

Freestyle Door System

Features a pillarless center-opening design offering easy entry and exit.

Seating for Four Adults

Offers four comfortable adult-sized bucket seats perfectly adapted to high-performance driving.

Advanced Air Bag Systems

Include dual-stage advanced front air bags, front seat-mounted side-impact air bags^(a), and front and rear side air curtains.

Optional DVD Navigation System^(b)

Features routing capabilities, moving map with voice guidance, and local points-of-interest database for exceptional functionality and convenience.

Optional Sport Package

Includes Xenon headlights, fog lights, and Dynamic Stability Control (DSC) (both models) with limited-slip differential, sport-tuned suspension, larger ventilated front disc brakes, and 18-inch wheels and tires (Sport Automatic).

Optional Touring Package

Includes the Sport Package and adds an auto-dimming mirror with HomeLink[®] wireless control system, power sliding-glass moonroof, and 300-watt, 9-speaker Bose[®] Music System.

Optional Grand Touring Package

Includes the Touring Package and adds leather-trimmed upholstery^(c), 8-way power driver's seat, and heated front seats and outside mirrors.

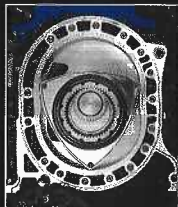
- (a) Front seats only. Never use seat covers on front seats. In a severe side collision, the seat covers could interfere with the side air bag inflation and serious injuries could result.
(b) Do not operate the Navigation System while driving. Obey traffic regulations. Read the Mazda RX-8 Owner's Manual for complete instructions.
(c) Seating surfaces upholstered in leather except for vinyl on seat side panels, rear sides of seatbacks, and other minor areas.

MAZDA

DRIVER'S GUIDE

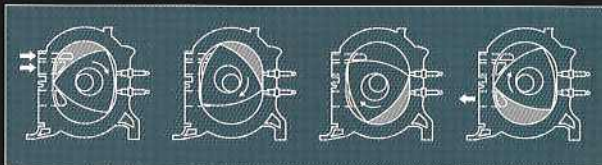


Whole New Spin on Performance



For undiluted exhilaration, a high-revving 238-hp rotary powerplant with a 9,000-rpm redline is offered with a short-throw 6-speed manual transmission. For both convenience and fun, a 197-hp version with a 7,500-rpm redline is paired with a 4-speed Sport AT automatic transmission.

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 strokes occurs in a different section of the oval housing.



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

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

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

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

Fueled by Innovation.

Revolutionary RENESIS Rotary Engine

Embodies a compact, lightweight, high-performance design in 197-hp standard-power or 238-hp high-power versions.

Short-Throw 6-Speed Manual Transmission

Incorporates close gear ratios to take best advantage of the rotary engine's power at all road speeds.

4-Speed Sport AT Automatic Transmission

Supplements automatic operation with a manual shift mode, giving the driver the option of a more exhilarating driving experience.

Double-Wishbone Front Suspension

Keeps front wheels in optimal alignment with the road for superior cornering performance, handling stability, and ride comfort.

Multilink Rear Suspension

Uses five optimally arranged links to ensure that the tires maintain the best possible contact with the road.

Electric Rack-and-Pinion Steering

Operates by an electric motor for more precise steering response and feedback.

4-Wheel Ventilated Disc Brakes

Deliver unparalleled stopping power with large ventilated front and rear discs.

Available Dynamic Stability Control (DSC)

Integrates the functions of the standard Anti-lock Brake System (ABS) and a Traction Control System (TCS) to aid vehicle stability when cornering or during emergency avoidance maneuvers.

Get started.

While no special break-in is necessary, a few precautions in the first 600 miles may add to performance. Don't race the engine. Don't maintain one constant speed for long. Don't drive constantly at full-throttle or high engine rpm for extended periods. Avoid unnecessary hard stops. Avoid full-throttle starts.

