



2009 MAZDA RX-8 SPECIFICATION DECK

PRELIMINARY DRAFT

PRODUCTION TIMING:

Job #1: March, 2008

LINEUP:

- Sport
- Touring
- Grand Touring
- RX-8 R3

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2009 MAZDA RX-8

PRODUCT CHANGES

OVERVIEW

Significantly refreshed with new technology features, engineering updates, enhanced exterior and interior styling. A new RX-8 R3 model has been added to showcase the improved performance and styling of this vehicle.

MODEL / SERIES / AVAILABILITY

- New RX-8 R3 model

EXTERIOR CHANGES

- 18" alloy wheel design
- Front headlights
- Front and rear bumpers
- Larger exhaust tips
- Rear LED taillights
- Rear lip spoiler (MT models only)

RX-8 R3 model includes:

- 19" forged alloy wheels
- DSC w/Traction Control
- Fog lights
- Rear wing spoiler
- Sporty front bumper
- Stylish side sills
- Xenon headlights

Grand Touring model includes:

- Rain sensing wipers

INTERIOR CHANGES

- Auxiliary audio jack
- One-touch open/close front power windows with remote down functionality
- Passenger seat one-touch walk-in function for ease of ingress/egress to rear seats
- Seat design
- Steering wheel
- Available enhanced Bose audio system with Centerpoint surround sound technology

RX-8 R3 model includes:

- Auto dimming mirror with Homelink
- Bluetooth hands free phone system
- Bose audio system
- Front Recaro sport seats with leather bolsters
- Leather parking brake
- Mazda advanced keyless entry system

Grand Touring model includes:

- Auto on/off headlights
- Automatic air conditioning
- Bluetooth hands free phone system
- Driver's seat memory (3 positions)
- Driver's seat one-touch walk-in function
- Leather parking brake

FUNCTIONAL CHANGES

- Improved body rigidity with structural reinforcement
- Improved rear suspension geometry for better handling performance
- Fuel tank capacity increased to 16.9 gallons
- Manual transmission final gear ratio changes from 4.444 to 4.777 for improved performance
- Improved access to the oil level dipstick
- All manual transmission models receive a low exhaust pressure muffler

RX-8 R3 model includes:

- Bilstein shock absorbers
- Urethane foam injected front suspension cross member

PACKAGE / OPTION CHANGES

- In-dash 7" LCD touch screen Navigation system (available on Grand Touring)
- Premium package 1 includes: Bose audio system, moonroof and Sirius satellite radio
- Premium package 2 includes: moonroof and Sirius satellite radio

COLOR & TRIM

- **Exterior Colors Added:**
 - Sparkling Black Mica (35N)
 - Diamond Gray Metallic (38E)
 - Aurora Blue Mica (34J) (RX-8 R3 model)
- **Exterior Colors Deleted:**
 - Galaxy Gray Mica (32S)
 - Stormy Blue Mica (35J)
- **Interior Colors Added:**
 - Dune Beige Leather (FG5)
 - Red Leather (FG6)
 - Gray/Black Cloth/Leather (FG7) (RX-8 R3 model)
- **Interior Colors Deleted:**
 - Black/Red Leather (FF4)
 - Sand Leather (FG0)

SAFETY

- No change

Product Changes and Features Availability

Features, options and package content subject to change.

RX-8 Navigation System Change

		2008 MY	New 2009 MY
Navi	Media (Map DISC)	DVD	DVD (2 disc)
	Compass Mode	None	Equipped
	Display size	7 inch	7 inch
Audio	AM/FM	Yes	Yes
	CD	Based on Audio	6CD Changer with MP3
	Sirius (N/A in Alaska/Hawaii)	Yes (First Generation)	Yes (Second Generation) *Seek Alert, Instant Replay
	Availability of iPod connection	Yes (First Generation)	Yes (Second Generation) *Text Display
Bluetooth	Handsfree phone	No	Yes
HMI	NAVI Operation	Remote control	Touch screen
	Handsfree phone	No	Touch screen & voice-recognition
	Volume control of audio guidance (Handsfree, NAVI guide voice)	No	Yes (Vol Knob)
Voice recognition	NAVI Operation	No	Yes
	Audio control	No	Yes (part of the function)
	Phone operation	No	Yes

2009 MAZDA RX-8

PRODUCT SUMMARY

The 2009 RX-8 has been significantly refreshed with new technology features, engineering updates, enhanced exterior and interior styling.
A new RX-8 R3 model has been added to showcase the improved performance and styling of this vehicle.

