

MAZDA MIATA



SUDDENLY, THERE'S A WHOLE NEW MEANING TO DRIVING FOR THE PURE FUN OF IT.

There's never been a sports car like it—not among the classic sports cars of yesteryear, nor the exotic high-performance machines of today. Mazda Miata is a car for the '90s that takes you back—to the joys of open-car driving...the wind in your face...the

nimble feel of a taut and eager roadster. You will experience a rush of exhilaration that you have never felt before—one that will enrich your driving for years to come.

The exciting all-new Mazda Miata: An enthusiast's dream come true. Again.





A NEW DIMENSION IN MAZDA PRODUCT THINKING BRINGS YOU AN EXCITING NEW ROADSTER FOR THE '90s.

Experience what happens when creative minds at Mazda search beyond pure engineering to the human emotions a new Mazda will inspire—what you'll actually experience, how you'll feel in driving it.

We call it "Kansei Engineering"—it's looking beyond mechanical specifications to the emotional satisfactions which will make a new Mazda "feel just right" to you in very special ways.

What that takes varies, of course, car by car, truck by truck. But it is the challenge to each Mazda development team to anticipate your desires—even those you didn't know you had—and to fulfill them in a vehicle Mazda hopes you'll fondly remember as "the best I've ever owned."

The all-new MX-5 Miata stands as a classic achievement in the art of "Kansei Engineering." The Miata goal is to capture the magic and deeply emotional pleasures of sports car driving. And with a single-minded dedication, the creative minds at Mazda have wondrously fulfilled that purpose, opening a new dimension in the pure excitement and emotions of driving.

To enrich your satisfaction beyond expectations continues to be our goal for every new Mazda of the '90s. Thoughtfully conceived, designed, engineered, and built for your greater pride and pleasure in owning a Mazda that just feels right.

THE MIATA VISION: A PURE CONCEPT THAT TRANSCENDS MERE MACHINERY.

It began with seven Mazda designers and engineers, in a room far removed from the mainstream of automotive operations.

That all were zealous sports car enthusiasts was significant—for their mission was to

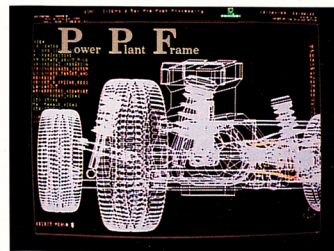
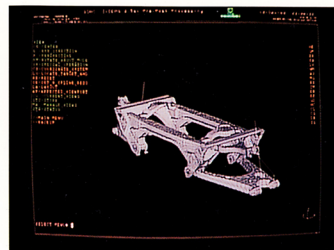
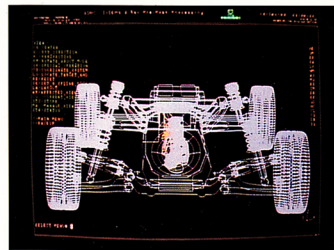
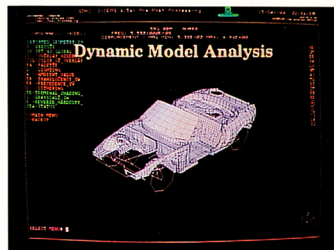
boldly envision an affordable, technically-advanced sports car for the '90s... give it shape and substance... then turn a dream into an exciting reality.

This was a once-in-a-lifetime challenge for the Miata team—an extraordinary opportunity to redefine basic sports car concepts and bring new joys in driving to a new generation of enthusiasts.

The ultimate test: Miata must create “the oneness between rider and horse”—a Mazda way of saying Miata must feel so alive and responsive it seems to anticipate your reactions to the road ahead. And Miata must feel absolutely right in every facet, detail and nuance. No compromises. No shortfalls. Period.

Early on, mid-engine and front-drive concepts were developed and quickly dismissed—only a traditional front-engine/rear-drive configuration would “feel right” to sports car purists. Miata must be a true roadster, of course—but unlike any other. Its body must be incredibly strong and solid, the soft top exceptionally snug and tight.

Once the basic characteristics were painstakingly defined, a vast array of Mazda computer-aided design and manufacturing (CAD/CAM) technology was unleashed to aid in design of components which could meet their highly demanding objectives. An example: To achieve its solid



feel on the road, a Miata body structure of extraordinary strength and rigidity became possible through computer evaluation of stress and flex forces at 8900 separate body points—in the design stage. And to optimize engine breathing and power output, similar technology was used to adapt the “trumpet intake” principle of high-performance racing engines for the Miata engine intake tracts. Here was sophisticated technology at work—purely for the ultimate purpose of expanding the sensual pleasures to be experienced in driving the new Miata!

