether child-seat anchors	S	S
Reclining front bucket seats	S	S
ⓧ 4-passenger seating with rear bucket seats and trunk pass-through	S	S
Cloth-trimmed upholstery; carpet floor mats	S	S
Center console with covered storage, dual cup holders and 12-volt power point	S	S
Rear console with covered storage and dual cup holders	S	S
Overhead console with sunglasses holder and front map lights	S	S
Power windows with driver's 1-touch-down feature	S	S
Power door locks with 2-stage unlocking (driver's door; all doors)	S	S
Remote keyless entry system with two transmitters	S	S
Cruise control	S	S
ⓧ Tri-mode gauge lighting: blue (entry); white-on-black (daytime); red-on-black (nighttime)	S	S
Digital speedometer with dual trip odometers	S	S
Center instrument-panel display for clock, audio system, climate control and outside ambient temperature	S	S
Leather-wrapped 3-spoke tilt steering wheel with audio and cruise control switches	S	S
Steering-wheel-mounted paddle shifters for Sport AT automatic transmission	—	S
Leather-wrapped gearshift knob	S	S
Heater/defroster with CFC-free air conditioning and dust and pollen filter	S	S
ⓧ 100-watt AM/FM/CD stereo with 6 speakers, including 2 tweeters	S	S
Antitheft alarm system with engine immobilizer	S	S

WHEEL OPTIONS



16-INCH ALLOY



18-INCH ALLOY

Product Changes and Options Availability: Following publication of this brochure, certain changes in standard equipment, options, prices and the like, or product delays may have occurred which would not be included in these pages. Your Mazda dealer is your best source for up-to-date information. Mazda reserves the right to change product specifications at any time without incurring obligations. Options shown or described in this brochure are available at extra cost and may be offered only in combination with other options or subject to additional ordering requirements or limitations.

OPTIONS/PACKAGES	RX-8
Appearance Package: Front air dam, side and rear aero flares (not available with front and rear splash guards)	O/A
Rotary Accent Package: Polished front and rear rotary accents	O/A
ⓧ Navigation system: DVD-based with retractable 7-inch LCD screen	0
SIRIUS Satellite Radio [†] receiver kit	O/A
Rear wing spoiler	O/A
Fender strakes	O/A
Front and rear splash guards (not available with Appearance Package)	O/A
In-dash 6-disc CD changer	O/A
Cassette player	O/A
Spare-tire mounting kit (trunk-mounted; includes wheel, tire and mounting hardware)	0
All-weather floor mats	O/A
Alarm shock sensor upgrade	O/A
Cargo tray	O/A
Cargo organizer	O/A
Collapsible cargo carrier	O/A
Cargo net	O/A
Door-edge guards	O/A
Moonroof wind deflector (Touring or Grand Touring models)	O/A

INTERIOR FABRICS



BLACK CLOTH



BLACK LEATHER



BLACK/RED LEATHER



BLACK/CHAPARRAL LEATHER



SAND LEATHER/ALCANTARA[®] †† (RX-8 SHINKA)

RX-8 PACKAGES			
RX-8 Sport Package	RX-8 Touring Package	RX-8 Grand Touring Package	RX-8 Shinka Special Edition (Limited Availability)
<i>Includes the following features:</i>	<i>Includes the following features in addition to or in place of RX-8 Sport:</i>	<i>Includes the following features in addition to or in place of RX-8 Touring:</i>	<i>Includes the following features in addition to or in place of RX-8 Grand Touring:</i>
-Self-leveling Xenon HID low-beam headlights	-300-watt Bose [®] 9-speaker audio system with AudioPilot [®] automatic noise compensation technology	-Mazda Advanced Keyless Entry & Start System	-Sand leather/Alcantara [®] -trimmed seats ††
-Fog lights	-Power sliding-glass moonroof	-8-way power driver's seat and lumbar support	-SIRIUS Satellite Radio system with a one-year subscription [†]
-Dynamic Stability Control (DSC) with Traction Control System (TCS)	-Auto-dimming mirror with HomeLink [®]	-Heated front seats	-6-disc in-dash CD changer
-Tochigi Fuji torque-sensing limited-slip differential (standard on 6-speed manual)		-Heated mirrors	-Bright-finish alloy wheels
-18-inch wheels and tires (standard on 6-speed manual)		-Faux-leather door trim	-Urethane-foam-injected front-suspension cross members
-Larger front brakes (standard on 6-speed manual)			-Leather-wrapped parking-brake handle
-Sport-tuned suspension (standard on 6-speed manual)			-Leather console lid cover

S: Standard O: Optional P: Package A: Dealer-available accessory — : Not available

*Always wear your safety belt and secure children in the rear seat.
[†]SIRIUS Satellite Radio reception requires a subscription and Mazda satellite radio receiver accessory kit. Available only in the U.S., except Alaska and Hawaii.
^{††}ALCANTARA is non-woven suede made of Microfiber by TORAY INDUSTRIES, INC.

