



**NORTHERN ALBERTA SPORTS CAR CLUB  
YEAR 2018  
ICE RACE CHAMPIONSHIP SERIES  
SUPPLEMENTARY REGULATIONS**

These rules are designed to make the activities of ice racing easier to understand and control for safe, fair and fun motorsport competition. When reading and interpreting these rules, you should remember the spirit of the regulations and understand that interpretation of any rule should be discussed with the Organizers before assuming that your interpretation is legal. These rules are not intended to "catch" the competitor, but rather to be a guideline to help you build a safe racecar that is legal within this race series.

The currently web posted *Western Canada Motorsport Association Sporting Regulations* are in effect and govern the operations of this Ice Race Series. Any and all issues not specifically dealt with in these *Supplemental Regulations* will be handled as covered by the above-mentioned regulations, or the currently posted *Western Canada Motorsport Association Technical Regulations*.

Sanctioned by WCMA and affiliated with ASN Canada FIA Inc.

Full ASN / WCMA Competition Regulations are available for viewing and download at [www.wcma.ca](http://www.wcma.ca)



## **1 GENERAL RULES AND IMPORTANT INFORMATION**

**Dates and Location** – Always check the Club website [www.nascc.ab.ca](http://www.nascc.ab.ca) or the Club's Main Facebook page (Northern Alberta Sports Car Club NASCC Racing and Events) regularly as event dates and venues are subject to change because of weather and ice conditions.

**Entry Fees and Entry Form** - Race Days fees are listed on the entry form that can be downloaded and completed prior to the event from our website. If paying cash bring correct amount, change might not be available. Fees will not be refunded after the vehicle has entered the track. MotorsportREG registration is also available for entry for the entire season at a discounted rate. Entries shall be accepted until 11:30 am on the day of the race. Late entries may or may not be accepted at the sole discretion of the event officials.

**Registration** –. All competitors must report to registration ASAP (usually located at the timing trailer) every race day to pay their entry fees, drop off registration forms and Drivers log book if not already done so on the previous day.

**Insurance Waiver** – Everyone on the race site must sign an insurance waiver. The waiver certificates will always be located at the Timing trailer. A dedicated individual will be given the task of collecting daily waiver signatures however, it remains the responsibility of every person to locate and sign the waiver. The waiver must be signed once per race date by everyone present on the ice. Officials will spot check crews at every event.

**Insurance** – Insurance is provided by ASN Canada FIA as identified in the “Summary of Insurance Coverage 2017/2018”. The insurance is specific for Ice Racing. The policy is available for viewing on the ASN Canada FIA website, or may be requested from NASCC organizers.

**Vehicle Inspection** – All ice race cars will be scrutinized by the Tech. Inspector before being allowed on the track. Cars will line up at the designated site and will be inspected in the order they arrive.

**Passengers** – Are not permitted during the races, but may be allowed at the discretion of the Clerk of the Course and the Race Director at specified times.

**Conduct** – Unsportsmanlike conduct by any driver or crew member will result in the team losing all points for the day and their entry refused for the next event. If a second incident occurs, entries for the rest of the season will be refused and a report sent to WCMA. Any sort of verbal abuse or abusive language is considered unsportsmanlike conduct.

**Car Appearance** - All cars must maintain a neat and tidy appearance. Reasonable efforts must be made to restore the appearance of a car damaged at a previous event or race. Cars will not be permitted to compete with damage that has not been repaired in a workmanlike manner. A car that is visually unacceptable, as brought to the attention of the steward and the clerk of the course by the scrutineers prior to the start of daily racing will not be permitted to race. If this occurs the entry fee may be refunded provided the car has not yet entered the racetrack proper.

**Body contact** - Body contact will not be tolerated! Penalties will be assessed for body contact as observed by race officials. A penalty box rule will be in effect. If a competitor is involved in a contact incident, they will be required to report to the Steward located in pit lane. Any driver involved in body contact and that does not report with the car to the Steward in the pit lane, may start the following race from the penalty box.