Warming the engine. NEW

The Mazda RENESIS Rotary Engine provides exceptional performance dynamics and reduces exhaust emissions, allowing the RX-8 to meet the strict Tier 2 emissions classification in the U.S. Mazda achieved this in part by the design of the engine ports and by adopting a sequential dynamic air intake system. Because of its unique design, it is important to warm up the engine before shutting it off. Ideally, the engine coolant temperature gauge needle should reach the middle of the normal operating range before shutting off the engine.

De-choking procedure when engine cranks but does not start. NEW

If the engine does not start, try the following procedure to start the engine using the de-choke mode. Failure to do so may aggravate the no-start condition.

1. Depress and hold the accelerator pedal to the floor and crank the engine for 7-8 seconds.
(This will clean out any unburned fuel from the combustion chamber.)
 2. Release the ignition switch.
 3. Release the accelerator pedal and start the engine. If the engine starts while performing Step 1, the engine will rev up. Immediately release the ignition key and remove your foot from the accelerator pedal.
- Do not keep holding the ignition switch in the START position over 10 seconds if the engine does not start. This may result in a weakened or dead battery.
 - Avoid racing the engine or suddenly taking off right after starting the engine.
 - If the engine still fails to start following the de-choking procedure, have your vehicle inspected by your Mazda Dealer.



Fill it up, and check the oil too.

The rotary engine in the RX-8 requires premium unleaded fuel (octane rating of 91 or above) to attain optimal performance.

By design, rotary engines consume a small amount of engine oil to lubricate internal engine components. Use the oil dipstick to inspect the oil level when refueling, and if the level is near or below Low, add enough oil to bring the level to Full.

Add only non-synthetic 5W-20 engine oil with SL or ILSAC on the container label. For added safety, an engine oil level warning light on the instrument panel will indicate low engine oil level.

Let it run.

To keep the rotary engine in top condition, the temperature gauge needle should reach the middle of the normal operating range before turning the engine off. During short periods of cold engine driving (such as backing the RX-8 out of a garage to wash it in a driveway), use the following procedure to help keep the spark plugs from fouling or the rotary engine from running rough:

1. Turn the ignition switch to the START position and hold (up to 10 seconds at a time) until the engine starts.
2. After starting the engine, let it idle for about 10 seconds, then move the vehicle.
3. After moving the vehicle, let the engine idle for about 5 minutes.
4. Rev the engine to 3,000 rpm, and then let it return to idle.
5. Turn the ignition switch to the OFF position.



Buzz it.

The RENESIS rotary engine generates linear power and torque that truly engages you at higher rpm ranges. Models with the 6-speed manual transmission redline at 9,000 rpm, while Sport AT models redline at 7,500 rpm. While the RENESIS rotary engine performs best in upper rpm ranges, an engine overrev warning buzzer will sound when the tachometer needle enters the striped zone.

Spare tire? No way.

In sports cars, spare tires take up valuable space and add unnecessary weight, so the RX-8 comes with a sophisticated combination of technology and services that greatly reduces the need for a traditional spare tire.

The Tire Pressure Monitoring System (TPMS) uses sensors installed on each wheel to send data by radio signal to a receiver unit in the RX-8. If tire pressure is too low or too high in one or more tires, the system will alert you via a warning light in the instrument panel and a warning buzzer. But remember, the system does not alleviate the need to check the pressure and condition of all four tires before driving.

The Instant Mobility System (IMS) emergency flat tire repair kit, found in the trunk of the RX-8, enables a temporary repair of a slightly damaged flat tire resulting from running over nails or similar sharp objects on the road surface. Follow the instructions in the kit to repair and reinflate the tire. After temporarily repairing a tire with the kit, take the vehicle to a Mazda Dealer to have the tire replaced.

Mazda Roadside Assistance is available 24 hours a day, 365 days a year in the unlikely event of a severely damaged flat tire. Just call 1-800-866-1998 any time during the Mazda 48-month, 50,000-mile warranty. Feeling old-fashioned? A temporary spare tire is available as a dealer-installed accessory.