

Used NA/NB Miata Inspection List

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This is a checklist companion to the Wiki article **Checking Out a Used NA or NB Miata**. This is designed to be printable so you can take a copy with you as you inspect a prospective car for purchase.

Check all VIN stickers for matching numbers (see locations at end of list)

Ask for all maintenance/repair records

Front Underneath (structure behind bumper)

- bent metal
- paint overspray (usually indicates a repair)
- shock leaks
- CV joint boot tears
- differential leaks
- exhaust system condition
- driveshaft damage
- transmission leaks
- bent rear suspension pieces
- floor pan and rocker panels for dents/rust
- suspension rust
- frame rail rust (NB)

Tires/Wheels/Brakes

- damaged wheels
- thickness of brake pads
- scoring/cracking of rotors
- cracks/cuts in sidewalls
- matching brand, model, and size
- tread depth (¼ inch or more)
- evenness of tire wear
- existence of spare tire

Trunk (first, open vertical fabric panel at front of trunk)

- evidence of body work, bent panels, etc.
- jackwell for water/rust
- Panasonic type battery (AGM-absorbed glass mat--no lead acid types)
- signs of battery leaks

Interior - Carpet/Upholstery

- unusual wear
- fading
- stains
- rips
- frayed edges
- cracks (leather, vinyl, plastic)
- scratches, gouges, burns
- overall cleanliness

Interior - Other Interior

- overall wear consistent with odometer mileage
- door sill by certification sticker for a replaced speedo notification.
- check radio. If it is OEM and takes extended time to come on, a repair is needed.
- check all controls
- check all lights
- check all gauges
- ask if any modifications and explanation of what they are

Top

- tears, loose edges, wear spots, stains, also on inside
- unlatch top and lift a little, then check zipper
- brown areas on plastic window indicate replacement is needed
- with window unzipped, lower the top to check smooth operation
- raise top, rezip window, clamp top down
- top should clamp down easily

Body Panels

- smoothness and matching seams
- sight down sides for ripples/body repairs
- door sills, rockers, hinges, for signs of rust
- bubbles in paint: rust has started
- paint condition: fading, scratches, chips
- matching color in all panels
- overspray (indicates a repair or a repaint)
- clogged drain holes in rockers and top drains behind seat belt towers

Under Hood

- general cleanliness (does it look neglected?)
- oil leaks
- radiator mounts and headlights for signs of accident damage
- ask about timing belt, plugs, and plug wire changes (30/60k)
- dipstick for oil level, color, metallic particles
- last change oil/filter change date/odometer reading
- cracks in drive belts
- excessive wear in water pump pulley
- proper level and fluid color in brake and clutch reservoirs
- proper level and leaks in power steering reservoir
- oil leaks in A/C compressor
- condition of all hoses
- radiator corrosion or damage (radiator top brown = near end of life)

Engine (running)

- smoke at exhaust: Blue = oil White = water in cylinders Black = rich fuel/air
- knocking and unusual sounds
- both fans running when A/C switched on
- loud knocking when A/C comes on (compressor bad)
- squealing when A/C on (loose belt)
- whistling when A/C on (usually OK)
- cold air at vents within 30 sec of A/C being switched on (good charge)
- bubbles in A/C view glass (low charge, check for leak)
- smooth idle, no shaking side to side
- no knocking sounds that fade away as engine is revved up slowly (rod/main bearings)
- crank pulley wobble, especially on 1990 and early 1991 cars

Glass

- proper operation of side windows
- checking, cracking, or discoloration
- sand damage (particularly windshield)
- stone pits
- scuffing from wiper blades

Misc.

- proper operation of all exterior lights
- proper operation of locks
- Boot cover (desirable, often missing, protects folded top from UV sunlight damage)

Test Drive (top up, windows closed, radio off)

- Whirring sounds from the rear are usually tires
- Listen for sounds of dry bearings grinding. If sound changes with road speed but not with engine RPM as you change gears, it is wheel bearings or differential.
- Listen to sounds of transmission as you go thru the gears. High pitched whining
- noises in one or more gears indicate bad bearings in trans. Try reverse gear as well.
- With car stopped, set handbrake. Should feel solid and go up approx 3 inches.
- If it hits a solid stop at top of travel, it is out of adjustment or brake pads worn out. Try to move car with handbrake set. It should hold.
- Clutch should be smooth on engagement. No slippage or chattering. Go up and down gears several times. Should be no sound or feel of bad synchronizers.
- Test brakes. Should have solid feel. Car should stop straight. Should be no
- pulsations (warped rotors) or grinding sounds.
- Make some quick left and right turns. Car should feel solid with no back and
- forth wallow. No excessive play in steering wheel.
- At 15 MPH in 1st gear, get on/off gas quickly several times. Check for slack in
- the driveline.
- At 45 MPH in 5th gear, disengage clutch. Rev engine 2k above what it was doing
- and pop the clutch. If engine immediately drops back to original RPM area, the
- clutch is OK. If it comes back slowly and car sounds like a slipping auto trans,
- this is sign of clutch slippage. Be gentle. Not your car!
- Drive at 60, 65, 70 MPH and whatever speeds you can safely do. Check for 65
- MPH shimmy (alignment & wheel balance. May need shock tower brace) Look
- for wandering or following longitudinal grooves in road. Should feel controlled
- over bumps, not wallow (shocks).
- Drive in stop and go traffic. Engine should not stutter, misfire, or bog down after
- a shift. (could be plug wires or worse).
- Car should accelerate smoothly and pull strongly in all gears. No hesitation.
- Listen for valve lifter tapping. Should quit after 15-30 seconds after start up. If noise continues, may indicate infrequent oil changes or wrong weight/type of oil.

VIN number locations:

1. Front drivers side on dash under windshield (plate)
2. Door jamb next to strike plate on both sides (sticker)
3. Door next to latch on both sides (sticker)
4. Fire wall (1/4" tall stamped letters on welded plate)
5. Hood (sticker)
6. Front fender
 - NA: in water run-off gully on both sides (sticker)
 - NB: rear edge of the fender where it meets the door, viewed with the door open (sticker)
7. Inside front bumper, passenger side, just under turn signal (sticker)
8. Trunk (sticker)
9. Inside rear drivers side fender just in front of bumper under gas fill hose (sticker)
10. Passenger side of aluminum oil pan (riveted metal plate)
11. PPF, top side roughly in center (stamped letters)

Short Nose Crank (SNC)

If the VIN ends with 209446 or lower on a 1990-1991 NA Miata, research the SNC situation.