The following equipment is standard as indicated. Each series includes the standard equipment of the previous series, except where additions / exceptions are noted:

RX-8 Sport	RX-8 Touring	RX-8 Grand Touring	RX-8 R3
Standard Equipment Functional / Powertrain 1.3L Rotary engine with 212 hp (AT) or 232 hp (MT) 6-speed sport automatic transmission w/paddle shifters and Adaptive Shift Logic (AT) 6-Speed manual overdrive transmission with short throw shifter (MT) - Direct drive electronically assisted steering - Front and rear stabilizer bars - Independent front double-wishbone suspension / rear multi-link suspension - Low exhaust pressure main muffler (MT) - Power assist 4-wheel ventilated disc brakes - Shock tower brace - Sport tuned suspension - Torque sensing Limited Slip Differential (MT) Exterior 18-inch aluminum alloy wheels with locks 225/45R18 high performance tires - Dual chrome tailpipe garnish - Dual power mirrors - Free style doors - Rear lip spoiler (MT models only) - Rear window defogger - Rear window integrated radio antenna - Variable intermittent windshield wipers Interior - Air conditioning - AM/FM/CD stereo with 6-speakers - Auxiliary audio jack - Center console with power outlet - Instrument panel display with clock, audio, HVAC, outside temp - Cloth trimmed upholstery and door panels - Cruise control - Cup holders - 4 - Floor mats - Gauges - black w/chrome bezels & white lettering; blue LED with red nighttime gauge illumination - Internal releases - fuel door, trunk, hood - Passenger seat one-touch walk-in function - Rear bucket seats with rear seat trunk pass through - Reclining front bucket seats - Scuff plates - black w/aluminum accents - Steering wheel mounted controls - audio, cruise - Steering wheel - tilt, leather wrapped - Shift knob - leather wrapped - Overhead console with sunglasses holder - Power door locks - driver / passenger w/illuminated switches - Power windows - driver / passenger w/illuminated switches - Power windows - one-touch open/close with remote down functionality - Vanity mirrors - driver & passenger, illuminated Safety - Air bags: front/side/curtain for driver & front passenger - Alarm with immobilizer - Anti-lock brake system w/EBD - Front seatbelts - 3-point with pretensioners & force limiters - Tire pressure monitoring system	In addition to Sport Functional / Powertrain - Torque sensing Limited Slip Differential (AT) Exterior - Fog lights - Xenon headlights Interior - Auto dimming rear view mirror with Homelink - In-dash 6 disc CD changer Safety - Dynamic Stability Control w/Traction Control	In addition to Touring Functional / Powertrain Exterior - Auto on/off headlights - Heated mirrors - Rain sensing wipers Interior 300 watt Bose 9-speaker sound system with - Centerpoint surround sound and AudioPilot® noise compensation technology 8-way power driver's seat with power lumbar support - Auto A/C - Bluetooth hands free phone system - Color keyed synthetic leather trimmed door panels - Driver's seat memory (3 positions) - Driver's seat one-touch walk-in function - Heated driver/passenger seats - Leather trimmed seating surfaces - Leather wrapped parking brake - Mazda Advanced Keyless Entry and Start System Safety	In addition to Touring Functional / Powertrain - Sport tuned suspension with Bilstein shock absorbers - Urethane foam injected front suspension cross member Exterior 19-inch forged aluminum alloy wheels 225/40R19 high performance tires - Rear wing spoiler - Side sills - Sporty front bumper Interior 300 watt Bose 9-speaker sound system with - Centerpoint surround sound and AudioPilot® noise compensation technology - Bluetooth hands free phone system - Front Recaro sport seats with leather side bolsters - Leather wrapped parking brake - Mazda Advanced Keyless Entry and Start System Safety

Features, options and package content subject to change.