**Official Notice Board** - Will be located at the Club Racing Trailer.

### **Event Organizers:**

Mark Burrough	(c) 587-783-2708
Ken Staples	(c) 780-404-3183
Rudy van Woerkom	(c) 780-970-2148
Ryan Smith	(c) 780-278-9397
Linda Sakaluk	(c) 780-497-8472

### **Event Officials:**

Clerk of the Course	Andy de Boon
Chief Course Marshal	Linda Sakaluk
Chief Communicator	Janet Norman
Doctors **	** Paramedics and Ambulance (BLS)
Chief Time Keeper	Brian Sinfield
Scrutineer	Gary Lohues/John Sych
Registrar	Della Berg/Linda Sakaluk
Starter	Mark Andruchiw
Pace Car	TBA

## **2) TRACK**

The track shall have a minimum width of 12 m. on the straights and 18 m. on the corners. The maximum straight length shall be 400 m. The corners at the ends of the straight(s) will be designed to reduce speed in order to preserve the track surface. The track layout will be planned and supervised by a committee selected by the race organizers. Races may be run both clockwise and counter-clockwise on a course of approximately 2 km in length.

## **3) DRIVER ELIGIBILITY**

All entrants must be in possession of the following valid papers that are current for the applicable race year.

- (a) WCMA Ice Race or Amateur license
- (b) WCMA sanctioned club membership

All new drivers must attend an Ice Race School, pass a subsequent exam and be recommended by their instructor before being allowed to race. All drivers with no previous racing experience shall be required to display a novice triangle on the rear of their vehicle for their first three race events. This triangle shall have a minimum dimension of 15 cm per side with a stroke width of at least 3 cm.

Competitors will be required to obtain a WCMA Drivers Log Book. This Log Book will be handed to the Registrar at each race meet and then picked up at the conclusion of each race meet. The WCMA will supply the initial Log Book free of charge. Failure to produce a Log Book will result in the competitor's entry being refused. Log Books are a continuous record and can be used from year to year until filled. If a Log Book is filled a new one will be supplied free of charge.

## **4) VEHICLE ELIGIBILITY**

As a rule, eligible vehicles will be compact sedans, coupes or station wagons. All cars shall present a neat and clean appearance.

The following vehicles are **NOT** eligible for NASCC ice race series competition:

- A. Those with a racing weight in excess of 1250 kg (2750 lbs) for 2WD cars and 1430 kg (3150 lbs) for AW Class (4 wheel drive, all wheel drive).
- B. Those with a wheelbase in excess of 280 cm. (110 in.)
- C. All terrain, commercial, open wheel, truck or dune buggy vehicles.
- D. Tube chassis vehicles are not permitted.

## **5) VEHICLE LOG BOOKS**

A Vehicle Log Book will be issued to each competing, vehicle. It will be the sole responsibility of the entrant to produce this Log Book to the Scrutineer at each event. Failure to produce this Log Book could result in the entry being refused.

## **6) TIMING TRANSMITTERS**

To qualify for a grid position and to be scored in a race each vehicle must have a “dBcom TX1C” timing transmitter installed, and it must be functioning. The transmitter frequency number must be unique in the Classes the vehicle is entered in. The transmitter mounting location will be determined in cooperation with the “Timing and Scoring Officials”. These transmitters can be purchased from NASCC at a cost of \$200 in 2017. Rental transmitters will ONLY be available to competitors from outside the Alberta region.

## **7) DECALS**

Each vehicle will display a NASCC supplied decal as well as a WCMA supplied decal on each side of the car. In the event of a series sponsor being obtained, drivers will be required to display sponsor decals on their cars. Prominent positions may be reserved for series sponsors.

## **8) CAR NUMBERS**

Car Numbers must be identified with Timing and Scoring at the beginning and during the season and adjustments may be required to ensure consistency and clear identification within each class.

## **9) ENVIRONMENT**

It is recommended that biodegradable antifreeze be used if available. The competitor will be responsible for the cleanup of any spills. ALL teams or individuals shall have a 5 gallon pail or container for scooping up any leaked oil or antifreeze. We need to take care of the environment

Any vehicle losing oil, coolant, or fuel during a competition will be Black Flagged. A car will not be allowed to resume competition until the cause of the leak has been found and repaired to the satisfaction of the Officials. Each competitor is responsible for minimizing leaks or spills and for the cleanup of their own pit and/or paddock area. Oil spills in the pits or paddock will not be tolerated. Each competitor is required to have a drip pan and a method of containing any spills or drips (i.e.: old piece of carpet) when parked in the pit area. The utmost care must be taken to prevent any lake water contamination from leaking fluids, spills etc. It is the responsibility of every competitor to collect and dispose of their refuse (in other words - take it home with you).

