

Miata's on Ice Supplemental Regulations (MI) - 2017

MAJOR CHANGE FOR THE 2017+ SEASON: Addition of TSMI 15 blue street studs to Hankook tires. Remove muffler requirement.

Mission Statement

The class will offer close competition, relatively low vehicle cost, and minimum car preparation effort. The class will develop driving and vehicle preparation skills, while maintaining close competition for both novice and veteran racers alike.

Forward

Auto racing is a dangerous sport.

These regulations are intended to assist in the conduct of Competitions and to further general safety. They are a guide and in no way guarantee against injury or death to participants, spectators or others.

No express or implied warranties of safety or fitness for a particular purpose are intended or result from the publication or compliance with these or any other official regulations. Entering a WCMA/NASCC event constitutes an agreement, without reservation, by any person participating in such event in any capacity, that he or she has read and understands the within Regulations and shall at all times conduct himself or herself in accordance with them.

The marks "Mazda" and "Miata" are recognized as registered to Mazda Motor Corporation with the United States Trademark and Patent Office.

1 Vehicle Specifications

Eligible vehicles are Mazda MX-5 Miatas built between the years of 1989 to 1997 (NA) and 1998 to 2005 (NB). All parts may be interchanged between the model years 1989 to 2005 with the exception of specific individual items as outlined elsewhere in these rules. No Mazdaspeed models are permitted.

1.1 Body

The entire body must remain stock, as produced, excluding safety modifications (e.g. Mud flaps, bumper corners, the addition of lights, etc.). The plastic front valence may be removed, as it is subject to breakage in cold weather. Hood is to be secured by at least two hood pins. The factory hood latch must be disabled. Fenders, and doors, may be interchanged between all model years. A hardtop must be installed. Factory or aftermarket hardtops are acceptable. Rear mud flaps, extending to within 4" from the racing surface are required. Factory soft top and mechanism may be removed or left in place retracted.

1.2 Steering, Suspension and Brakes

Suspension must retain all factory stock components and not be modified. Factory adjustable components may be adjusted to improve handling (e.g. Caster, Camber, Toe, etc.). Factory anti-roll bars may be disconnected or removed. Modification of coil springs or the addition of spacers to alter ride heights is allowed within the limit of travel allowed by the factory suspension components. Shock absorbers are to be stock, or stock replacements specific to the models listed (No adjustable racing shocks allowed). Brakes must be fully functional and not be modified in any way. Emergency brake must be connected to both rear brake assemblies, and must not influence either rear wheel in favorable manner. Steering rack must be specific to the models listed (No steering quickners).

1.3 Interior

Factory driver's seat may be replaced with a racing seat. Interior may be stripped to remove flammable materials and make roll cage installation easier. Cutting or removal of interior sheet metal is not allowed except for the driver side interior door. The driver's side door may have the interior skin opened up to allow Nascar style anti-intrusion door bars that extend into the door cavity. Windshield glass must remain stock and intact all other glass may be removed or replaced with Lexan. Passenger seat may be removed but if attending Race School a passenger seat and seatbelt must be retained.

1.4 Transmission

Factory stock 5-speed or 6-speed Manual. Must be operable in all gears. Must retain stock flywheel and clutch assembly. Flywheel may be resurfaced, but not lightened or modified.

Factory stock 4-speed Automatic. Must be operable in all gears and retain stock torque converter.

1.5 Bumpers

Factory stock bumpers and location must be retained. Bumper may have lower air dam/valence removed and/or trimmed to reduce damage in an off track event. Factory stock impact absorbers must be retained (not modified or welded). Bumpers may be interchanged between model years. Tow loops are required to both front and rear. Tow loops must be of reasonable size, and easily accessible without protruding beyond the bumper. No trailer hitch devices may protrude beyond the bumper face or interfere with bumper function. Bumper corners must be tied to body panels or cleanly capped in order to control bumpers hooking with other vehicles.