The critical moment for Miata came in April 1987, when a full-size model was unveiled to driving enthusiasts in a research clinic. Response was so overwhelming that Miata became a “go” program for production.

Now its small team became a full task force to execute a multitude of designs and details. Yet infinite care was taken to keep the concept pure, no matter what it took.

And sometimes, “what it took” was extraordinary. Because engine sounds are so important to the sports car experience, over 100 tape recordings of exhaust notes were evaluated to ensure the ideal throaty resonance for Miata. To heighten your “direct feel” in shifting, a special compact gearshift linkage was designed with throws of just 1.8 inches. And to make Miata “feel just right” to you, even a small thing like how it feels to drive with your elbow out the window was explored in developing the cockpit ergonomics.

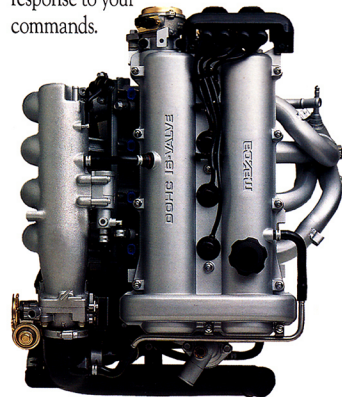
Out of such devotion to perfection by passionate sports car believers has come the definitive new roadster for the '90s—and a whole new driving experience for you.

A CONCEPT BECOMES MECHANICAL REALITY.



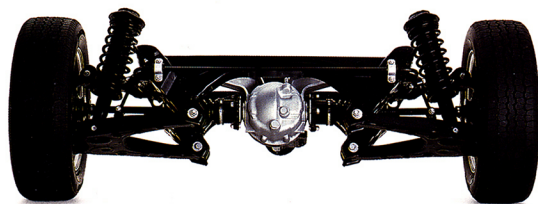
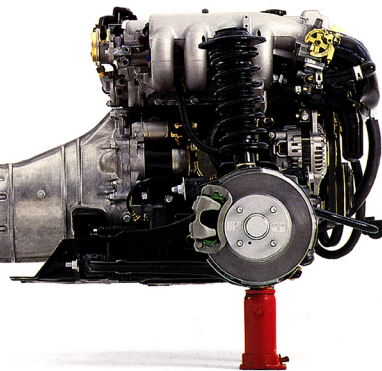
“The more weight, the harder it is to move around”—that’s a caution in performance car design. Through ingenious engineering and the use of aluminum and high-tensile steels, Miata weighs just over 2100 lbs. Its weight is concentrated low and inboard, and balanced virtually 50/50, front and rear—contributing to uncanny agility and response to your commands.

In their relentless quest to enhance road feel and optimize performance, the Miata team enlisted its tire manufacturers to develop special high-traction tires exclusively to meet Miata performance specifications. These tires answer to a rack-and-pinion steering system especially designed to provide smooth, quick response and maneuverability, with 3.3 turns lock-to-lock and a 30.6 ft. turning circle. Shock absorbers are a low-pressure gas-filled type, for your riding comfort.



The heart of Miata performance is its 16-valve 116-hp DOHC engine. Features include multi-port fuel injection; specially designed induction, ignition and stainless steel exhaust systems; lightweight flywheel; and precision-cast aluminum head—all contributing to high-revving action and lively response throughout a broad rpm range.

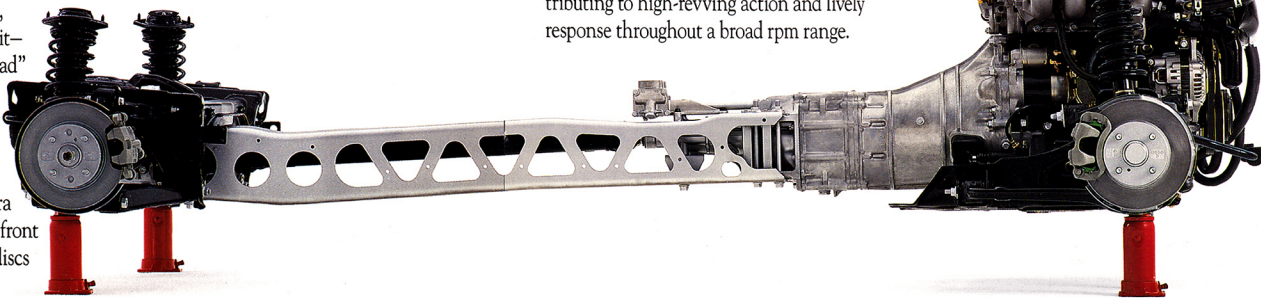
The 5-speed overdrive shifter was especially engineered to enhance that critical feeling of power and control—quick, slick and precise. Close ratios, super-short throws and smooth positive action. As *Car and Driver* was moved to say, “feels like a toggle switch.”



