

MAZDA RX-8

2004 **MAZDA** *RX-8*



2004 - 2007

LIKE MOST REVOLUTIONS, THIS ONE IS FUELLED BY IMAGINATION.

Imagine a new kind of sports car. A truly original, innovative sports car – born from a car company that dares to break from, and re-invent, tradition. Introducing the all-new, rotary-powered Mazda RX-8. The sports car that pushes the limits of cutting-edge technology, casts aside outdated definitions, and gives Mazda's sports car heritage a radical new spin. The revolutionary 2004 Mazda RX-8. Experience it for yourself. Once you do, the way you think about sports cars will never be the same.



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

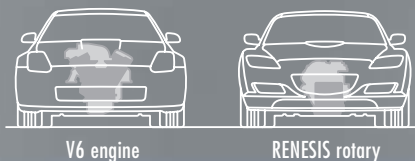
Underneath Mazda RX-8's handsome aluminum hood is the smooth-revving, high-output 238-hp RENESIS rotary engine.* No cylinders. No pistons. Just a remarkable 9,000-rpm redline. For sure-footed handling, the RX-8 boasts a fully-independent suspension system with double-wishbones up front and a multi-link design in the rear. And to ensure precise control, its rack-and-pinion steering system utilizes a speed-sensitive electric boost. Linear, fade-resistant stops are also a given with Mazda's technology – thanks to the RX-8's massive, 4-wheel ventilated disc brakes and Electronic Brake Force Distribution (EBFD). Phenomenal braking power. All great reasons to join the revolution.

ROTARY-DRIVEN INNOVATION: The RX-8's advanced RENESIS rotary engine is the culmination of more than 40 years of extensive research, development, racing and refinement conducted by Mazda engineers. Since 1961, Mazda has designed and built more than 80 different rotary engines in 2, 3, and even 4-rotor configurations. In 1991, a rotary-powered Mazda won the legendary 24 Hours of Le Mans, beating out the favoured entries from Mercedes Benz and Jaguar. Mazda has now sold more than 1.8 million rotary-powered vehicles worldwide, including three distinct generations of the legendary, rotary-powered Mazda RX-7.

*The *Sport mode AT* (4-speed automatic transmission) engine delivers 197-hp with a 7,500-rpm redline.



The Mazda RX-8's RENESIS rotary engine is lighter and 30% more compact than conventional piston engines of comparable power. This allows the engine to be placed behind the front axle and in a lower position, providing several key advantages: An exceptional power-to-weight ratio for enhanced



V6 engine

RENESIS rotary

acceleration. A low centre of gravity for superb handling. Plus more cabin space to comfortably enjoy the inspiring performance that rotary power makes possible. Note: Superb handling is achieved by attaining a low polar moment. See following page for details.