## **10) FIRE SAFETY**

All teams or individuals shall have a 10 lbs ABC fire extinguisher in full view and accessible at all times. The extinguisher must be at the ready and manned during any refueling procedure.

## **11) DAILY SCHEDULE**

The actual daily schedule will be published a few days before the event, but a typical sequence and schedule of the race day will be available on the NASCC website. Schedules may be modified as necessary for special venues such as Lac La Biche.

## **12) GRIDS**

Grid position for the first race of the day will be “first come-first served” basis. All other races for that race day will be inverted order of their finishing position in the previous race. This is also known as a reverse grid.

Cars must reach their grid by the time the previous class takes the checkered flag or they will be gridded at the back in order of their arrival. Racers that arrive at the grid area late may be allowed on track to join the back of the cars that have left the grid area or they may be held in pit lane until the green flag is shown and only then allowed to enter the track after the last properly gridded car has passed the pit exit.

Novices will be gridded to the rear for the first race and grid position for future races will be decided at the discretion of track officials and the comfort of the driver.

### **13) SCORING**

All races per day per class will count for points. All races will be timed so the number of laps in each race may vary.

In the case of a red flag that caused a race be cancelled before 30% of the scheduled length no points will be awarded. If over 30% is completed of the scheduled race length it will be classed as a completed race.

In the case of a Red Flag scoring will be done from the lap prior to the display of the red flag if the race does not restart. The competitor who caused the red flag will be scored last of the racers on track when the race is stopped.

### **14) POINTS**

Individual points for each daily race will be based on an increasing order of 1 point from the last place car which receives 3 points. The second place car will receive a bonus of 1 point and the first place car will receive a bonus of 3 points. ie. A 5 car grid would be pointed 10,7,5,4,3. A 4 car grid would be pointed 9,6,4,3. A 3 car grid would be pointed 8,5,3.

### **15) CAR CLASSES**

#### **NS CLASS (No-Stud)**

This class is for two wheel drive cars running normal DOT approved unstudded tires. Also called "Rubber-to-Ice".

#### **CH CLASS (Chevette)**

This is a "spec" class for Chevrolet Chevettes\Pontiac Acadians and equivalents. No modifications are allowed other than WCMA safety and technical requirements and aftermarket replacement of head and taillights with DOT approved equivalents, and locking of the differential. All cars in this class will run on identical spec bolted tires as described in these supplemental regulations. Complete listing of Chevette Class specific regulations is found later in this document.

#### **MI CLASS (Miatas on Ice)**

This class is for stock prepared Mazda MX5 Miata's from the NA series of 1989 to 1997, and NB series from 1998 to 2005, excluding MazdaSpeed versions. All cars in this class will run on identical spec bolted tires as described in these supplemental regulations. Complete listing of Miata's on Ice Class specific regulations is found later in this document.

#### **NE CLASS (Neon Class)**

This is a "spec" class for Dodge/Plymouth Neon. No modifications are allowed other than WCMA safety and technical requirements and after market replacement of head and taillights with DOT approved equivalents. All cars in this class will run on identical spec bolted tires as described in these supplemental regulations. Complete listing of Neon Class specific regulations is found later in this document.

### **LS CLASS (Limited Stud)**

This class is for 2 wheel drive cars. All cars in this class will run on identical spec bolted tires as described in these supplemental regulations.

### **AW Cars (4 wheel drive, all wheel drive)**

This class is for cars that have power applied to "all wheels" through a common drive train. No cars have run in this class for many years, so any racers planning to bring an AW racer should provide organizers with advance notice of a week or more to facilitate the event at track, and to designate a class tire type. Commercially available Studded Rally tires are the specified tire for this class.

## **16) TIRES AND STUDDING**

### **A) ALL CLASSES**

Dual wheels are not allowed. The scrutineer is the sole judge in all matters pertaining to the legality and adequacy of competition tires. Tubes are not required; however, they are allowed in any class.

### **B) TIRE DEFINITIONS**

#### **NS CLASS (No-Stud) - Rubber to Ice**

All tires shall be DOT approved and normally available at tire stores and contain no studs or bolts. No tractionizing or other modification of the tire is allowed.

