

2010 Miata Challenge Series

www.MiataChallenge.com

949 RACING



Schedule

January 31 – Buttonwillow (Race #13 CW)
February 20 – Willow Springs Big Track
March 20 – El Toro (Auto-X)
March 21 – El Toro (Special Road Course)
March 28 – Infineon Raceway
May 16 – Spring Mountain
July 10 – Laguna Seca
August 14 – AAA Speedway (Auto-X)
August 15 – AAA Speedway (ROVAL)
September 26 – Buttonwillow (Race #13 CW)
November 7 – Streets of Willow (CCW w/ Blowpass & Bowl)
December 4 – Streets of Willow (CW w/ Blowpass & Bowl)

Points System

Road Course

1st: 10
2nd: 8
3rd: 6
4th: 5
5th: 4
6th: 3
7th: 2
8th: 1
DNF = 1 (1st-7th), 0 (8th or lower)
DSQ = 0

Auto-X

1st: 5
2nd: 4
3rd: 3
4th: 2
5th: 1

NOTE: THIS PAGE DOES NOT CONSTITUTE THE ENTIRE RULES SET!

It is the competitor's responsibility to have a copy of the current rules, as published at www.miatachallenge.com, in their possession. If you have any questions regarding classing, please do not hesitate to consult the Miata Challenge chief steward for clarification.

Classification System

<u>Street Class</u>	<u>Modified Class</u>	<u>Unlimited Class</u>
0 to 9 points	9.25 to 15.25 points	15.25+ points

Tires

201+ treadwear: +0
141-200 treadwear: +2
101-140 treadwear: +4
41-100 treadwear: +6
<40 treadwear: +8

Wheels

Wheel width <7.5": +0
Wheel width 7.5-8": +1
Wheel width 8.5+": +2
Steel wheels: -1

Model (Street Class Only)

NB/NC 99-11: +1

Other

Excessive Rice: +1
Non male: -1
Automatic Trans (Miata engine only): -1
Rental Miata / MX5 (with rental contract): -1

(100 or less treadwear "race compounds" not allowed in Street class)

Suspension

Any change to OEM front and/or rear sway bar (Update/ Backdate free): +0.5
Any non OEM springs (not including threaded sleeves or adjustable spring perches): +0.5
Any eccentric/offset front suspension pivot bushing (Street only): +0.5
Any coilover, includes sway bar, bushing and spring points: +2
Any aluminum brake caliper: +0.25

Power

Non OEM header and/or test pipe: +0.5
Any internal engine mod (Cam, pistons, porting, etc) including 1-6~1.8, early 1.8 to later 1.8 swap: +1.5
Any external engine mod (intake, ECU, pulley): +0.5
Iron block: V8, V6, non Miata I4 swap: +3
Aluminum block swap: V8, V6, Rotary, I4: +5
Forced induction (Miata engine): +5

Drivetrain

Quaife or OS Giken dog box conversions: +1
Any Torsen (including OE) or clutch type differential: +1

Safety

Approved driver seat and 5 or 6 pt harness and charged fire extinguisher installed: -0.5

Body / Aerodynamics

Any Aftermarket front lip spoiler: +0.5
Any Custom front aerodynamic modification, including canard, splitter or bumper swap (includes lip spoiler): +1
Any Aftermarket rear trunk lip spoiler: +0.5
Any Custom rear aerodynamic modification, including wing, diffuser, bumper (includes lip spoiler): +1

Lightening (Modified Class Only)

Removal of headlight assembly: +0.25
Removal of front and/or rear bumper supports: +0.25
Any tubular control arm: +0.25
Removal of door windows and/or gutted doors: +0.25
0.187" or 0.250" Lexan, Tuffak or Makrolon polycarbonate windshield: +0.5

Miata Challenge

2010 Rules and Regulations **(Revised 2/18/2010)**

It is the competitor's responsibility to read and understand these rules in total. Any modifications not specifically allowed in this document can be considered not allowed. Consult Miata Challenge event organizers for any clarifications needed prior to entering event. Miata Challenge reserves the right to re-class any car not deemed to be classed within the spirit of the rules by the entrant.

While points for modifications for competitor classing will not change during the year, we may add clarifications on any of the rules and/or regulations throughout the year.

