



2004 Mazda RX-8

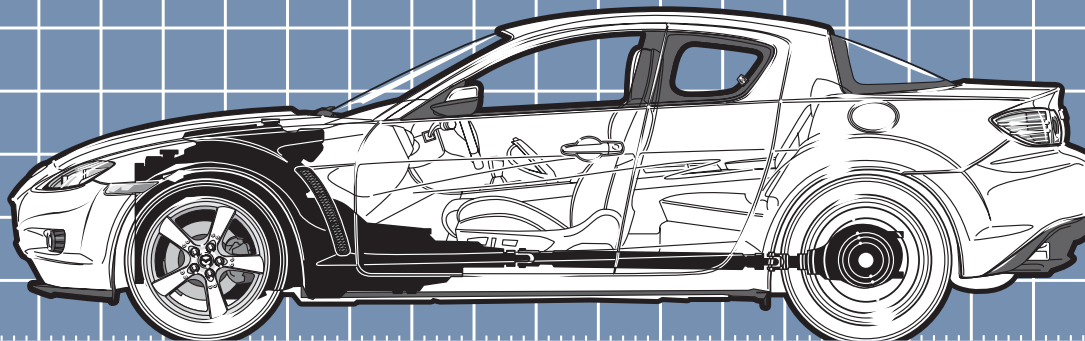
Mazda North American Operations, P.O. Box 19745, Irvine, Calif. 92623; www.mazdausa.com

At a Glance

0-60 mph	5.9 sec
0-1/4 mile	14.5 sec
Top speed	148 mph*
Skidpad	0.88g
Slalom	65.4 mph
Brake rating	excellent

List Price: **\$26,680**
Price as Tested: **\$31,100**

Price as tested incl std equip. (ABS, front, side and side-curtain airbags, seatbelt pretensioners, cruise control, auto. climate control, AM/FM radio w/in-dash 6-disc CD player, keyless entry, leather trim, multifunction steering wheel; pwr windows, mirrors & door locks), Grand Touring package (xenon headlights, stability and traction control, Bose audio, moonroof, leather door trim, 6-way power driver's seat, heated front seats, foglamps, heated mirrors) \$3900, dest charge (\$520).



SCALE: 10 IN. (254 mm) DIVISIONS
DRAWING BY TIM BARKER

SPECIFICATIONS

Engine

Type	aluminum rotor housings, cast-iron side plates, 2-rotor Wankel
Valvetrain	3 intake & 2 exhaust side ports per rotor chamber
Displacement	80.0 cu in./1308 cc
Chamber width, generating radius, eccentricity	3.15, 4.13, 0.59 in./80.0, 105.0, 15.0 mm
Compression ratio	10.0:1
Horsepower (SAE)	250 bhp @ 8500 rpm
Bhp/liter	191.1
Torque	159 lb-ft @ 5500 rpm
Redline	9000 rpm
Fuel injection	elect. sequential port
Fuel	premium unleaded, 91 pump octane

Warranty

Basic warranty	4 years/50,000 miles
Powertrain	4 years/50,000 miles
Rust-through	6 years/unlimited

Chassis & Body

Layout	front engine/rear drive
Body/frame	steel with aluminum hood and rear doors/unit steel
Brakes: Front	12.7-in. vented discs
Rear	11.9-in. vented discs
Assist type	vacuum, ABS
Total swept area	485 sq in.
Swept area/ton	282 sq in.
Wheels	alum. alloy, 18 x 8JJ
Tires	Bridgestone Potenza RE040, 225/45R-18 91W
Steering	rack & pinion, electric power assist
Overall ratio	16.4:1
Turns, lock to lock	3.0
Turning circle	34.8 ft
Suspension	
Front	upper & lower A-arms, coil springs, tube shocks, anti-roll bar
Rear	multilink, coil springs, tube shocks, anti-roll bar

General Data

Curb weight	3000 lb
Test weight	3180 lb
Weight dist (with driver), f/r, %	52/48
Wheelbase	106.3 in.
Track, f/r	59.1 in./59.3 in.
Length	174.2 in.
Width	69.7 in.
Height	52.8 in.
Ground clearance	5.3 in.
Trunk space	7.6 cu ft

Accommodations

Seating capacity	4
Head room: Front	35.8 in.
Rear	35.5 in.
Seat width: Front	2 x 16.0 in.
Rear	2 x 15.0 in.
Front-seat leg room	43.0 in.
Seatback adjustment	25 deg
Seat travel	9.0 in.
Rear-seat knee room	23.0 in.

Drivetrain

Transmission:	6-speed manual		
Gear	Ratio	Overall ratio	(Rpm) Mph
1st	3.76:1	16.71:1	(9000) 39
2nd	2.27:1	10.08:1	(9000) 65
3rd	1.65:1	7.31:1	(9000) 89
4th	1.19:1	5.28:1	(9000) 124
5th	1.00:1	4.44:1	(9000) 147
6th	0.84:1	3.75:1 est (7650)	148*
Final drive ratio		4.44:1	
Engine rpm @ 60 mph in top gear			3100

*Electronically limited.

Instrumentation

999-mph digital speedometer, 10,000-rpm tachometer, coolant temp, oil pressure, fuel level

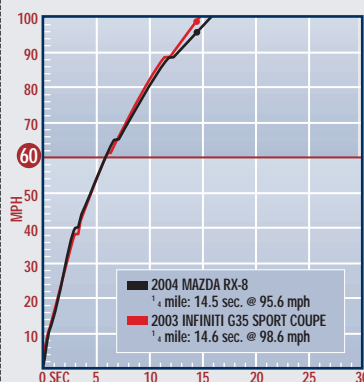
Safety

ABS; front, side & side-curtain airbags
electronic braking distribution
traction and stability control
seatbelt pretensioners

PERFORMANCE

Acceleration

Time to speed	Seconds
0-30 mph	2.1
0-40 mph	3.2
0-50 mph	4.5
0-60 mph	5.9
0-70 mph	8.0
0-80 mph	10.0
0-90 mph	12.8
0-100 mph	15.9
Time to distance	
0-100 ft	3.0
0-500 ft	7.9
0-900 ft	11.4
0-1320 ft (1/4 mile)	14.5 @ 95.6 mph



Braking

Minimum stopping distance	
From 60 mph	114 ft
From 80 mph	202 ft
Control	very good
Brake feel	very good
Overall brake rating	excellent

Subjective ratings consist of excellent, very good, good, average, poor; na means information is not available.

Fuel Economy

Our driving	est 19.0 mpg
EPA city/highway	est 18/24 mpg
Cruise range	est 281 miles
Fuel capacity	15.8 gal.

Handling

Lateral acceleration (200-ft skidpad)	0.88g
Balance	moderate understeer
Speed through 700-ft slalom	65.4 mph
Balance	mild oversteer
Lateral seat support	very good

Interior Noise

Idle in neutral	47 dBA
Maximum in 1st gear	76 dBA
Constant 50 mph	69 dBA
70 mph	72 dBA

Test Notes:

Teeth clenched, we used 7500 rpm for our drag-strip launches. Despite the resulting wheelspin, the elevated revs keep the Wankel in the fattest part of its powerband, resulting in the quickest time. • ABS-assisted stops were

straight and drama-free, with impressively short distances. • Through the slalom, the RX-8 requires a delicate touch to prevent the tail swinging wide in transitions; not so around the skidpad, where rear grip is resolute.

Test Conditions:

Temperature	Humidity	Elevation	Wind
69° F	50%	350 ft	calm