2009 MAZDA RX-8 EQUIPMENT AND FEATURES

	SPORT RX8 SP	TOURING RX8 TR	GRAND TOURING RX8 GT	RX-8 R3 RX8 HP
POWERTRAIN				
Exhaust, low pressure main muffler	MT	MT	MT	MT
Exhaust, single with dual outlets	Std	Std	Std	Std
Light weight carbon fiber driveshaft	MT	MT	MT	MT
Rear wheel drive	Std	Std	Std	Std
Transmission, 6-speed automatic with paddle shifters and Adaptive Shift Logic	Available	Available	Available	NA
Transmission, 6-speed manual overdrive (short throw shifter)	MT	MT	MT	MT
Variable dynamic effect intake system	MT	MT	MT	MT
SUSPENSION				
Brakes, power-assisted 4-wheel ventilated disc brakes	Std	Std	Std	Std
Brakes, 12.7" front	Std	Std	Std	Std
Brakes, anti-lock with electronic brakeforce distribution (ABS)	Std	Std	Std	Std
Dynamic Stability Control (DSC) with traction control	NA	Std	Std	Std
Front - independent double wishbone	Std	Std	Std	Std
Rear - independent multi-link suspension	Std	Std	Std	Std
Shock absorbers, Bilstein	NA	NA	NA	Std
Shock absorbers, monotube gas filled front and rear	Std	Std	Std	Std
Sport tuned suspension	Std	Std	Std	Std
Stabilizer bar, front and rear	Std	Std	Std	Std
Steering, direct drive electronically assisted	Std	Std	Std	Std
Torque sensing limited-slip differential	Std on MT	Std	Std	Std
Urethane foam injected front suspension cross member	NA	NA	NA	Std
Wheel locks	Std	Std	Std	Std
Wheels / Tires, 18" aluminum alloy with 225/45 R18 tires	Std	Std	Std	NA
Wheels / Tires, 19" forged aluminum alloy with 225/40 R19 tires	NA	NA	NA	Std
EXTERIOR FEATURES				
Fog lights, front	NA	Std	Std	Std
Headlights, Xenon auto leveling	NA	Std	Std	Std
Headlights, auto on/off	NA	NA	Std	NA
Headlights, halogen	Std	NA	NA	NA
Mazda advanced keyless entry and start system	NA	NA	Std	Std
Mirrors, dual power remote / body colored	Std	Std	NA	NA
Mirrors, heated dual power remote / body colored	NA	NA	Std	NA
Moonroof, power sliding glass with one-touch open and sunshade	NA	Opt	Opt	NA
Rear lip spoiler	Std on MT	Std on MT	Std on MT	NA
Rear wing spoiler	NA	NA	NA	Std
Remote keyless illuminated entry	Std	Std	Std	Std
Side sills	NA	NA	NA	Std
Windshield, heat absorbent glass / tinted with sunshade	Std	Std	Std	Std
Wipers, rain sensing	NA	NA	Std	NA
Wipers, variable intermittent	Std	Std	Std	Std
INTERIOR FEATURES				
Air bags, driver and passenger front, side, head curtain	Std	Std	Std	Std
Air conditioning, automatic	NA	NA	Std	NA
Air conditioning, CFC-Free	Std	Std	Std	Std
Alarm system with engine immobilizer	Std	Std	Std	Std
Bluetooth hands free phone system	NA	NA	Std	Std
Cigarette lighter with ash tray	Std	Std	Std	Std
Cruise control with steering wheel mounted controls	Std	Std	Std	Std
Cup holders, 2 front / 2 rear	Std	Std	Std	Std
Defogger, rear window with auto shutoff	Std	Std	Std	Std
Demisters, front side windows	Std	Std	Std	Std
Door locks, power with front passenger switch illumination	Std	Std	Std	Std
DVD Navigation system with in-dash 7" LCD touch screen	NA	NA	Opt	NA
Floor Mats, carpeted front/rear	Std	Std	Std	Std
Foot pedals, aluminum including foot rest	Std on MT, NA on AT	Std on MT, NA on AT	Std on MT, NA on AT	Std
Glove box, illuminated & locking	Std	Std	Std	Std
Heater/Defroster, with rear duct	Std	Std	Std	Std
Ignition key illumination	Std	Std	Std	Std
Lighting, door / overhead dimming, dual map lights	Std	Std	Std	Std
Mirror, rear view autodimming with HomeLink®	NA	Std	Std	Std
Mirror, rear view day/night	Std	NA	NA	NA
Mirror, vanity / driver & passenger / illuminated	Std	Std	Std	Std
Parking brake, leather wrapped with bright button	NA	NA	Std	Std
Parking brake, urethane handle with bright button	Std	Std	NA	NA
Power outlet	Std	Std	Std	Std
Power windows, illuminated switches with one-touch-up/down with remote functionality	Std	Std	Std	Std
Rear storage console with lid	Std	Std	Std	Std
Remote releases, trunk lid / fuel door / hood	Std	Std	Std	Std
Scuff plates, black with aluminum accents	Std	Std	Std	Std
Seat upholstery, cloth with cloth door trim	Std	Std	NA	NA
Seat upholstery, leather with synthetic leather door trim	NA	NA	Std	Std
Seats, bucket type with integrated head restraints	Std	Std	Std	Std
Seats, heated (front)	NA	NA	Std	NA
Seats, 8-way power driver's seat w/3 position memory switch	NA	NA	Std	NA
Seats, passenger side one-touch walk-in function	Std	Std	Std	Std
Seats, driver's side one-touch walk-in function	NA	NA	Std	NA
Seats, front Recaro sport seats	NA	NA	NA	Std
Shift knob, aluminum and leather wrapped	Std on MT, NA on AT	Std on MT, NA on AT	Std on MT, NA on AT	Std
Shift knob, leather wrapped w/silver accent	Std on AT, NA on MT	Std on AT, NA on MT	Std on AT, NA on MT	NA
Steering Wheel, leather wrapped with tilt	Std	Std	Std	Std
Storage console, overhead with sunglasses holder	Std	Std	Std	Std
Tire pressure monitoring system	Std	Std	Std	Std
Trip odometer, two resettable	Std	Std	Std	Std
Warning lamps: air bags, battery, brake, engine, fuel, high-beam, oil, seat belt, tire pressure	Std	Std	Std	Std
AUDIO FEATURES				
AM/FM stereo w/single CD player and six speakers	Std	Std	NA	NA
Antenna, mounted in rear glass	Std	Std	Std	Std
Auxiliary audio jack	Std	Std	Std	Std
Bose® 9-speaker 300 watt sound system w/Centerpoint surround sound & AudioPilot	NA	Opt	Std	Std
In-dash 6-CD changer	PIO	Std	Std	Std
SIRIUS Satellite Radio System (includes 6 month free subscription) (NA in Alaska/Hawaii)	PIO	Opt	Opt	PIO