1.6 Rear Axle

Must be original equipment only ratios between 3.636:1 and 4.3:1. The viscous limited slip differential or the Torsen type differentials are acceptable as is any differential locking device such as a spool or welding the spider gears.

1.7 Wheels

Factory stock, original equipment, 14" or 15" steel wheels must be used. (No aluminum/magnesium wheels allowed).

1.8 Tires

Spec. Tires: Hankook I-Pike RC01 (W411) 185 section width only. Tires can be fitted with TSMI 15 blue street studs in the designated manufactured locations. Tires must be mounted on wheels as per 1.7.

1.9 Roll Cage

Western Canada Motorsport Association (WCMA) cage specifications must be followed. A complete WCMA spec roll cage must be used. Roll cage must be padded near driver's head, left side and knee region. Additionally to the WCMA requirements a center roof bar must be used extending from the center of the windshield roof bar to the center of the roll hoop roof bar behind the drivers seat. A plate must be installed above the drivers head to fill the rectangular area between the center roll bar and the drivers side roof bars. The plate must be 14 gauge or thicker (0.0747"). The plate should be stitch welded with 2" long beads on 5" centers (3" space between welds). If using a NASA/SCCA Spec Miata cage kit with a diagonal roof bar the center bar can be added in 2 pieces ahead and behind the diagonal. The roof plate must fill the same area but can be installed as 2 triangles filling the two openings.

1.10 Fuel

Readily available pump gasoline only (No Racing Gas or Additives).

1.11 Lights

All Stock lighting, front and rear, must be retained. A rear facing, single amber fog lamp must be mounted at the back of the roof. Two Tail/Brake lights must be mounted above the trunk lid and may be behind the hardtop rear window. To be clear, a total of four (4) brake and four (4) tail lights are required. DOT equivalent lights may be substituted and/or added. This includes brake, turn, tail, front and side marker lights. Headlamps can be replaced but must be DOT approved as headlamps. Retractable headlights may be locked in the up position and the actuators may be removed.

1.12 Vehicle Ballast

Ballast weight may be added to improve traction and/or handling. Ballast should be located in the trunk area or in spare tire well. Ballast must be made of solid metal. Ballast must be securely mounted to vehicle using a minimum of two 3/8" bolts and locking nuts on weights up to 60 lbs and a minimum of two 1/2" bolts on weights up to 120 lbs. 2x2x1/8" plates should be welded to back side of any thin sheet metal used for bolting locations and the bolt must pass through the reinforcing plate. Stacking is permitted up to the maximums stated. Ballast must be safe, secure and removable. Ballast must be behind driver. Securely mounted ballast may be added to the under-side of the vehicle between differential housing and floor providing it does not extend more than 12" from the center of the differential to either side or not more than 12" forward from the centerline of the rear axle. Ballast type and location is subject to race organizer's approval.

1.13 Battery

Must remain in the trunk space and be secured with the stock mount. Battery may be relocated within the trunk space secured by a metal strap or bar minimum 3/16"x1" in cross section, using minimum 5/16" threaded rod or bolts on either side. The threaded rods must attach to a substantial body structural member or a 1/8" reinforcing plate must be welded on the back side of the body panel. The battery must sit within a tray or be prevented from sliding out of the mount by adequate means.

1.14 Exhaust System

Must be Factory stock or stock replacement manifold only. Exhaust manifold must remain unmodified (porting and polishing prohibited). Exhaust system must exit to the edge (left, right or rear) of the vehicle body and behind the driver. Any size tubing may be used. A muffler must be used, of any size or make.

1.15 Air Cleaner Assembly

Air filter element may be eliminated. Aftermarket replacement filter element allowed. Factory airbox may be removed. Cone type air filter is permitted. Inlet supply hose may be rerouted away from incoming ice and snow. For safety reasons, it is not recommended, to route inlet supply into driver's compartment.

