

Used Miata Inspection Checklist

Check VIN, title, and price

- _____ Record the VIN number here
- _____ Check last 6 VIN digits greater than 209446 (lower indicates weak crank)
- _____ Record the odometer reading here
- _____ Record date car was built (rear of driver door frame)
- _____ Check VIN is valid <http://www.hazmat.com/~mjb/candm/decoder/>
- _____ Check no salvage title http://wsf.carfax.com/cfm/general_check.cfm
- _____ Check Kelly price <http://www.kbb.com/>

Check exterior appearance and damage

- Check VIN #'s on all body panels match (checking for replaced panels)
- Check car appears level and straight (checking for serious damage)
- Check no major exterior damage, panels line up
- Check paint on all panels matches (checking possible collision damage)
- Check no rust at fender edges (checking for winter or sea salt damage)
- Check doors, hood, trunk operate normally (checking collision damage)
- Check windshield wipers undamaged, rubber good (easily replaced if bad)

Check cockpit function, appearance, and damage (top down)

- Check seats not torn, frayed, or excessively faded (checking abuse)
- Check seat belts and buckles not torn, frayed, broken (checking wear)
- Check all vinyl in good condition (checking abuse)
- Check carpet clean, dry, intact (wetness may mean heater or rain leak)
- Check steering wheel in good condition (checking abuse)
- Check pedal condition and wear vs. odometer (checking fraudulent mileage)
- Check center and vertical consoles in good condition (checking abuse)
- Check instrument pod in good condition (checking abuse)
- Check both seats adjust properly fore/aft and incline (checking damage)
- Check glove box and center storage work and lock properly
- Check all A/C vents adjust properly (checking abuse)
- Check hood release works properly (checking wear)
- Check door latch/lock function (checking wear and abuse)
- Check fuse box cover in place (checking abuse)
- Check underside of instrument panel properly covered (checking abuse)

Check trunk interior appearance, damage, and equipment

- Check spare tire serviceable (remove to inspect)
- Check jack and jack handle present and functional (remove)
- Check battery type, security, and condition (should be sealed, non-acid)
- Check battery cables condition and tightness
- Check carpeting (should be dry, clean)
- Check trunk lock function (also, not punched out and replaced)
- Check deep recesses (should be dry, clean, no junk)
- Check presence of all covers

Check under hood appearance, damage and equipment

- Check general cleanliness (no heavy dirt, no visible oil seepage)
- Check for rust (rust here possibly indicative of salt damage)
- Check plastic belly pan (should be present, well-fastened)
- Check missing, broken parts, wiring, or fasteners
- Check radiator cooling fins from front (not badly mashed closed)
- Check all hoses (dry and firm, not oily or mushy, no leaks)
- Check all belts (tight, no cracks or missing teeth)
- Check alternator, power steering pump, A/C compressor tightly mounted
- Check plug wire appearance (no cracks in insulation)
- Check oil level and color (should be full and reasonably clean)
- Check oil filter type (Mazda is best, aftermarket not so good)
- Check plastic radiator top and filler neck not cracked
- Check coolant level and color (may be colored; should be fairly clear)
- Check brake master cylinder fluid level (not very dirty or excessively cloudy)
- Check clutch master cylinder fluid level (okay if somewhat dirty)
- Check power steering fluid level and color (should be full, reasonably clear)
- Carefully remove plug wires and check plug wells (dry, no oil)
- Remove plugs and check condition (electrodes dry, no oil or soot)
- Check fasteners holding exhaust manifold heat shield (none broken)
- Check exhaust down pipe heat shield welds (none broken)
- Check both cooling fans spin freely
- Check crankshaft pulley bolts and 21mm bolt if visible (bolts tight)
- Check engine mounts (not broken)
- Check throttle cable not excessively slack (can be easily fixed)
- Leave hood open