1000 RPM

2000 RPM

3000 RPM

4000 RPM

5000 RPM

6000 RPM

7000 RPM

8000 RPM

9000 RPM

—238HP @ 8500 RPM
RX-8 6-speed MT

—225HP

—197HP @ 7200 RPM
RX-8 4-speed *Sport mode AT*

—200HP

—175HP

—150HP

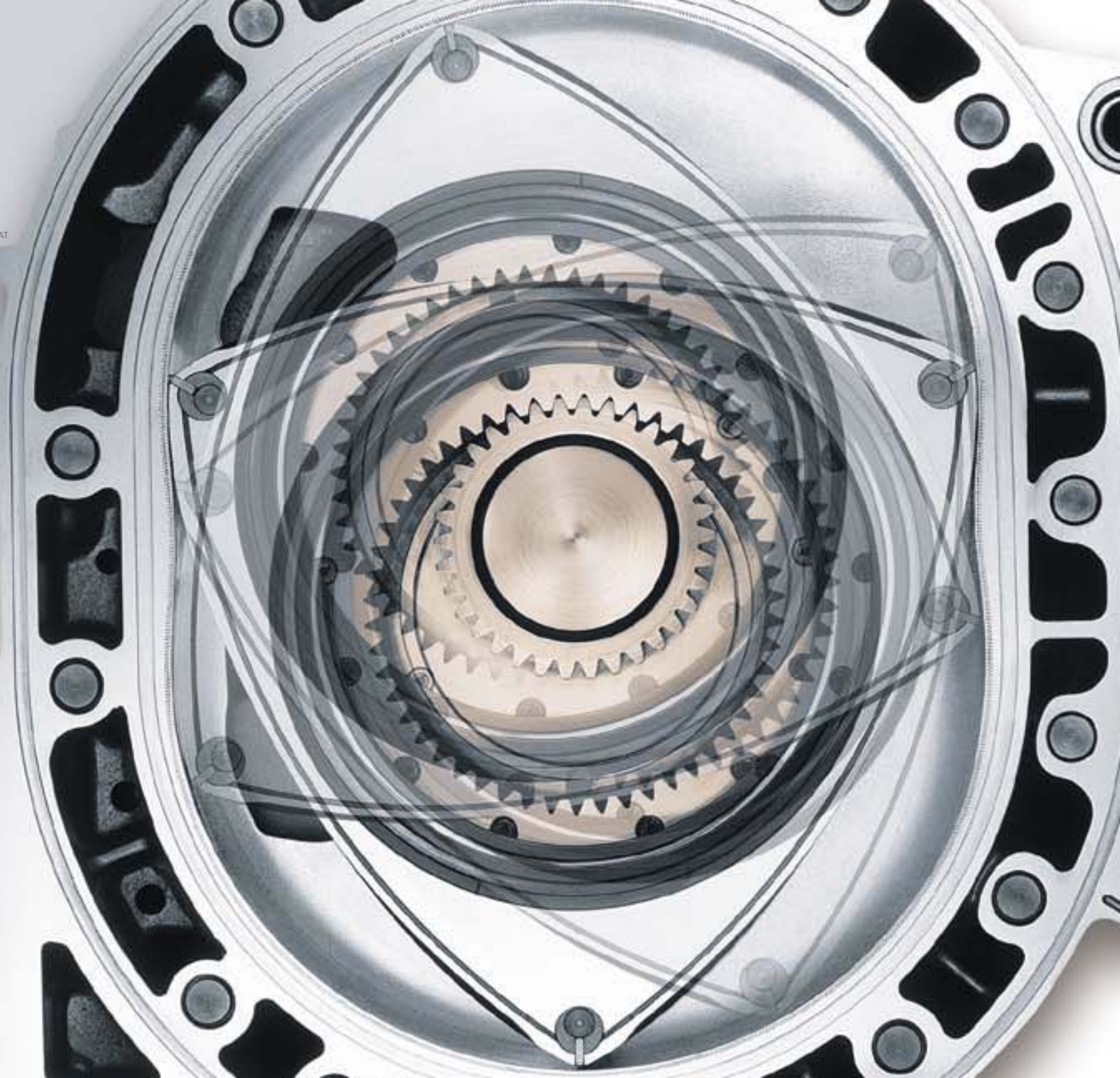
—125HP

—100HP

—75HP

—50HP

—25HP



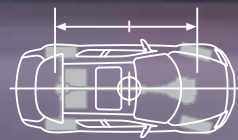


UNDERNEATH ITS EXQUISITE EXTERIOR BEATS THE HEART OF A COMPETITOR. AND A BACKBONE OF STEEL.

Sophisticated rotary technology is just the tip of the iceberg when it comes to the Mazda RX-8's advanced engineering. Because in addition to a choice of two rotary engine transmission packages, the RX-8 also utilizes the integral Power Plant Frame (PPF) technology of Miata legacy. Generally, under acceleration the driveshaft torque tends to twist the whole drivetrain, wasting energy and performance. To combat this, the Power Plant Frame marries engine, transmission and differential into a single, rigid unit. The remarkable result of this design is a drivetrain that virtually eliminates the twisting. So when you step on the accelerator, maximum power is swiftly and directly provided to the rear wheels giving the RX-8 its tight, quick feel. What it takes to stay ahead of the pack.



High polar moment



Low polar moment

An important contributor to the Mazda RX-8's excellent handling is its "low polar moment of yaw inertia." Translation: "Yaw inertia" can be described as the resistance of a vehicle to being turned from its natural straight line path. Thanks to its "low polar moment," the RX-8 is very responsive to a change in direction

and provides more agile handling than cars with a "high polar moment." The RX-8's rotary engine helps make this possible by allowing more mass to be positioned close to the car's centre point — its yaw axis. Core powertrain components, and the fuel tank, are located between the axes of the wheels for better dynamics. A car with its mass more widely distributed is less responsive to any desired change in direction.



ITS INGENIOUS ENGINEERING DOESN'T HINGE SOLELY ON ITS POWERTRAIN.

The rewards of Mazda RX-8's inventive thinking aren't limited to the engine compartment. For openers, its freestyle door system banishes the centre pillars, granting pilot and passengers unrestricted access to first-class seating for up to 4 adults. The structural integrity of the vehicle is maintained by an innovative door system, integrating the catch pins, door latches and virtual B-pillar. All this provides side impact safety that leaves no doubt. Aft, an unobstructed cargo area thoughtfully welcomes any weekend luggage. Unshackled from tradition's trade-offs, the RX-8 re-defines the sports car. And opens up a whole new world of possibilities.





ALL EXCHANGES BETWEEN MAN AND MACHINE SHOULD BE THIS INTUITIVE.

A quick glance around the Mazda RX-8's cockpit telegraphs its driver-centric design. Electroluminescent gauges ignite before your eyes – changing from blue to amber. A thick, leather-wrapped steering wheel puts the controls of the sound system as well as the paddle-style shifters for the available **Sport** mode automatic transmission, quite literally, at your fingertips. The drilled-aluminum foot pedals (6MT) reflect its competitive heritage. Sight unseen, dual-stage driver and front passenger side air bags* provide peace of mind, along with curtain and front side air bags.* As the 9-speaker Bose® stereo blasts out an appropriate tune, you truly appreciate the patented noise compensation technology that allows only pure sound to your ears. With all unwanted noise removed, you are focused as you consult the available DVD navigation system. The tach skyrockets to its 9,000-rpm redline. And suddenly, there's not a stretch of road that's remotely your equal.

*Always wear your safety belts and secure children in the rear seat. Consult owner's manual.



Rear engine

The RENESIS rotary engine's compact size enabled Mazda engineers to design a sports car chassis and rigid cabin structure that can accommodate four full-size adult passengers –



Front mid-engine

twice as many as a conventional sports car of similar dimensions. It's a graphic example of how rotary technology allows form to beautifully follow function.



EXCITING PAST. AN EXHILARATING FUTURE.

Innovative. Stylish. Fun-to-drive. For more than 40 years, Mazda has dedicated itself to engineering vehicles for drivers who truly savour the "emotion of motion." That fun-to-drive, connected-to-the-road feeling that can turn a simple drive into an exhilarating experience. Which is why you'll find the "soul of a sports car" in every vehicle we make. From the remarkable RX-8 and MX-5 Miata to the Tribute and MPV, Mazdas don't look like – or drive like – anything else on the road. There's a Zoom-Zoom factor in their DNA – part engineering, part spirit. We invite you to share the Mazda driving experience with us soon. You'll quickly discover yourself in good company.



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Get more detailed information on your Mazda RX-8. Check out our website at www.mazda.ca for specifications and features, option packages, pricing, financing and to find a dealer near you.

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