1.16 Numbers & Appearance

Must be in accordance with WCMA / NASCC regulations. Generally, bodywork must be completed before showing up to the next event. Failure to maintain bodywork and appearance MAY result in exemption. White cars are not preferred but can be acceptable if additional bright colors are used to improve visibility. For example racing stripes in red/yellow/blue etc. Visibility of white cars are subject to race organizer's approval.

1.17 Vehicle Reinforcement

No reinforcement of any type forward of front axle centerline or rearward of rear axle centerline. No reinforcement mounted in any vertical body surface, including any surface covered or enclosed by original body panels. "Self-expanding" foam may be used inside rear vertical panels. A short piece of roll bar tubing may be added to the roll cage by the driver's left leg to reduce the left front wheel intrusion in the event of a hard impact to this area. Tubing shall be anchored to the inner left fender well by a steel plate no larger than 4" x 4" x 1/8" thick, either by welding or by 4 each 3/8" bolts.

2 Engine Specifications

2.1 Short Block

1600 cc or 1800 CC engines only. Engine recondition allowed within NASA Spec Miata specifications. No turbo chargers/superchargers/NOS or power adders of any kind.

1800 CC engines must run a 45mm restrictor plate for 1994-1997 model years and a 37mm restrictor plate for 1999-2005. (Sizes to be confirmed by track testing)

Lightening of engine components is not permitted. Balancing of rotating assembly is allowed, however one piston, and one connecting rod must remain untouched to ensure that they have not been lightened as a set. Factory oiling system must be retained. Timing belt/chain must remain stock or stock replacement.

2.2 Cylinder Head

Must be Factory stock cylinder head only.

2.3 Camshaft

Must be Factory stock or stock replacement only. Factory stock lift, duration, and lobe separation dimensions only. Camshaft timing must remain stock.

2.4 Ignition System

Must be Factory stock or stock replacement only. Any spark plugs and/or spark plug wires may be used. Any initial ignition timing may be used.

2.5 Fuel Injection

Must be Factory stock or stock replacement only. Modification, machining and/or polishing of venturies is not permitted. AFM adjustment is permitted.

2.6 Intake Manifold

Must be Factory stock and remain unmodified. (Polishing, porting, port matching, etc. prohibited.)

2.7 Engine Rebuild

Engines undergoing rebuild must be built to NASA Spec Miata regulations (SM). This rule is intended to ensure that rebuilt engines do not perform substantially better than a new stock engine. Any non-factory parts or modification of factory parts that is allowed by SM regulations is permissible and supersedes 2.2 through 2.6. Restrictor plate dimensions required are as stated in 2.1.

3 Official Organizations

The Miata's on Ice (MI) regulations are a sub-section of the general technical and sporting regulations as defined by WCMA. NASCC also defines supplemental regulations regarding the ice racing events and general vehicle preparation.

These WCMA regulations should be consulted from the WCMA web site and specifically deal with:

- DRIVER ELIGIBILITY
- VEHICLE ELIGIBILITY
- VEHICLE PREPARATION
- DRIVER SAFETY

The NASCC supplemental regulations should be consulted from the NASCC web site and specifically deal with:

- CLASSES
- TIRES AND STUDDING
- VEHICLE ELIGIBILITY
- VEHICLE PREPARATION
- EVENT SCHEDULE

4 Race Start Procedure

In order to maintain close competition, the starting grid may be fully inverted according to point standings and race finish results. It is intended to hold Miata races beginning from a standing start position. This will be at the discretion of the race director depending on entry numbers and race scheduling demands.

For Miata (MI) Races, it is expected that the top 6, top 10, top 15, or full class may be inverted. Class size, track design and weather factor in the decision. For a small class size, full inversion is expected. For a class size of greater than 25 cars, a top-N car inversion is expected (N = 6, 10, 15...). This will be at the discretion of the race director depending on entry numbers.

5 Illegal Car Preparation

Warnings or vehicle exemption may result if an illegal performance enhancing modification is found. Vehicle log-books are encouraged to be used for reporting any problem areas. Random technical checks may be expected.