#### **CH CLASS (Chevette)**

- The spec tire for the Chevette class is the Hankook I-Pike, size P155/80R/13. The spec rim is an OEM Chevette 13" x 4.5" steel wheel. These tires are directional, so it might be wise when mounting them to buy two spares, one for each side of the car.
- Tire must not be shaved and tread depth as measured at the centerline groove (not wear bar indicators) must be 0.350". New tires measure approximately 0.380" to 0.400".
- Inner carcass of the tire must be as manufactured.
- A 1 1/4" or 1 3/8" wood spade bit is used to remove tire tread in 16 evenly spaced holes that must intersect the centre tire groove.
- All tires shall utilize M6 x 1.0 x 25 mm HD Body Bolts with washer, M6 x 1.0 Zinc Top Lock Nut and 1/4 x 1 1/4 Zinc Fender Washer .120 thick and must be used unmodified.
- The NASCC has purchased a significant amount of the above hardware for resale to Club Members. Contact Mark Burrough at [m.burrough@shaw.ca](mailto:m.burrough@shaw.ca) to purchase hardware.
- A fender washer shall be used under the HD body bolt head on the inside and the bolt will be inserted through the tire. Another fender washer shall be used under the nut on the outside of the tire.
- A polyurethane type sealer can be used on both the inside and outside to aid in preventing leaking. A ribbon style polyurethane sealer works extremely well, is easy to use and doesn't stick to your fingers.
- Number of bolts is limited to a maximum of 16 bolts per tire and the heads must intersect the centre tire groove.

#### **AW Cars (4 wheel drive, all wheel drive)**

Commercially available studded rally tires that are 170 mm or wider, using studs that protrude no more than 7.5 mm, and no more than 60 studs per foot may be used. After market stud replacements or additions are not allowed (such as Kold Cutter studs). The Black Rocket or Pryme (previously

Menard) Rally tire is strongly recommended. All studded tires shall be commercially available studded street or rally tires.

### **NE CLASS (Neon Class), LS Class (Limited Stud) and MI CLASS (Miata's on Ice)**

The following regulations shall apply to tires used on cars competing in the NE and LS class.

Cars can use either Black Rocket BR 110 studded tires (Option 1) or Old Spec bolted tires with limitations (Option 2) or new spec bolted tires (Option 3) as described below and may mix and match any of these tires on the car during competition.

#### **Option 1 - Black Rocket BR 110 studded tires.**

- Black Rocket tires shall be BR 110 in 13" 14" or 15" diameter
- The NASCC has a limited supply of Black Rockets available which can be purchased for a price of \$310 each. Contact Sean Finn at [seanfinn@telusplanet.net](mailto:seanfinn@telusplanet.net) for availability and purchase. The current stock is 6-15" and 4-14" tires and once these are gone no more will be purchased by the club.

#### **Option 2 - Old Specification bolted tires.**

- Tires built under the old rules prior to 2017 with ¼" bolts and either nuts or T-nuts will be allowed, tires with spot welding on one side of the nuts will be allowed but any other welding of nuts is prohibited.
- Tires must be shaved smooth to eliminate most of the tread down to within at 3 mm of the wear indicators.
- Bolts must conform to the 9 bolts per foot of tread and maximum protrusion from the tread face shall be 12 millimeters measured across the tread face.
- Any size tire can be used except T series (Space Saver spare) tires except for the Spec Neon class that shall use a tire in 185/60-14 or 185/65-14 size.

#### **Option - 3 New Specification bolted tires.**

- Any size steel belted radial tire can be used except T series (Space Saver spare) tires except the Spec Neon class that shall use a tire in 185/60-14 or 185/65-14 size.
- Tires shall be shaved smooth to eliminate most of the tread down to within 3 mm of the wear indicators. The NASCC has a tire shaving machine for use by club Members or Tires can be shaved at the Tire Craft Lethbridge facility contact Patrick at Tire Craft, 17803 118 Avenue, Edmonton, phone # 780 452-4481 to arrange for the shaving.
- Tires shall utilize M6 x 1.0 x 25 mm HD Body Bolts with washer, M6 x 1.0 Zinc Top Lock Nut and ¼ x 1 ¼ Zinc Fender Washer .120 thick.
- The NASCC has purchased a significant amount of the above hardware for resale to Club Members. Contact Mark Burrough at [m.burrough@shaw.ca](mailto:m.burrough@shaw.ca) to purchase hardware.
- The fender washer shall be used under the HD body bolt head on the inside and the bolt can be inserted through the tire without the need for drilling a hole. Another fender style shall be used under the nut on the outside of the tire.
- A polyurethane type sealer can be used on both the inside and outside to aid in preventing leaking. A ribbon style polyurethane sealer works extremely well, is easy to use and doesn't stick to your fingers.
- Approved nut is the Top Lock Nut specified above. T-nuts are specifically excluded and no welding of nuts is allowed.
- Number of bolts is limited to 9 bolts per foot of tread.