Competitor Registration

- Competitors will be required to have a completed entry form in the hands of the timing person before competition begins. It is the responsibility of the entrant to make sure this happens. Verbal requests to enter competition will not be counted.
- Only officially registered AMB transponders recorded by Speed Ventures will be scored. You may rent one from SV or register your own on your entry form.

Vehicle Registration

- Competitors will be required to submit one vehicle for the day's competition no later than 8:30 am that day. A tech sticker will be given to the entrant to be placed on the upper left hand (drivers) corner of the windshield. Competitors will not be allowed to switch cars once timed runs have begun.
- Competitors found modifying their cars during timed sessions to a class above that which they are registered for will be disqualified and their points from the previous event deleted. They will also be banned from participating in the two subsequent MC events.

Series Championship Points System

- All points scored will count towards series championship.
- To be declared a class champion, the competitor must have won at least one road course event when there was a minimum of one other entrant in that class. In the event that the high points scorer did not win an event this way, the next highest point scorer will be declared champion.
- In the event of a season final tie in points, the competitor with the most road course wins will be declared the higher points scorer.
- In the event of a season final tie in points and road course wins, the competitor with the highest average points per event (AX and RC) will be declared the higher points scorer.
- In the event we still have a tie, the faster of the two that day wins.

Equipment Regulations

Safety Equipment

- Properly installed SFI or FIA 5/6 pt harnesses, FIA or SFI seat, and SFI approved head & neck restraint are not mandatory but encouraged. No lightening points will be assessed for SFI or FIA 8855-1999 approved racing seats. 4/5/6 pt harnesses may not be used in conjunction with OEM seats. 4 pt harnesses must be ASM type.
- 90-05 Miatas must have a four point roll bar bolted or welded to the frame per Speedventures minimum safety requirements for open cars. Two point "style" bars will not be allowed. 6-8 pt cage is free.

Mirrors

- Street & Modified: Free, but must not serve any other function.
- Unlimited: Free

Interior

- Street: Must retain complete OEM dash, a real passenger seat, door cards and carpet. Carpet may be removed behind driver seat. No removal of any single component over 1 lb unless otherwise allowed for Street class.
- Modified: May remove passenger seat, carpet, dash, heater.
- Unlimited: Free

Items which may be removed in Street and Modified classes

- Door arm rests
- Center console aft of shifter
- Brake dust shields
- ABS system
- Air conditioning system
- Power steering system
- Soft top
- Hard top
- Cruise control
- Radio
- Speakers

Windshield

- Street & Modified: Must be OEM or OEM replacement and be made of DOT approved shatter resistant glass.
- Unlimited: Free

Battery

- Street and Modified: Any battery in stock mounting location.
- Unlimited: Charging and starting system are free.

Master Cut Off Switch

- All classes: Free

Suspension & Drivetrain

Tires

- Street: May not use tires with UTQG tread wear rating of less than 140.

Clutch

- All classes: Free

Flywheel

- All classes: Free

Wheel Spacers

- All classes: Free, but these limitations:
 - 3mm maximum on OEM studs
 - 20mm maximum on extended studs

Transmission

- All classes: May use Miata 5 or 6 speed transmission.

Final Drive Ratio

- Street: May use any USDM Miata ratio (3.9, 4.1, 4.3). Quaife or OS Giken close ratio dog box conversions not allowed in Street class.
- Modified: May also use 3.6 and 4.875.
- Unlimited: Free

Brakes

- All classes: Any master cylinders and proportioning valves are free. Any Miata OEM or steel caliper, any rotor, soft lines, pads are free.
- Street: Must retain functioning OEM parking brake mechanism.
- Modified & Unlimited: May delete emergency brake mechanism for non-street legal cars only.

Cooling Ducts

- Street & Modified: May add no more than two 3" diameter holes in front bumper for cooling ducts without points penalty. Further modifications constitute Custom Front Aerodynamic Modification.
- Unlimited: Free

Engine & Differential Mounts

- All classes: Free

Connecting Links for Sway Bars

- All classes: Free

Suspension Bushings

- Street: May replace with OEM replacement urethane or hard rubber type. No solid materials, e.g.: Delrin, Aluminum, Acetal.
- Modified: Same as Street, but may use offset bushing or rigid materials without penalty

Control Arms

- Street & Modified: Must use Mazda Miata factory control arms. May update / backdate. May add material but not remove material.
- Unlimited: Free. May replace pivots with spherical bearings. May relocate pivot location up to 25mm from OEM location for that year chassis

Dampers (Shocks)

- “Coilover” herein defined as a damper assembly having either a threaded body, threaded sleeve or springs of less than 75mm ID.

