



zoom-zoom

REVOLUTIONARY RENESIS ROTARY ENGINE

DOUBLE-WISHBONE FRONT SUSPENSION

SEATING FOR 4 ADULTS

"PRE-LOADED" MULTILINK REAR SUSPENSION

4-WHEEL VENTILATED DISC BRAKES

"FREESTYLE" DOOR SYSTEM

LIKE MOST REVOLUTIONS, THIS ONE IS FUELED BY IMAGINATION.



SOME SPORTS CARS PUSH THE ENVELOPE. THIS ONE TEARS IT TO SHREDS.

Imagine a sports car like no other—from how it looks and feels to how it's powered and performs. A strikingly original design in every conceivable detail. The Mazda RX-8 is just such a vehicle. In fact, from its "Freestyle" door system and accommodating cockpit to its unique RENESIS rotary engine and advanced suspension system, the way you feel about sports cars will never be the same.



ZOOM-ZOOM



THE DRIVING FORCE BEHIND ITS STUNNING SHAPE IS ACTUALLY UNDER THE HOOD.

The athletic tension captured by the Mazda RX-8's bold design is, to a large extent, made possible by its unique rotary engine. Better still, its original, nothing-else-like-it design inspired even the experts at *Automobile Magazine* (4/03) to conclude: "The RX-8 is different, but it's a true sports car."





EVEN BACKSEAT DRIVERS ARE LEFT SPEECHLESS.



ITS UNIQUE APPEAL DOESN'T HINGE SOLELY ON ITS HORSEPOWER.

The benefits of the Mazda RX-8's innovative technology don't begin and end in the engine compartment. Instead, you'll find them throughout the car, inside and out. Its "Freestyle" door system, for example, banishes both center pillars, granting pilot and passengers unrestricted access to first-class seating for four adults. At the turn of an ignition key, its electroluminescent gauges ignite before your eyes. The RX-8's thick leather-wrapped wheel puts controls for the audio system and cruise control literally at your fingertips—and paddle shifters as well, if you choose an RX-8 equipped with the 4-speed Sport AT automatic transmission. Opening the trunk reveals an unobstructed cargo area big enough to thoughtfully accommodate your weekend luggage. Unshackled from traditional trade-offs, the RX-8 redefines the sports car. And opens up a whole new world of possibilities in the process.





IT HITS ON ALL CYLINDERS. EVEN THOUGH IT DOESN'T HAVE ANY.

Hear that distinctive "snarl" resonating from the Mazda RX-8's dual exhaust outlets? It's a sound cylinders and pistons simply can't duplicate. Because this RX-8's propulsion comes from a smooth-revving 250-hp RENESIS rotary engine mated to a short-throw 6-speed gearbox*. No cylinders. No pistons. Just a remarkable 9,000-rpm redline. For sure-footed handling, the RX-8 boasts a fully independent suspension system with double wishbones up front and a multilink design in the rear. And to promote precise control, its rack-and-pinion steering system utilizes a speed-sensitive electric boost. Linear, fade-resistant stops are also a given—thanks to the RX-8's massive 4-wheel ventilated disc brakes.

*A 210-hp rotary (7,500-rpm redline) paired with a 4-speed Sport AT automatic is also available.



DARING DESIGN:

From the low, sensuous slope of its aluminum hood—made possible by its unique engine—to the firmly supportive contours of its race-car-inspired seating, every inch of the Mazda RX-8's stunning design testifies to a single revolutionary idea: It won't be shackled to any outdated definition of what a sports car can or can't be. Instead, the RX-8's radical design allows it to break new ground in several remarkable ways. Producing a vehicle with the uncanny ability to rewrite the rules. The result is a beautiful paradox. It's responsive, yet reliable. Agile, yet accommodating. Well-balanced, yet well-equipped. But then, no matter how you look at it, there's nothing else quite like it on the road.



PEERLESS PERFORMANCE:

Envision a sports car with an engine like no other.

One so advanced that its ingenious rotary technology is capable of granting a multitude of wishes. For more power. More control. More balance. More passenger room.

