



2005 MX-5 Miata SPECIFICATION DECK

ISSUE DATE: May 11, 2004
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PRODUCTION TIMING:

Job #1: July 2004 (MX-5 / MX-5 Miata LS)
Job #1: August 2004 (*MAZDASPEED* MX-5)

LINEUP:

- MX-5 MIATA (CLOTH)
- MX-5 MIATA (LS)
- *MAZDASPEED* MX-5

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2005 MX-5 MIATA PRODUCT CHANGES

OVERVIEW

- Maintain lineup strategy from 2004 calendar year

MODEL / SERIES / AVAILABILITY

- No Change

EXTERIOR CHANGES

- **New alloy wheel design featured on the *MAZDSPEED MX-5 (update 06/04/04)***
- **Colors Added:**
 - Razor Blue (28P)
 - Nordic Green (27C)
 - Lava Orange Mica (27Y) (***MAZDASPEED***)
 - Black Mica (16W) (***MAZDASPEED***)
- **Colors Deleted:**
 - Pure White (A3D)
 - Brilliant Black (A3F)
 - Emerald Mica (18J)
 - Strato Blue Mica (25E)

INTERIOR CHANGES

- No Change

FUNCTIONAL CHANGES

- Retractable key replaces normal key (LS)

SAFETY CHANGES

- No change

PACKAGE / OPTION CHANGES

- Convenience Package - remote keyless entry now features a retractable key rather than a traditional key

ORDER COMBINATIONS CHANGES

- Miata & Miata LS - there are 13 orderable combinations (consistent with the '04 model year). However, MSCs have doubled from 13 to 26 due to Cal. and Fed. representation for the 2005 model year.
- MAZDASPEED - there are 3 orderable combinations rather than 2. There are 6 MSCs due to Cal. and Fed. representation for the 2005 model year.

Product Changes and Features Availability

Features, options and package content subject to change.

Note: Bold text indicates changes since last publication.

2005 MX-5 MIATA PRODUCT SUMMARY

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

MX-5 Miata	MX-5 Miata LS
Functional / Powertrain <ul style="list-style-type: none"> 1.8L DOHC 16-VALVE i4 VVT (Intake) 4-wheel double wishbone suspension 5-Speed manual transmission w/Overdrive AM/FM/CD player plus 4 speakers Front and rear stabilizer bars OBD II (On Board Diagnostic) Power-assist 4-wheel disc brakes Power Steering Rack-and-pinion steering Slam locks Suspension Tower Brace Trunk light 	<i>All MX-5 Miata content, plus or in place of:</i> Functional / Powertrain <ul style="list-style-type: none"> Bose audio amplifier (225W) Bose audio system with 6 speakers including 2 tweeters Cruise Control Limited Slip Differential Power door locks Remote keyless entry system with retractable key
Exterior <ul style="list-style-type: none"> 16-inch aluminum alloy wheels with locks 205/45R16 Bridgestone tires Available in 5 exterior colors Body colored fuel door Front fog lights Headlights: multi reflector and projector Intermittent windshield wipers Manual black convertible top and boot cover Power antenna Rear glass window w/defogger 	Exterior <ul style="list-style-type: none"> Manual black or parchment cloth convertible top
Interior <ul style="list-style-type: none"> 3-spoke leather wrapped steering wheel Air conditioning Carpeted floor mats Cigar lighter and ashtray Driver's vanity mirror Dual cup holders Full center console with lockable storage compartment Lockable glove box Passenger side seatback pocket Power mirrors and windows w/driver's side one-touch down feature Reclining high back bucket seats Silver finish air vent bezels Silver finish center panel Silver finish HVAC Silver finish hand brake button Silver finish interior door handles Silver finish meter rings Silver finish shift plate bezel Textured black cloth upholstery Windblocker antidraft panel with integral storage pouch 	Interior <ul style="list-style-type: none"> Black or parchment leather trimmed upholstery with coordinating piping Leather wrapped steering wheel with silver stitching
Safety <ul style="list-style-type: none"> Dual airbag with passenger airbag deactivation switch Immobilizer 	Safety
Options <ul style="list-style-type: none"> Automatic transmission Convenience Package Suspension Package (Cloth) Cassette player Mud Guards Appearance Package 1 or 2 Chrome Fuel Door Power steering delete (MT only) In-Dash 6-disc CD changer Cargo net Compass/outside temperature/auto dimming mirror Headlamp / taillamp bezels Detachable hardtop Rear spoiler Perimeter alarm with shock sensor 	Options <ul style="list-style-type: none"> 6-Speed manual transmission w/leather wrapped shift knob with silver stitching ABS Suspension Package (LS)