To give you outstanding handling and stability, Miata incorporates race-proven 4-wheel double-wishbone suspension technology, plus Mazda-developed rear-wheel

toe control to increase maneuverability in cornering and in quick lane changes. Front and rear stabilizer bars are also included to reduce body sway and aid stability.

A Mazda-designed Power Plant Frame (PPF): This special structure, usually found only in far more expensive sports cars, creates a single powertrain unit—and an exceptional “toe-to-road” feel of direct power flow, with minimal vibration, shudder or slack. Potent stopping power comes from power-assisted 4-wheel disc brakes; and for extra resistance to fade and lockup, front discs are ventilated, and rear discs are pressure-modulated.



THE MIATA COCKPIT IS WHERE IT ALL COMES TOGETHER TO FEEL JUST RIGHT.



You know it, from the moment you settle into the highbacked bucket seat. All the artful Miata engineering comes together here in an incredible sense of control.

The softgrip steering wheel feels thick, comfortable. A driver's-side airbag Supplemental Restraint System (SRS) is engineered into its center pad—unusual standard equipment in a car of such modest price. And behind it: large speedometer, tach and analog gauges—each clearly marked in white on black for easy visibility.

Drop your right hand from the wheel, and flicking the shifter through its short throws is a revelation in precise action.

Miata pedals are precisely placed for quick heel-and-toe interaction between the brake and accelerator; the accelerator is a long-travel, “no-slip” metal pedal that gives you a “direct feel” of power flow.

While you marvel at the ergonomics of Miata, you'll note other niceties, as well.



Like surprising headroom and legroom—even for six-plus-footers, when the top is up. And that top is quickly raised from the driver's seat, looks taut and neat, and is unflappable once in place. It's all part of what makes Miata feel right even before you take it out on the road.



Mazda offers thoughtful accessories and options to personalize your Miata. Among them: A smoothly tailored tonneau cover; luggage racks in matte black or chrome; a functional and attractive front end mask.



MAZDA GOES THE EXTRA MILE TO MAKE MIATA A "PRACTICAL" SPORTS CAR.

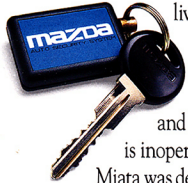
Mazda understands that one is not attracted to a sports car for its practicality. But it is good to know Miata *has* been thoughtfully designed with the realistic requirements of today's driving fully in mind.

To make it suitable for all seasons and climates, the Miata team designed a tight-fitting one-piece hardtop that turns Mazda Miata into a sleek-looking sports coupe.

For these security-minded times we live in, Miata provides lockable glove and console storage, a remote fuel door release, anti-theft security options, and a security-coded radio that is inoperable when removed. And,

Miata was designed not only for incredible fun in driving, but for high reliability and for easy maintenance and servicing as well.

Such "practical" considerations all were part of creating a modern sports car for the '90s. You'll also appreciate the personal touches we offer to make Miata right for you. From the air conditioning to sound systems to various "dress-up" items, each meets the Miata standard of impeccable quality and style in the sports car spirit.



Top: Both remote- and integral-control anti-theft security systems are optional. Above: AM/FM stereo cassette and CD sound systems are separate options.



"JUST BORN AND ALREADY A STAR..."



Road & Track editors in their July 1989 issue named the new Mazda Miata one of their five "World's Best Cars"—extraordinary praise in the company of some of the most exotic and expensive cars in the world.

"Just born and already a star. What does this say about the MX-5? That it stole the hearts (and votes) of nine smitten staffers... what a sports car should be... Pure, simple, undistilled, clear-eyed driving fun..."

Road & Track, July 1989

"Wait till you drive the Miata! You'll love it... Twist the key and you're rewarded with a pleasant burble... torque is strong across a wide band... a feeling of directness between the throttle and rear wheels... Its combination of communication, responsiveness, predictability and forgiveness makes it the best-handling 2-seater I've driven in recent memory... The lightweight sports car is back!"