And, of course, more exhilaration. Envision a sports car so innovative, it puts a matrix of other sophisticated technologies at your command—including an Anti-lock Brake System (ABS)



with Electronic Brakeforce Distribution (EBD), rack-and-pinion steering with computer-controlled electric assist, available Dynamic Stability Control (DSC) with Traction Control System (TCS), and a host of other active and passive safety systems. Now, envision yourself at the wheel of that vehicle—a sports car so original, its credentials are impossible to ignore—the new Mazda RX-8.

INSIGHTFUL INNOVATION:

Some are born to follow. But those who are born to lead—and blaze new trails—will delight in the Mazda RX-8's array of innovations: From its unique RENESIS rotary engine, "Freestyle" door system and advanced independent suspension system to its tri-mode electroluminescent gauges and available custom-engineered Bose® sound system. The RX-8 renders conventional ideas about sports-car performance, design and innovation obsolete. Now, picture the exhilarating impact Mazda's rotary-powered RX-8 could have on every road you travel. Once you do, the way you feel about sports cars will never be the same.



HERE'S OUR PLAN TO BRING YOUR PEACE OF MIND UP-TO-SPEED.

TO ENSURE YOUR NEW MAZDA RX-8 CONTINUES TO BE A SOURCE OF PRIDE AND EXHILARATION FOR

YEARS TO COME, WE CREATED THE 2003 MAZDA DRIVER'S ASSURANCE PLAN. IT INCLUDES A 48-MONTH/

50,000-MILE "BUMPER-TO-BUMPER"

LIMITED WARRANTY, AS WELL AS A 24-HOUR

EMERGENCY ROADSIDE ASSISTANCE

PROGRAM TO HELP MINIMIZE ANY

INCONVENIENCE IF AN UNEXPECTED

PROBLEM OCCURS ON THE ROAD.

AND SHOULD YOUR MAZDA REQUIRE

A WARRANTY REPAIR, THE MAZDA

SERVICE TRANSPORTATION SOLUTION

CAN TYPICALLY MAKE SURE YOU HAVE ANOTHER

VEHICLE TO DRIVE. WITH THE MAZDA DRIVER'S ASSURANCE PLAN, YOUR TIME AND PEACE OF MIND


COME FIRST. FOR COMPLETE DETAILS, SEE YOUR MAZDA DEALER. FIND OUT HOW THE ROTARY-POWERED

MAZDA RX-8 PUTS A WHOLE NEW SPIN ON SPORTS-CAR PERFORMANCE AT: www.MazdaUSA.com/rx8

zoom-zoom

RX-8





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"FREESTYLE" DOOR SYSTEM

ITS ADVANCED ROTARY ENGINE PUTS A WHOLE NEW SPIN ON PERFORMANCE.

Coiled under the Mazda RX-8's weight-saving aluminum hood is an engine unlike any other—a painstakingly hand-assembled, remarkably responsive RENESIS rotary powerplant. It is an engine so advanced that it has no cylinders, pistons or valves. Just three major moving parts and an outrageously broad powerband. The rotary's compact size, light weight, reliability and power-to-weight ratio provide so many inherent advantages that the RX-8 was literally designed around it. From every angle—compared to an ordinary powerplant—a rotary is the ideal engine for a sports car. Better still, two distinct engine/transmission choices ensure the RX-8 is tailor-made to fit your driving style. For undiluted exhilaration, a high-revving 250-hp powerplant, with a stratospheric 9,000-rpm redline, is offered with a short-throw 6-speed manual gearbox. For both convenience and fun, a higher-torque 210-hp version, with a 7,500-rpm redline, is paired with a 4-speed Sport AT automatic.



UNLIKE A CONVENTIONAL PISTON ENGINE, the RX-8's rotary engine has no cylinders, pistons or valves. Instead, two triangular rotors spinning within their own oval housings—and around a common output shaft—are used to smoothly generate power. Each of the internal combustion engine's four basic cycles occurs in a different section of the oval housing.



Intake Stroke: As an apex of the rotor passes the intake ports, fuel-air mixture is drawn in.

Compression Stroke: The intake ports are blocked and the fuel-air mixture is compressed.

Combustion Stroke: The compressed fuel-air mixture is ignited by two spark plugs. The force created by this combustion spins both rotor and output shaft.