Check wheels and tires

- Check appearance and damage, all four wheels (alloys undamaged)
- Check tire make, type, and size (tires identical)
- Check even tire wear and tread depth okay (wear bars not showing)
- Jack up right front corner of car
- Check movement when wheel is shaken (no looseness or rattle)
- Remove right front wheel
- Check brake pad thickness remaining (0.040" minimum)
- Check brake rotor surface (no deep gouges; a little rust okay)
- Check brake slave cylinder (no leakage)
- Check shock absorber (no leakage, boot not split)
- Replace wheel and torque lug nuts to 80 ft-lbs

Check underside for appearance, missing parts, damage

- Drive front wheels up onto ramps, shut engine down
- Check play, steering wheel vs. wheel movement (no looseness)
- Check for rust throughout (minor surface rust okay)
- Check rubber steering rack boots (boots not split)
- Check sway bar mounting brackets (bracket or fasteners not broken)
- Check underbody braces (fasteners not broken)
- Check suspension members (no damage)
- Check engine sump and drain plug (no leakage, no damage)
- Check transmission (no leakage, no damage)
- Check shock absorbers, other three wheels (no leakage, boots not split)
- Check wheel alignment bolts, nuts, cams (no damage)
- Check drive shaft (no apparent damage)
- Check rear half-axle rubber boots (not split)
- Check differential for apparent damage (fins probably mean limited slip)
- Check brake calipers and hoses (no damage or leaks)
- Check for front/rear bumper crush damage (crush indicates collision)
- Drive rear wheels onto ramps, shut engine down
- Check exhaust suspension hangers (not broken or unhooked)
- Check catalytic converter appearance (no holes or damage)
- Check muffler type and condition (no holes or damage)
- Check tailpipe tip appearance (not corroded)
- Check interior of exhaust tip (no heavy soot or oil)

Check manual and records

Check owners manual is present

Check for maintenance log (presence indicates fastidious owner)

Check engine operation

Check engine starts within a few turns

Check absence of hydraulic lash adjuster clatter

Check absence of water pump or other noises

Check all warning lights (should be off, except during start-up)

Check tachometer and idle rpm (about 850 rpm)

Check oil pressure when cold (50-60 psi cold okay; 20 psi hot okay)

Check fuel level indicator functions

Check coolant temp indicator (doesn't exceed straight up as engine warms)

Check trip counter resets to zero (reset only with car not moving)

Check A/C and blower functions (A/C service is expensive)

Check heater functions

Check radio functions

Check both windows raise/lower without binding (binding easily fixed)

Check manual headlight door switch functions, if installed

Check all three brake lights function (bulbs easily replaced)

Check directional lights function (possible flasher module failure)

Check hazard flashers function (possible flasher module failure)

Check license plate lights function (bulbs easily replaced)

Check all parking lights function (bulbs easily replaced)

Check low beam headlights function (lamps easily replaced)

Check high beam headlights function (lamps easily replaced)

Check horn functions

Check both windshield washers function (jets may be clogged)

Check both windshield wipers function

Check absence of exhaust buzz, full rpm range (hood open)

Check engine response to throttle blips (sloppy cable easily fixed)

Test Drive (including engine to 7,200 rpm)

- Check hand brake operation
- Check transmission operation (smooth shift, no clashes)
- Check clutch operation (no shuddering or slippage)
- Check steering (not sloppy; check power boost if installed)
- Check brakes (positive braking, no swerving under braking)
- Check hands-off straight tracking on level road (no wander)
- Check excessive running noise (tires, drive train, suspension, exhaust)
- Check squeaks and rattles (a few on an old car may be normal)
- Check cruise control (functions)
- Check engine coolant temperature (needle approximately straight up)
- Check oil pressure (about 20-30 psi @ idle, higher when engine revs)

Post-Drive

- Check both radiator fans operate w/ air conditioning on
- Raise top (should raise easily, appear undamaged)
- Check rear window zipper for function, if installed
- Check top latches for function
- Check plastic rear window (clear, no splits – expensive to replace)
- Check top upper surface for tears and excessive wear
- Check top for attachment to center bow (easily fixable, if not)
- Raise/lower windows with top raised (checking interference)
- Check raised windows seal against top (checking window seals)
- Check presence of boot cover (needed to protect underside of top from sun)