Road & Track, March 1989

"This car is *alive*. It breathes and flexes its muscles and generally behaves more like an organism than a machine... a flat-out blast to drive. Nimble, precise, even, smooth—wonderful traits all wrapped up into one neat little package..."

Autoweek, May 22, 1989

"The best sports car buy in America... the appeal of the Miata knows no bounds... clean, elegant design... marvelous road manners... a real sense of excitement as the revs rise... a serious for-real sports car that churns up all sorts of memories of late, great roadsters. The only difference is that this one's a far better, more capable car."

Motor Trend, July 1989

"The Miata MX-5 feels just about perfect, delivering every bit of simple fun its voluptuous, organic shape promises... a car for those of us who were born too late for the English roadster craze... light, agile, and quick, with a seat that supports, a wheel that commands, a shifter that snaps, and an exhaust note of sheer exuberance."

Automobile Magazine, March 1989

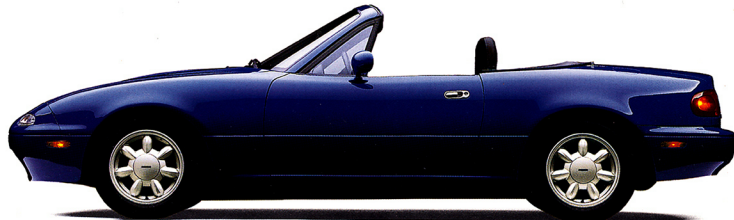
"If you were reading this magazine 30 years ago... no one would have dared dream of a two-seater so deft in its execution..."

Car and Driver, March 1989

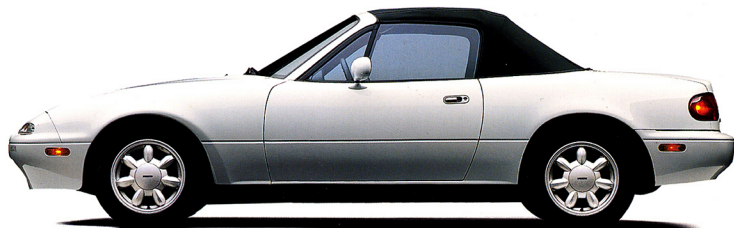


Shown with optional front air dam, rear spoiler and skirt.

THREE COLORS, THREE CONFIGURATIONS FROM NO TOP TO HARDTOP COUPE.



Mazda Miata in Mariner Blue, with black convertible top and black interior. Aluminum alloy wheels shown are part of Option Package A (details on next page).



Mazda Miata in Crystal White, with black convertible top and black interior. Retractable halogen headlamps, color-keyed bumpers and side mirrors are standard.



Mazda Miata in Classic Red, with black convertible top and black interior. Mazda-manufactured optional hardtop shown is currently available in red only.

SPECIFICATIONS AND FEATURES.

Engine	
Type	DOHC 16-valve 4-cylinder
Displacement	1997 cc (97 cubic inches)
Bore and stroke	3.1 x 3.3 inches
Compression ratio	9.4:1
Horsepower, SAE net	116 @ 6500 rpm
Torque, SAE net	100 lbs.-ft. @ 5500 rpm
Fuel system	Multi-port electronic fuel injection
Fuel requirement	Unleaded regular gasoline

Transmission	
Type	5-speed manual with overdrive
Ratios: 1st	3.136
2nd	1.888
3rd	1.330
4th	1.000
5th	0.814
Reverse	3.758
Final drive	4.300
Clutch	Single dry plate, hydraulically actuated

Electrical System	
Battery	Lightweight maintenance-free type, 32 amp/hour
Alternator	60 amp
Ignition system	Distributor-less electronic

Chassis	
Frame	Monocoque
Suspension	Fully independent, double-wishbone type with coil springs, gas-filled shock absorbers, front and rear stabilizer bars
Steering	Rack-and-pinion type (optional power assist) Steering ratio: 18:04 (power assist: 15:01) Steering wheel turns, lock-to-lock: 3.3 (power assist: 2.8) Turning circle diameter, curb-to-curb: 30.6 feet
Brakes	Power-assisted with dual hydraulic circuits 9.3-inch ventilated front discs 9.1-inch rear discs
Wheels	5.5J 14 styled steel 5.5J 14 aluminum alloy (optional)
Tires	P185/60HR14 steel-belted radials
Fuel capacity	11.9 gallons
Curb weight	2116 pounds; 2182 pounds with Package A; 2189 pounds with Package B