Upper Shock Mounts

- All classes: Free

Bump Stops

- Street & Modified: May not use aftermarket or modified OEM spindles. Update / Backdate OK.
- Unlimited: Free

Alignment

- All classes: Free

Engine

Exhaust

All classes: Free, behind OEM cat location.

Catalytic Converter

Street: Must have functioning catalytic converter. Function can be quickly verified with infra red heat gauge.

Modified & Unlimited: May delete catalytic converter.

Ignition

All classes: Free

Radiator

All classes (type): Free.

Street (location): Must be mounted within 2" of OEM location in same orientation.

Modified (location): Must be located within 2" of either bottom two, or top two OEM mounting points.

Unlimited (location): Location free.

Coolant Reroute

All classes: Free

Oil Cooler

All classes (type): Free.

Street and Modified (location): Must be located in engine bay and serve no other function.

Unlimited (location): Free

Fuel

All classes: Up to 100 octane unleaded pump gas, or E01~E100 allowed. Water or methanol injection is allowed; however, Methanol can not be primary fuel source. Nitrous Oxide injection can not be used. Any competitor found using N2O will be banned forever.

Engine Swaps & Forced Induction

All classes: Non Miata engine conversions include points for LSD, internal, external, header, exhaust, subframe.

Forced induction Miata engine includes points for ECU, header, exhaust, internal, external mods.

Body & Chassis Modifications

Body Panel Attachment

- Street: May pin hood and trunk. Must retain OEM hood and trunk hinges. May delete front hood latch if two pins are used. Must attach within 0.25" of OEM locations
- Modified: May pin hood and trunk. May remove all hood or trunk hinges and latches if 4 pins are used per panel. Must attach within 0.25" of OEM locations
- Unlimited: Body panel attachment free.

Tire to Fender Clearance

- All classes: Fenders may be rolled and or pulled to allow for tire clearance.

Flares

- Street & Modified: Must take lightweight body panel points if material is removed from OEM fender to allow flares. See "Body / Aerodynamics" section in Classification portion of the Rules.
- Unlimited: Free

Hood Vents

- Street & Modified: May not protrude more than 1.25" above surface of OEM hood.
- Unlimited: Free

Chassis Stiffening Braces

- Street & Modified: Chassis braces can serve no other purpose.
- Unlimited: Free

Tow Hooks

- All classes: OEM tow hooks may be removed. Must retain at least one front and at least one rear fixed or strap style tow hook at all times while on course.

Tub (Unibody)

- Street & Modified: Can not modify tub except, and only to allow installation of approved roll bar, seat, intercooler or engine swap.
- Unlimited: Must retain contiguous tub between OEM subframe mounting points. Examples: Radiator support may be removed or replaced. Cage may extend to shock front shock towers. Windshield frame may be removed.

Subframes

- Street: Must use unmodified OEM subframe unless part of non-Miata engine swap. May update/ backdate.
- Modified & Unlimited: Free

Tail Lights

- All classes: All cars must retain functioning tail lights of same light output and color.
- Street & Modified: Must retain OEM or direct OEM replacement taillights in original locations. Third high mount light may be removed.
- Unlimited - Type and shape of tail light free and must be located within perimeter of OEM tail light.

Aerodynamics

- "Front" of the car is herein defined as the top of the windshield header forward.
- "Rear" of the car is herein defined as the top of the windshield header aft.
- Front or rear lip spoiler herein defined as "Homologated" i.e. that which is/was serial produced, is/was readily available to the public.
- Rear lip spoiler may not protrude more than 7" above lower most point of OEM trunk lid. Taller than that and it will be considered a wing.
- "Custom" is herein defined as not Homologated i.e. not for sale, not advertised, not readily available to the public, DIY, one of a kind or home made.

Under tray

- Front: Lowermost point of front bumper skin to front subframe cross member - All Classes: Free.
- Middle: "Mid-body Flat Bottom Under Tray" herein defined as any structure covering more than 300 square inches combined of underbody between engine/transmission junction and rear axle centerline Side skirts attached below door opening, between wheel openings - All Classes: Free.
- Rear: Any under body structure or structure (other than engine exhaust) covering more than 300 square inches combined of area aft of rear axle centerline herein defined as a diffuser.