Product Changes and Features Availability

Features, options and package content subject to change.

2005 MX-5 MIATA

PRODUCT SUMMARY

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

MAZDASPEED MX-5 Miata

Functional / Powertrain

- 1.8L DOHC 16 valve turbocharged 4-cylinder engine with engine designation of BP T/C with red wrinkle finish on valve cover with turbo logo
- 4-wheel ABS with silver painted brake calipers
- 6-Speed manual transmission with improved transmission gear durability through shot peening treatment
- 225 watt 6-speaker Bose audio system with 6-disc CD changer and speed sensing automatic volume control
- Anodized aluminum oil cap with **MAZDASPEED** logo
- Bilstein dampers with revised timing: silver painted
- Bosch torque sensing limited slip differential (0.85L vs. standard Miata at 1.1L) Slip ratio 2.6:1 drive side, 2.2:1 coast side, vs. MX-5 Miata at 2.0:1 drive / coast sides
- Compression ratio: 9.5 : 1 (lowered from 10.0 : 1 in standard MX-5 Miata due to piston shape modification)
- Cruise control: deleted
- Denso Iridium SK16PR-F8 spark plugs (0.8mm gap), and tube-fin air-to-air intercooler (206mm x 200mm x 64mm) 75% efficient
- Driveshaft universal joints enlarged
- Emissions: LEV - B (modifications to precious metal in catalyst, additional pressure sensor, additional intake temperature sensor, and revised fuel control)
- Engine and drive mounts tuned for increased torque
- Engine block modified to accommodate oil pipe for turbocharger
- Enlarges radiator core (646mm x 320mm x 27mm vs. MX-5 Miata at 646mm x 320mm x 16mm). Coolant capacity increased from 6.0L to 6.2L
- Eurospec fresh air duct
- Exhaust system: increased pre-silencer capacity to 2.0L, change inner structure of main silencer for aggressive sound, large exhaust tip with **MAZDASPEED** logo
- Front and rear stabilizer bars: painted red, front increased from 22mm to 23mm, rear increased from 12mm to 14mm
- Head and camshaft modified with deletion of Variable Valve Timing
- IHI single-scroll turbocharger with 8.5 psig boost
- Oil cooler plate changed from 3 pieces to 5 pieces
- Optimized steering rack: rack stroke reduced from 60.5mm to 53.2mm
- Spring painted red: rates increased from 29.4 N/mm to 37.7 N/mm for the front, and 21.7N/mm to 27.6N/mm for the rear
- Suspension tower brace: painted silver

Exterior

- Black vinyl soft top
- **MAZDASPEED** and MX-5 badging
- Smoked headlamps (no change to lenses, vessels are smoked)
- Tires: Toyo Proxes R28 205/40R17 80W high performance uni-directional tires (29psi front, 32psi rear)
- Unique front and rear under spoiler, and rear deck spoiler
- Wheels: 17 x 7 Racing Hart aluminum alloy wheels (no offset change) (redesigned from '04 model year)

Interior

- 3-Spoke leather wrapped steering wheel with red stitching, silver stitching with Lava Orange Mica exterior color
- Aluminum foot pedals (accelerator, brake, and clutch) with **MAZDASPEED** logo, and driver's aluminum foot rest
- Black cloth bucket seats
- Black leather wrapped shift knob with red stitching, silver stitching with Lava Orange Mica exterior color
- Black leather wrapped hand brake with red stitching, silver stitching with Lava Orange Mica exterior color
- Body colored rear view mirror cap with **MAZDASPEED** logo
- Floor mats with **MAZDASPEED** logo
- Silver instrument panel gauges with **MAZDASPEED** logo
- Stainless steel scuff plates with **MAZDASPEED** logo
- Unique curl-fit finish on center panel and shift panel

Safety

- No changes

Options

- Grand Touring Package: black leather bucket seats w/ red stitching (silver stitching w/ Lava Orange Mica exterior), black cloth convertible top
- No other options or packages are available

Product Changes and Features Availability

Features, options and package content subject to change.