- Maximum protrusion from the tread face shall be 12 millimeters measured across the tread face.
- The bolts may need to be cut to meet the maximum length, but no sharpening of the bolt shall be done below 4mm of the end and shall follow as closely as possible the profile of the stock bolts.

## **17) GENERAL PREPARTION REGULATIONS FOR ALL COMPETITORS AND VEHICLES**

### **DRIVER SAFETY**

HELMETS	Helmets must be in good condition. Helmets must be classified and labeled as Snell Foundation - 2005 SA, or newer. The 2005 SA helmets will no longer be valid from Dec 31 <sup>st</sup> 2018 onwards. Approved Helmets can be found in WCMA Technical Regulations – Race (current Edition) APPENDIX 4.b: "COMPETITOR SAFETY EQUIPMENT - Helmets".
FRONTAL HEAD RESTRAINT	Not mandatory, but will be for LS and NE Classes for the 2019 season onwards. List of approved FHR devices can be found in WCMA Technical Regulations – Race (current Edition) APPENDIX 4.c: "COMPETITOR SAFETY EQUIPMENT - Frontal Head Restraint". If you have one use it !!!
EYE PROTECTION	It is strongly recommended that competitors use goggles or visors to provide eye protection.
CLOTHING	<p>Ice Racers drivers may use one piece Fire Resistant Coveralls (Oil Field) in place of an approved driver suit/underwear system. Coveralls must be Nomex, Proban, or equal with a CSA rating. Coveralls must be clean and good condition. Natural or Fire Resistant fabrics (that will not melt) are worn under the coverall and an approved driver suit/underwear systems is recommended.</p> <p>Socks made from a Natural or Fire Resistant fabrics (that will not melt) are recommended. Shoes and gloves must be made of leather or any approved fire-resistant material and must contain no holes. Shoes may have synthetic rubber soles. Gloves and shoes must have a layer of fire-resistant material next to the skin. Balaclava is required and is to made of any approved fire-resistant material. List of approved clothing can be found in WCMA Technical Regulations – Race (current Edition) APPENDIX 4.d: "COMPETITOR SAFETY EQUIPMENT - Clothing".</p> <p>The scrutineer is the sole judge in all matters pertaining to the legality and adequacy of the clothing If you have a racing suit and racing gloves wear them !!!</p>
SEAT	<p>Ice Racing classes may use original equipment seats, provided shoulder harness anchor or guide is provided immediately behind the seat back at shoulder level. Seat requirements can be found in WCMA Technical Regulations – Race (current Edition) APPENDIX 2.A.2: "VEHICLE REQUIREMENTS - Seat".</p> <p>A quality racing seat is strongly recommended.</p>
DRIVER RETRAINT SYSTEM	<p>Make sure to review WCMA Technical Regulations – Race (current Edition) APPENDIX 2.A "VEHICLE REQUIREMENTS – Driver Restraint System.</p> <p>In summary a five point SFI or FIA approved Safety Harness is mandatory and must be of the motor sport competition type.</p> <p>The harness must not have any discoloration or signs of wear and must be less than two years old from the date of manufacture for SFI belts, and less than 5 years old for FIA belts. The scrutineer is the sole judge in all matters pertaining to the legality and adequacy of the competition safety harnesses.</p>