Exhaust Stroke: The rotor's continuing orbit forces exhaust gases out the exhaust port. The cycle is then repeated.

—250HP @ 8500 RPM
RX-8 6-Speed

—225hp

—210HP @ 7200 RPM
RX-8 Automatic

—200hp

—175hp

—150hp

—125hp

—100hp

—75hp

—50hp

—25hp

1000rpm

2000rpm

3000rpm

4000rpm

5000rpm

6000rpm

7000rpm

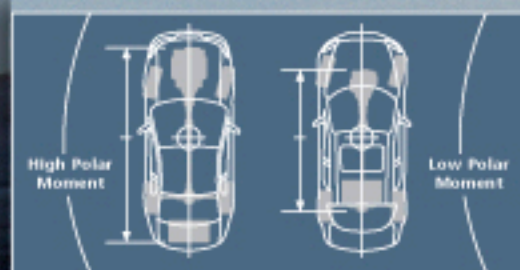
8000rpm

9000rpm



THE GAP BETWEEN YOUR WANTS AND NEEDS WILL DISAPPEAR IN A BLUR.

Forged from today's cutting-edge technologies, the Mazda RX-8 delivers an exhilarating experience—at speed or at rest. But its sports-car credentials are best reviewed on the road. Its advanced, fully independent suspension system will inspire both your awe and your confidence—with sophisticated double wishbones up front. Plus a “pre-loaded” multilink design in back to minimize any lag in rear suspension response. Head into a curve “hot” and its available Dynamic Stability Control (DSC) deftly adjusts power and braking, as necessary, to expertly help you maintain your course. And when you need it most, you’ll instantly appreciate the impressive stopping power of the RX-8’s power-assisted 4-wheel disc brakes—not to mention its massive ventilated rotors, Anti-lock Brake System (ABS) and Electronic Brakeforce Distribution (EBD).



EXCELLENT HANDLING is achieved, in part, by strategically positioning much of the RX-8's mass, including its entire powertrain and fuel tank, near the car's center point—its yaw axis. This endows the RX-8 with what engineers call a low polar moment of yaw inertia. Since “yaw” is simply a vehicle's movement, left or right, and “inertia” the tendency to continue in the same direction, having a “low polar moment” means the RX-8 is very responsive to a desired change in direction. Cars with heavy engines and widely distributed masses have a higher polar moment and can be less responsive and more difficult to control.

COMPLEMENTING ITS HIGH-PERFORMANCE HEART IS A BACKBONE OF STEEL.

Sophisticated rotary technology is just the tip of the iceberg when it comes to the Mazda RX-8's advanced engineering. For example, regardless of which engine/transmission pairing you select, you'll also benefit from the RX-8's integral Power Plant Frame (PPF). Functionally speaking, the Power Plant Frame marries engine, transmission and differential into a single, super-rigid unit. The remarkable result of this mechanical magic is a drivetrain that virtually eliminates the typical powertrain twisting that wastes precious energy. So even the slightest request your right foot makes for more power is instantly—and more efficiently—transformed into meaningful performance.



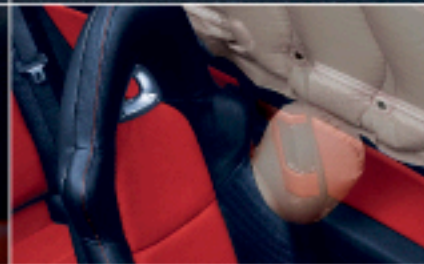
WEIGHT DISTRIBUTION. front to rear, significantly impacts handling. So the Mazda RX-8 is designed to maintain an approximate 50:50 weight distribution—regardless of passenger load. Much of the credit for this remarkable feat goes to its rotary engine. Smaller and lighter than a piston engine of comparable power, it also provides the RX-8 with a superb power-to-weight ratio for spirited acceleration. And more cabin space to comfortably enjoy its inspiring performance.



Front Mid-Engine



Rear Engine



THE RX-8'S BASIC DIMENSIONS are virtually identical to those of a Porsche 911 Carrera. However, the rotary engine's compact size enabled Mazda engineers to design a sports-car chassis and rigid cabin structure that accommodate four full-sized adults—twice as many as the renowned Porsche. Once again, rotary technology allows form to follow function, beautifully.