Dimensions (inches)			
Wheelbase	89.2	Track: front/rear	55.5/56.2
Length	155.4	Head room	37.1
Width	65.9	Leg room	42.7
Height	48.2	Shoulder room	50.4

Exterior/Interior Colors	
	Classic Red/Black
	Mariner Blue/Black
	Crystal White/Black

EPA Mileage Estimates	
5-Speed	25 MPG City 30 MPG Highway

Mechanical Features	
1.6L DOHC 16-valve engine	S
Sport-tuned stainless steel exhaust system with tubular header	S
3-speed manual transmission with overdrive	S
Power Plant Frame (PPF)	S
Rear-wheel drive	S
Rack-and-pinion steering	S
Power-assisted 4-wheel disc brakes	S

Exterior Features	
14-inch styled steel wheels with bright center caps	S
P185/60HR14 steel-belted radial tires	S
Dual body-color rearview mirrors	S
2-speed windshield wipers with intermittent and 1-wipe features	S
Tinted glass	S
Retractable halogen headlamps	S

Interior Features	
Highback reclining bucket seats	S
Black cloth upholstery	S
Loop-pile carpeting	S
Full center console with lockable storage compartment	S
Lockable glove box	S
Map pocket on back of passenger's seat	S
Remote fuel-filler door release	S
Day/night rearview mirror	S
Double-fold sunvisors with passenger's vanity mirror	S
Two dashboard-mounted courtesy lights	S
8000-rpm tachometer with 7000-rpm redline	S
140-mph speedometer	S
Resettable trip odometer	S
Gauges for engine coolant temperature, oil pressure, and fuel level	S
4-spoke steering wheel with soft trim	S
Driver's-side airbag Supplemental Restraint System (SRS)	S
Heater/defroster with 4-speed blower and side-window demisters	S

Options and Accessories	
Package A: Power-assisted steering, leather-wrapped steering wheel, aluminum alloy wheels, AM/FM auto-reverse cassette stereo sound system with digital clock and anti-theft code	O
Package B: Package A items, plus cruise control, power windows and head restraint speakers	O
Viscous-type limited-slip differential	O
Removable hardtop with glass window (Classic Red only)	O
Air conditioner	O/A
Compact disc player (requires Package A or B)	O
Protective front end mask with soft backing	A
Front air dam, rear spoiler and skirt	A
Decklid-mounted luggage rack (available in black or chrome)	A
Heavy-gauge black vinyl tonneau cover	A
Anti-theft alarm system	A
Anti-theft alarm system with infrared remote control	A
S: Standard O: Optional A: Dealer-installed accessory	

36-month/50,000-mile Warranty
Mazda warrants that the Mazda vehicle will be free of defects with normal use and prescribed maintenance for 36 months or 50,000 miles, whichever comes first, or Mazda will repair any problem without charge. Ordinary maintenance items or adjustments, parts subject to normal wear and replacement, and certain other items are excluded. This transferable, "limited warranty" is free on all new 1990 Mazda vehicles sold and serviced in the United States. See your Mazda Dealer for details.

Information and illustrations in this brochure are based on the latest competitive and Mazda product information available at the time of publication. Some equipment shown is optional at extra cost; specific options may be available only in combination with other options. Specific combinations of colors, interiors, equipment or features may vary from time to time and by geographic area; colors in illustrations may vary from actual upholstery or paint colors due to reproduction and printing processes. Mazda reserves the right to make changes without notice in product content and price at any time.



THE MAZDA COMMITMENT TO YOUR SATISFACTION CONTINUES WITH A LONGER, STRONGER WARRANTY.

It only begins with inspired engineering... it carries through in the extraordinary quality of the cars and trucks we build... and it is proudly reflected in a warranty that is more comprehensive than is provided for most other cars and trucks.

Mazda warranty protection extends for 36 months or 50,000 miles—and affords complete “bumper-to-bumper” protection, including many components that other

warranties do not cover. Moreover, there are no deductible fees for warranty services during the life of the warranty.

It's a better kind of easy-to-use, owner-friendly protection preferred by buyers today. And another Mazda way of demonstrating our pride and confidence in every product that wears the Mazda name—and another reason you can just feel right about the new Mazda you drive in the '90s.

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