2009 MAZDA RX-8
PACKAGES AND OPTIONS

	Sport RX8 SP	Touring RX8 TR	Grand Touring RX8 GT	RX-8 R3 RX8 HP
Premium Package 1 Bose audio w/9 speakers Moonroof Sirius satellite radio (N/A in Alaska/Hawaii) (includes 6 month free subscription)	NA	Opt.	NA	NA
Premium Package 2 Moonroof Sirius satellite radio (N/A in Alaska/Hawaii) (includes 6 month free subscription)	NA	NA	Opt.	NA
Navigation System	NA	NA	Opt.	NA

2009 MAZDA RX-8

ACCESSORIES

		Sport RX8 SP	Touring RX8 TR	Grand Touring RX8 GT	RX-8 R3 RX8 HP
AUDIO / VISUAL ELECTRONICS					
SSA	Shock Sensor Alarm	PIO	PIO	N/A	N/A
CDC	In-Dash 6-Disc CD/MP3 Changer	PIO	N/A	N/A	N/A
SAT	SIRIUS Satellite Radio w/6 Month	PIO (N/A in Alaska/Hawaii)	PIO (N/A in Alaska/Hawaii)	PIO (N/A in Alaska/Hawaii)	PIO (N/A in Alaska/Hawaii)
EXTERIOR					
DEG	Door Edge Guards	PIO	PIO	PIO	PIO
MND	Moonroof Wind Deflector	NA	PIO	PIO	N/A
RSW	Rear Wing Spoiler	PIO (N/A on MT models)	PIO (N/A on MT models)	PIO (N/A on MT models)	N/A
MGB	Splash Guards, Front/Rear	PIO	PIO	PIO	N/A
INTERIOR					
FLA	All Weather Floor Mats	PIO	PIO	PIO	PIO
CGN	Cargo Net	PIO	PIO	PIO	PIO
CGO	Cargo Organizer	PIO	PIO	PIO	PIO
CGT	Cargo Tray	PIO	PIO	PIO	PIO
CGC	Collapsible Cargo Carrier	PIO	PIO	PIO	PIO
STR	Spare Tire Kit	PIO	PIO	PIO	PIO

**2009 MAZDA RX-8
COLOR AND TRIM**

INTERIOR TRIM TYPE		INTERIOR TRIM COLORS			RX-8 R3
		Black	Dune Beige	Red	Gray/Black
Sport/Touring	Cloth	FG3	--	--	--
GT	Leather	FG4	FG5	FG6	--
Recaro	Cloth/Leather	--	--	--	FG7
CODE	EXTERIOR COLOR	AVAILABILITY			
22V	Sunlight Silver Metallic	●			
34K	Crystal White Pearl	●			
38E	Diamond Gray Metallic	●	●		
35N	Sparkling Black Mica	●		●	
27A	Velocity Red Mica	●			●
A3F	Brilliant Black Clearcoat				●
34J	Aurora Blue Mica				●