2005 MX-5 MIATA

EQUIPMENT AND FEATURES	BASE	LS	MAZDASPEED
POWERTRAIN			
1.8L DOHC 16-valve 4-cylinder engine	Std.	Std.	-
1.8L DOHC 16-valve 4-cylinder engine with IHI single-scroll turbocharged w/ 8.5 psig boost	-	-	Std.
Enhanced exhaust system and pre-silencer capacity with large exhaust tip and MAZDASPEED logo	-	-	Std.
Exhaust, stainless steel sport-tuned	Std.	Std.	-
Rear wheel drive	Std.	Std.	Std.
Treansmission, automatic 4-speed electronically controlled	Opt.	Opt.	-
Transmission, manual 5-speed with overdrive (short throw shifter)	Std.	Std.	-
Transmission, manual 6-speed with overdrive (short throw shifter)	-	Opt.	-
Transmission, manual 6-speed with overdrive (short throw shifter) with gear shot-peening treatment	-	-	Std.
Variable Valve Timing	Std.	Std.	-
SUSPENSION			
Brakes, Anti-lock with EBD (ABS)	-	Opt.	Std.
Brake calipers: silver colored	-	-	Std.
Brakes, power - assisted 4-wheel ventilated front / solid rear disc	Std.	Std.	Std.
Double wishbone	Std.	Std.	Std.
Limited-slip rear differential (not available for AT model)	Pkg.	Std.	-
Limited-slip rear differential: Bosch torque sensing	-	-	Std.
Shock Absorbers, gas filled front and rear	Std.	Std.	-
Spare tire , temporary	Std.	Std.	Std.
Sport Suspension w/Gas filled Bilstein shock absorbers	Pkg.	Pkg.	-
Sport tuned suspension w/gas filled Bilstein shock absorbers: MAZDASPEED tuned	-	-	Std.
Stabilizer Bar, Front	Std.	Std.	-
Stabilizer Bar, Rear	Std.	Std.	-
Stabilizer Bar, Front: larger painted red	-	-	Std.
Stabilizer Bar, Rear : larger painted red	-	-	Std.
Steering, power rack & pinion	Std.	Std.	Std.
Steering, power steering delete	Opt.	-	-
Tire, size / type	205/45 R16 83W		205/40 R17 80W
Tower brace	Std.	Std.	Std. (Silver Painted)
Wheel locks	Std.	Std.	Std.
Wheels, Size / Appearance	16" / Aluminum alloy		17" / Aluminum Alloy
EXTERIOR FEATURES			
Antenna, power	Std.	Std.	Std.
Body Colored, Front & Rear Bumpers, Door Handles	Std.	Std.	Std.
Convertible top, cloth (black or beige with vinyl boot cover)	-	Std.	Pkg. (Black only)
Convertible top, vinyl (black with vinyl boot cover)	Std.	-	Std.
Fog lights, clear-lens halogen	Std.	Std.	Std.
Glass rear window	Std.	Std.	Std.
Headlamps: smoke finish	-	-	Std.
Remote keyless illuminated entry	Pkg.	Std.	Std.
Mirrors, dual power remote / body colored	Std.	Std.	Std.
Windshield, solar-control/tinted	Std.	Std.	Std.
Wipers, 2-speed fixed intermittent	Std.	Std.	Std.
INTERIOR FEATURES			
Air bags:			
- Driver & passenger front air bag with deactivation switch	Std.	Std.	Std.
Air Conditioning, CFC-Free	Std.	Std.	Std.
Aluminum foot pedals with MAZDASPEED logo	-	-	Std.
Audio:			
- 4-speaker sound system	Std.	-	-
- AM/FM stereo w/single CD player w/digital clock	Std.	Std.	-
- AM/FM stereo w/6-CD changer w/digital clock	-	-	Std.
- Bose 6-speaker sound system (includes tweeters)	-	Std.	Std.