THE FUTURE OF SPORTS CARS IS WELL WITHIN YOUR GRASP.

The Mazda RX-8's cockpit telegraphs its driver-centric intentions everywhere you look. The electroluminescent gauge cluster changes colors at the flip of a switch. The three-spoke wheel conveniently tilts to meet your grip and puts its multi-function controls front-and-center. Racing-inspired aluminum foot pedals seemingly anticipate your input on the RX-8 equipped with the 6-speed manual gearbox. Sight unseen, second-generation dual-stage driver and front passenger air bags*, side air curtains and front side air bags deliver extra peace of mind. As the available 9-speaker Bose® sound system pumps out a favorite soundtrack, you consult the optional DVD navigation system and plot your course. The tach skyrockets to its stratospheric 9,000-rpm[†] redline and, suddenly, there's not a stretch of road that's remotely your equal.

*Always wear your safety belt and secure children in the rear seat. †A 210-hp rotary (7,500-rpm redline) paired with a 4-speed Sport AT automatic is also available.

ROTARY-DRIVEN DESIGN:



The Mazda RX-8 wears its rotary heritage with genuine pride. In fact, both inside and outside the car, its designers have tastefully integrated the Mazda rotary engine icon into everything from the RX-8's aluminum hood and fascia panels to its seatbacks and manual shift knob. The icon is a badge of honor representing over four decades of continuous evolution and refinement. The eye-catching icon's three corners also symbolize the three key areas where the RX-8 excels: Design, Performance, and Innovation. For those who've driven an RX-8, it's also a reminder that the way you think about a sports car will never be the same.

ROTARY-DRIVEN PERFORMANCE:

Mazda engineers have more practical experience with rotary engines than anyone else in the world. Fact is, the RX-8's advanced RENESIS rotary engine is the culmination of more than 40 years of extensive research, development, racing and refinement. Since 1961, Mazda



has designed and built more than 80 different rotary engines in 2-, 3-, and even 4-rotor configurations. For the record, Mazda has sold nearly 1.8 million rotary-powered vehicles worldwide, including three generations of the RX-8's immediate sports car predecessor, the legendary RX-7.

ROTARY-DRIVEN INNOVATION:

Mazda's ingenious RENESIS rotary engine has also inspired a host of other innovations in other areas of the RX-8's design. For example, in addition to the side reinforcement beams found in the front doors, the RX-8's "Freestyle" rear doors utilize vertical reinforcement beams with special top-and-bottom latch mechanisms to eliminate the need for conventional center pillars and provide excellent side-impact protection. Additional innovations include an advanced multilink rear suspension that's "pre-loaded" to minimize any lag in rear suspension response, plus an available Dynamic Stability Control (DSC) system with traction control to enhance performance, handling and safety under many driving conditions.



0 PISTONS. 4 DOORS. 6 SPEEDS AND 250 HORSEPOWER.* PLUS 1,028 HAIRS STANDING UP ON THE BACK OF YOUR NECK.

No matter how you crunch the numbers, the Mazda RX-8 adds up to sheer excitement. A truly advanced, no-holds-barred sports car overflowing with revolutionary ideas designed to reward you at every turn. From its tense, athletic stance and clear-lens headlights to its concave, aerodynamically shaped roof and metallic taillight accents, there's nothing else remotely like it. Its ingenious rotary engine enables a fusion of free-flowing power, inspired performance, stellar good looks and unexpected versatility. The Mazda RX-8 is, in fact, a true original. And the perfect formula for undiluted exhilaration.

*A 210-hp rotary (7,500-rpm redline) paired with a 6-speed Sport AT automatic is also available.



ENGINE WEIGHT AND PLACEMENT also contribute to the RX-8's agile, responsive handling. The RX-8's innovative rotary powerplant is nearly 90 lbs. lighter than a popular all-aluminum V6 engine. Better still, the rotary engine's low, compact profile allows it to be mounted well behind the front axle in a position that helps the RX-8 achieve its exceptional balance and low center of gravity.