2009 MAZDA RX-8 SPECIFICATIONS

	6-SPEED SPORT AUTOMATIC	6-SPEED MANUAL
ENGINE		
Engine Type	1.3 liter RENESIS 2-rotor rotary	1.3 liter RENESIS 2-rotor rotary
Horsepower, SAE net	212 @ 7,500	232 @ 8,500
Torque, SAE net (lb./ft.)	159 @ 5,500	159 @ 5,500
Redline	7,500	9,000
Displacement (L)	0.654L x 2	0.654L x 2
Bore x Stroke (inches)	N/A	N/A
Compression Ratio	10.0 : 1	10.0 : 1
Cylinder Heads	N/A	N/A
FUEL SYSTEM		
Fuel Injection	Multi-port electronic fuel injection	
Required Fuel	Premium Unleaded	
Minimum Fuel Requirement (rating)	91 octane	
Emission Control (CAL / Federal)	ULEV2-B / Tier2 Bin5-B	
IGNITION SYSTEM		
System	Pointless electronic	
Alternator	12V - 110A	
Battery	80D/26L	
Starter	12V-2.0kw	12V-2.0kw
DRIVETRAIN		
Type	Rear-Wheel Drive (RWD)	
Transmissions	6-speed electronic automatic	6-speed manual
Clutch Type for Manual Transmission	N/A	Single dry plate with diaphragm spring
Clutch Size	N/A	236x160
Gear Ratios (:1)		
1st	3.538	3.815
2nd	2.060	2.260
3rd	1.404	1.536
4th	1.000	1.177
5th	0.713	1.000
6th	0.582	0.787
Reverse	3.168	3.603
Final Drive	4.300	4.777
CHASSIS		
Body Type	Unibody with front and rear suspension subframe	
Front Suspension	Double wishbone	
Rear Suspension	Multi-link	
Steering Type	Rack-and-pinion	
Power Assist	Direct-drive electronic power steering	
Overall Steering Ratio	16.43:1	
Steering Wheel Turns-to-Lock	2.99	
Turning Circle, Curb-to-Curb (feet)	34.8	
Turning Circle, Wall-to-wall (feet)	36.8	
Braking System	Power assist; 4-wheel Anti-Lock Brake System with Electronic Brakeforce	
Front Brakes	Ventilated discs (12.7 inches)	
Rear Brakes	Ventilated discs (11.9 inches)	
Parking Brake	Mechanical (lever-type)	
TIRES & WHEELS		
Tires	225/45R18 / 225/40R19 (R3)	
Wheels	18x8JJ / 19x8JJ (R3)	
Tire Brand	Bridgestone	
Temporary Spare Tire	N/A	
Temporary Spare Wheel	N/A	
INTERIOR DIMENSIONS		
Seating Capacity	4	
Headroom without Moonroof, front/rear (inches)	38.2 / 36.8	
Headroom with Moonroof, front/rear (inches)	36.7 / 36.5	
Shoulder Room, front/rear (inches)	54.8 / 54.9	
Leg Room, front/rear (inches)	42.7 / 32.2	
Hip Room, front/rear (inches)	53.3 / 48.1	
EXTERIOR DIMENSIONS		
Wheelbase (inches)	106.4	
Track, front (inches)	59.1 / 59.3 (R3)	
Track, rear (inches)	59.3 / 59.4 (R3)	
Length (inches) w/o license plate holder	175.6	
Width (inches)	69.7	
Height (inches)	52.8	
Minimum Ground Clearance, laden (inches)	4.7	
Coefficient of Drag (cd)	0.30	
WEIGHTS		
Weight Distribution, % front: rear	52 / 48	
Curb Weight, Federal Spec (lbs.)		3,064
GVWR (lbs.)	3,858	3,818
CAPACITIES		
Oil (U.S. quarts)	6.0	6.7
Engine Coolant (U.S. quarts)	9.2	9.4
Fuel Tank (gallons)	16.9	
Passenger Volume, EPA (cubic feet)	89	
Cargo Volume, SAE (cubic feet)	7.6	
EPA Vehicle Size Category	Subcompact	
FUEL ECONOMY		
EPA Mileage, City/Highway (mpg)	16/23	16/22