Legend: Opt. = Option PIO = Port Installed Option Pkg. = Package Std. = Standard

2005 MX-5 MIATA

EQUIPMENT AND FEATURES	BASE	LS	MAZDASPEED
- Speed - sensing automatic volume control	-	Std.	Std.
- Tweeter speakers	Opt.	Std.	Std.
Cigarette Lighter with Ash Tray	Std.	Std.	Std.
Cruise Control	Pkg.	Std.	-
Cup Holders, 2 front	Std.	Std.	Std.
Defogger, rear window	Std.	Std.	Std.
Demisters, Front Side Window	Std.	Std.	Std.
Door Locks, power	Pkg.	Std.	Std.
Door trim:			
- vinyl, black or parchment	Std.	Std.	Std. (Black)
Center Panel	Silver - like finish		Curl - fit finish
Engine Immobilizer	Std.	Std.	Std.
Floor Mats, Carpeted	Std.	Std.	Std. w/ MAZDASPEED logo
Gauges - Oil, Water, Coolant	Std.	Std.	Std.
HVAC with silver finish	Std.	Std.	Std.
Instrument panel gauges	White	White	Silver w/ MAZDASPEED logo
Lamp Courtesy, overhead with dimming	Std.	Std.	Std.
Locking storage, glove box and center console	Std.	Std.	Std.
Meter rings with silver finish	Std.	Std.	Std.
Mirror, vanity / driver & passenger	Std.	Std.	Std.
Mirror, Rear View Day/Night	Std.	Std.	-
Mirror, Rear View Day/Night with body colored mirror cap & MAZDASPEED logo	-	-	Std.
Parking brake handle, urethane	Std.	Std.	-
Parking brake handle, leather wrapped w/ red stitching, silver stitching with Lava Orange Mica exterior color	-	-	Std.
Power windows with driver's one-touch-down feature	Std.	Std.	Std.
Power outlet	Std.	Std.	Std.
Remote, trunk lid/fuel door/ hood release	Std.	Std.	Std.
Scuff plates: stainless steel	-	-	Std. w/ MAZDASPEED logo
Shift knob, urethane	Std.	Std.	-
Shift knob, leather wrapped w/ red stitching, silver stitching with Lava Orange Mica exterior color	-	-	Std.
Shift plate bezel	Silver - like finish		Curl - fit finish
Seats:			
- Bucket type with reclining and forward/back slide feature	Std.	Std.	Std.
- Integrated head restraints	Std.	Std.	Std.
- Passenger's seatback storage pocket	Std.	Std.	Std.
- Three point safety belts with pretensioners and force limiters	Std.	Std.	Std.
- Upholstery, Cloth (black)	Std.	-	Std.
- Upholstery, Leather black w/ red stitching, silver stitching with Lava Orange Mica exterior color	-	-	Pkg.
- Upholstery, Leather (black or parchment)	-	Std.	-
Steering wheel, 3-spoke leather wrapped w/ red stitching, silver stitching with Lava Orange Mica exterior color	-	-	Std.
Steering wheel, 3-spoke leather wrapped with silver stitching	Std.	Std.	-
Tachometer	Std.	Std.	Std.
Trip odometer, two resettable	Std.	Std.	Std.
Warning Lamps: Air Bags, Battery, Brake, Engine, Fuel, High-Beam, Oil, Seat Belt	Std.	Std.	Std.
Windblocker with storage pouch	Std.	Std.	Std.