EXTERIOR COLORS



BRILLIANT BLACK CLEARCOAT
Black Cloth, Black Leather, Black/Red Leather, Black/Chaparral Leather, Sand Leather/Alcantara[®] (RX-8 Shinka) ††



SUNLIGHT SILVER METALLIC
Black Cloth, Black Leather, Black/Red Leather, Black/Chaparral Leather



WHITEWATER PEARL MICA
Black Cloth, Black Leather, Black/Red Leather, Sand Leather/Alcantara[®] (RX-8 Shinka) ††



WINNING BLUE METALLIC
Black Cloth, Black Leather



PHANTOM BLUE MICA
Black Cloth, Black Leather



GALAXY GRAY MICA
Black Cloth, Black Leather, Black/Red Leather, Black/Chaparral Leather, Sand Leather/Alcantara[®] (RX-8 Shinka) ††



VELOCITY RED MICA
Black Cloth, Black Leather, Black/Red Leather, Black/Chaparral Leather



COPPER RED MICA (RX-8 SHINKA)
Sand Leather/Alcantara[®] ††

- Grille trim ring¹
- Fog lights²
- Front air dam³
- Polished front rotary accent
- Polished rear rotary accent
- Full front mask
- Front splash guards
- Polished aluminum fender strakes
- Door-edge guards
- Side aero flares
- 18-inch dark-chrome-appearance aluminum wheels
- Wheel centers⁴
- Rear splash guards⁵
- Rear aero flares⁶
- Rear wing spoiler
- Moonroof wind deflector

- Car cover⁷
- Car-cover cable lock
- B-pillar appliqué
- Exhaust finishers
- Aldehyde filter
- Windshield sunscreen
- Cassette player
- In-dash 6-disc CD changer
- CD/MP3 player
- MiniDisc player
- PhatNoise[®] car audio system
- SIRIUS Satellite Radio receiver kit*
- Leather parking-brake handle
- Leather gearshift knob with rotary emblem⁸
- Night lights⁹
- Aluminum accelerator pedal⁸
- Aluminum brake pedal⁸

- Aluminum foot rest⁸
- Aluminum door sill trim plates
- Aluminum air vent bezels
- Aluminum-tone power window switches
- Carpet floor mats
- Premium carpet floor mats
- All-weather floor mats
- Rear door-trim protectors
- Spare-tire mounting kit¹⁰
- Cargo tray
- Cargo organizer
- Collapsible cargo carrier
- Cargo net
- First aid kit
- Roadside assistance kit
- Wheel locks
- Touch-up paint

All Genuine Mazda Accessories installed by your Mazda dealer, prior to or at initial vehicle delivery, carry the same new-vehicle limited warranty as your new Mazda. See your dealer for details.

MAKE YOUR RX-8



PHATNOISE[®] CAR AUDIO SYSTEM. Listen to the equivalent of up to 500 CDs on your Mazda's stereo system with a PhatNoise[®] 20GB digital media cartridge and trunk-mounted digital media player. Plays MP3, WMA, FLAC and audible formats. Complete with USB Desktop Cradle, software and mounting hardware.

1. Cannot be used with front air dam and automatic transmission. 2. Blue-tint, clear or multitint. 3. Cannot be used with grille trim ring and automatic transmission. 4. Polished with Mazda emblem or black with rotary emblem. 5. Cannot be used with rear aero flares. 6. Cannot be used with rear splash guards. 7. Available in four color combinations. 8. With automatic transmission. 9. Driver/passenger. 10. Includes mounting hardware and wheel; tire sold separately.

SIRIUS[®] SATELLITE RADIO reception requires a subscription and Mazda satellite radio receiver accessory kit. Available only in the U.S., except Alaska and Hawaii.

COMMITTED TO YOUR PEACE OF MIND.

Every new 2006 Mazda is covered by one of the industry's most comprehensive new-vehicle warranties, the **Mazda Driver's Assurance Plan**. It includes a **48-month/50,000-mile** "bumper-to-bumper" **Limited Warranty** plus **24/7 Emergency Roadside Assistance**. And should your RX-8 require a warranty repair, the **Mazda Service Transportation Solution** can typically provide another vehicle to drive. After all, we want your new Mazda to be a source of pride, exhilaration and peace of mind for years to come. See your Mazda dealer for details.

REDISCOVER THE EMOTION OF MOTION. With 13 exhilarating models, Mazda makes it easier than ever to satisfy your practical needs. And your emotional ones. So treat yourself to the Mazda Test-Drive Experience. Put the RX-8 of your choice through its paces. Down local streets, on-ramps, highways and off-ramps. Through straightaways, S-curves and corners. Discover the responsive acceleration and steering, superb braking and surefooted handling that set every Mazda apart. And in the process, rediscover that elusive emotion of motion—that fun, connected-to-the-road feeling that we like to call "Zoom-Zoom."

MazdaUSA.com

ALL CHILDREN INSTINCTIVELY KNOW IT.

A FEW ADULTS STILL REMEMBER IT.

ONE UNIQUE CAR COMPANY REFUSES TO OUTGROW IT.

IN GROWN-UP LANGUAGE, IT MEANS THE EXHILARATION AND

LIBERATION THAT COME FROM EXPERIENCING SHEER MOTION.

BUT AS USUAL, CHILDREN PUT IT MUCH BETTER.

AND SIMPLY CALL IT ZOOM-ZOOM.

WE PRACTICE IT EVERY DAY.

IT'S WHY WE BUILD THE KIND OF CARS WE DO.

MAZDA. ALWAYS THE SOUL OF A SPORTS CAR.™

zoom - zoom