Legend: Opt. = Option PIO = Port Installed Option Pkg. = Package Std. = Standard

2005 MX-5 MIATA

FACTORY INSTALLED OPTIONS / PACKAGES

- **Convenience Package (CV1)**

Availability:

- Optional: Miata Cloth
- Standard: Miata LS
- Not available: **MAZDASPEED** MX-5

Includes:

- Tweeter speakers
- Power Door Locks
- Cruise Control
- Remote Keyless Entry System with Retractable Key

- **Suspension Package (SP1)**

Availability:

- Optional: Miata Cloth
- Not Available: Miata LS or **MAZDASPEED** MX-5
- Note: not available with the Convenience Package or automatic transmission

Includes:

- Limited Slip Differential (LSD)
- Bilstein Shock Absorbers

- **Suspension Package (SP2)**

Availability:

- Optional: Miata LS
- Not Available: Miata Cloth or **MAZDSPEED** MX-5
- Note: available with the Convenience Package or automatic transmission

Includes:

- Bilstein Shock Absorbers

- **Grand Touring Package (LS1)**

Availability:

- Optional: **MAZDASPEED** MX-5
- Not Available: Miata Cloth or MIATA LS

Includes:

- Black leather bucket seats with red stitching (Silver stitching with Lava Orange Mica exterior color)
- Black cloth soft top

2005 MX-5 MIATA COLOR AND TRIM

INTERIOR TRIM TYPE AND COLOR SELECTOR		INTERIOR TRIM COLORS	
		Black	Parchment
MX-5 Miata			
Cloth Bucket Seats		ND0	-
MX-5 Miata LS			
Leather Bucket Seats		ND2	ND3
MAZDASPEED MX-5			
Cloth Bucket Seats		ND0	
Leather Bucket Seats with Red Stitching		ND2	
Leather Bucket Seats with Silver Stitching		NE5	
EXTERIOR COLOR		AVAILABILITY	
COLOR	CODE		
MX-5 Miata			
Classic Red	A3E	●	-
★ Nordic Green	27C	●	-
Sunlight Silver Metallic	22V	●	-
★ Razor Blue Mica	28P	●	-
Black Cherry Mica	28W	●	-
MX-5 Miata LS			
Classic Red	A3E	●	-
★ Nordic Green	27C	-	●
Sunlight Silver Metallic	22V	●	●
★ Razor Blue Mica	28P	-	●
Black Cherry Mica	28W	-	●
MAZDASPEED MX-5			
★ Black Mica	16W	●	-
Velocity Red Mica	27A	●	-
★ Lava Orange Mica (black leather w/silver stitching only)	27Y	●	-
Titanium Gray Metallic	29Y	●	-
LEGEND:			
★ = New for this model year			
● = Available			

2005 MX-5 MIATA SPECIFICATIONS

FUEL ECONOMY / SYSTEM

ENGINE DISPLACEMENT		TRANSMISSION	CITY	HIGHWAY
RWD				
Miata and Miata LS	1.8L DOHC	5-speed manual	23	29
	16-Valve I-4 VVT	6-speed manual	23	28
		4-speed automatic	22	28
MAZDASPEED	IHI Turbo Charged w/o VVT	6-speed manual	20	26
FUEL SYSTEM				
System			Multi-port fuel injection	
Recommended Fuel			Premium unleaded, 91 octane or greater	
Minimum Fuel: Miata and Miata LS			Regular unleaded, 87 octane or greater	
Minimum Fuel: MAZDASPEED MX-5			Premium unleaded, 91 octane or greater	
Emission Control			Catalyst	
IGNITION SYSTEM				
System			Distributorless electronic	
Starter			12V - 1.0kW	
Alternator			12V - 80A	
Battery			12V - 32AH 5 HR	

ENGINE HORSEPOWER AND TORQUE RATINGS

LINEUP	BORE x STROKE (mm / in)	COMPRESSION RATIO	HORSEPOWER H.P. @ RPM	TORQUE LB.FT. @ RPM
MIATA & MIATA LS	83 x 85 / 3.27 x 3.35	10.0:1/Redline 7000	142 @ 7000	125 @ 5000
MAZDASPEED MX-5		9.5:1 / Redline 6500	178 @ 6000	166 @ 4500

DRIVETRAIN RATIOS

RATIOS (:1)	MIATA / MIATA LS			MAZDASPEED
	5-SPEED MANUAL	6-SPEED MANUAL	4-SPEED AUTOMATIC	6-SPEED MANUAL
1st	3.136	3.760	2.450	3.76
2nd	1.888	2.269	1.450	2.269
3rd	1.330	1.645	1.000	1.645
4th	1.000	1.257	0.730	1.258
5th	0.814	1.000	-	1.000
6th	-	0.843	-	0.843
Reverse	3.578	3.564	2.222	0.0564
Final	4.300	4.100	4.100	4.100

2005 MX-5 MIATA SPECIFICATIONS

BRAKES			
	MIATA	MIATA LS	MAZDASPEED
SYSTEM	Diagonal hydraulic		
FRONT DISC	Ventilated 10.6 in.		
REAR DISC	Solid 10.9 in.		
PARKING BRAKE	Mechanical rear wheels		
ANTI-LOCK	-	Opt.	Std.

TIRES / WHEELS			
	MIATA	MIATA LS	MAZDASPEED
WHEEL	6 1/2 JJ - 16 aluminum alloy		70 x 7J Racing Hart aluminum alloy
TIRE SIZE	205/45 R16 83W high performance		205/40 R17 80W Toyo Proxes
TIRE INFLATION F/R	26 psi / 26 psi		29 psi / 32 psi
SPARE WHEEL	Temporary T105/70 D15		
SPARE TIRE	Temporary 60 psi / 60psi		

CHASSIS / SUSPENSION			
	MIATA	MIATA LS	MAZDASPEED
BODY TYPE	Monocoque		
STEERING TYPE	Rack-and-Pinion		
POWER STEERING ASSIST TYPE	Enigne-rpm sensing; variable power assist		
SUSPENSION FRONT	Independent Double Wishbone w/29.4 N/mm coil springs, 22mm stabilizer bar		Independent Double Wishbone w/37.7 N/mm coil springs, 23mm stabilizer bar
SUSPENSION REAR	w/21.7 N/mm coil springs, 12mm stabilizer bar		Independent Double Wishbone w/27.6 N/mm coil springs, 14mm stabilizer bar

2005 MX-5 MIATA SPECIFICATIONS

DIMENSIONS / WEIGHTS / CAPACITIES

INTERIOR DIMENSIONS		
Head Room (inches)		
Front / Rear:		37.1 / not applicable
Shoulder Room (inches)		
Front		49.7
Leg Room (inches)		
Front		42.8
Hip Room (inches)		
Front		49.2
Volume		
Passenger (cubic feet)		46
Cargo (cubic feet SAE)		5.1
Total Volume		51.1
EXTERIOR DIMENSIONS		
Wheelbase (in)		89.2
Track Front / Rear (in)		55.7 / 56.7
Length (in)	155.3 Miata & LS / 155.7	MAZDASPEED
Width (in)		66.1
Height (in)	48.3 Miata & LS / 48.0	MAZDASPEED
Minimum ground clearance (laden) (in)		4
Weight Distribution % front/rear	50 / 50 Miata & LS; 52 / 48	MAZDASPEED
Coefficient of Drag	0.38 Miata & LS / 0.375	MAZDASPEED
WEIGHTS		
Curb Weight lb. Miata & Miata LS: 5-speed MT / 6-speed MT / 4-speed AT	2447 / 2440.5 / 2473.6	
Curb Weight lb. MAZDASPEED : 6-speed MT		2529
GVW lb. 5-speed MT / 6-speed MT / 4-speed AT		2948
CAPACITIES		
Turning		
Steering wheel turns lock-to-lock	2.7 Miata & LS / 2.3	MAZDASPEED
Turning Circle, curb-to-curb (ft)	30.2 Miata & LS / 34.2	MAZDASPEED
Liquids		
Crankcase (quarts):		4
Coolant (L)	6 Miata & LS / 6.2	MAZDASPEED
Fuel capacity (gallons)		12.7