## GENERAL VEHICLE PREPARTION

ROLL CAGE	<p>All competing vehicles must be equipped with a roll cage complying with WCMA Technical Regulations – Race (current Edition) APPENDIX 1: "ROLL CAGE SPECIFICATIONS".</p> <p>A diagonal roof bar (drivers front to passenger rear) is strongly recommended and will be required for 2019 to prevent roof intrusion and reinforce the front driver corner. FIA A-Pillar reinforcement bars may be required in the future and should be incorporated into the design of any new cage build.</p>
LIGHTS	<p>All cars must have functioning headlights, taillights, brake lights and rear fog light. Cars without functioning lights may be excluded from further competition.</p> <p><b>Headlights:</b> Standard or relocated head lights clear/blue (2) must be in good working order at the start of each day and at least one must be operational at all times on the track.</p> <p><b>Brake Lights:</b> Cars must have a minimum of four rear facing brake/tail lights at least two of which must be high-powered 32w (i.e. 1157 type), or high intensity red LED mounted on or above the trunk lid. The lenses of these lamps must be colored red.</p> <p><b>Rear Fog Light:</b> One rear facing, high intensity (min of 55 watts or brighter) AMBER or WHITE colored fog lamp, incandescent or High intensity LED, must be installed on top of the roof or at eye level and must be in operation at all times when on track.</p>
AERODYNAMIC DEVICES	<p>1) Rear spoilers are permitted provided that they comply with the following:</p> <p>A. Production rear spoiler that is standard for that model or is readily available through aftermarket channels.</p> <p>B. Lip type spoiler continuous with the deck lid fitted rearwards of the rear window, no wider than the body and bumper excluding fender flares, no further rearwards of the rear of the vehicle than the rear bumper, and may have no side panels or fences. The maximum height of this spoiler is 15cm.</p> <p>2) A front spoiler may be fitted. It shall not protrude beyond the overall outline of the vehicle as viewed from above if a bumper were fitted. It must also not protrude rearward of the foremost part of the front wheel opening. The spoiler shall be no higher than the factory grill opening.</p> <p>3) Longitudinal wings or rudders are strictly prohibited.</p>
BALLAST	<p>Ballast may be allowed to a maximum of 120 lbs based on class to enhance handling characteristics, check specific class rules for allowance. All ballast shall be solid metal such as steel and must be securely mounted within the coachwork in such a fashion that a tool is required for removal of ballast and so that it cannot come loose in the event of an accident and become a danger to the driver or other competitors. To secure ballast 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 though the reinforcing plate.</p>
BATTERY	<p>Dependent on Class rules but if not specified may be relocated. Regardless, it must be securely fastened. If in the driver compartment it shall be housed in a marine box such that any spillage is contained in the event of a roll over. Mounting shall consider the great forces involved in any rollover or collision. Metal rods and flat bar shall be used. Ratchet straps may be used to hold the marine box lid.</p>
BRAKES	<p>No car shall have ABS (Anti-Lock Brake System), all cars equipped with ABS are required to disable the ABS system before competition.</p>
BUMPERS	<p>Bumpers may be removed. If removed, all protruding brackets and hardware must also be removed. A bumper if used must be the stock one for the year and model of the car as raced.</p> <p>Bumpers may be relaced by a single piece of 2" X 6" nominal non-laminated finished</p>

	<p>soft wood lumber (such as spruce), mounted to the original bumper brackets or a reasonable facsimile. A piece of 1-1/2" angle iron, no more than 3/16" thick may be attached to the bumper brackets to allow the wood to be securely fastened. This piece of angle iron shall not exceed 4" in length. The wood shall not extend forward more than 3" from the closest coachwork at bumper height and the ends of the bumper shall not protrude horizontally past the inside edges of the tires on each side. If bumper end-caps are lost or removed, the metal bumper ends must be closed, and no sharp edges may remain.</p> <p>No other bracing is allowed ahead of the front axle centerline or within 15cm of the rear body panel.</p>
CATCH TANKS	Catch tanks must be fitted to the engine and radiator breathers. Catch tanks must be of 1 liter minimum capacity for all vehicles. They may not be housed in the driver's compartment
COMPETITION NUMBERS	All vehicles must display their competition number on both sides of the vehicle between front and rear wheels and on the front hood. Numbers must be a minimum of 10" in height and 2" in width. They must clearly contrast with the color of the car. If numbers are illegible, cars will not be timed or lap scored.
EXHAUST SYSTEM	Exhaust system must meet WCMA fabrication standards. Each car must reduce exhaust noise to a maximum level of 90 decibels at 30 meters (100 feet). If a vehicle is judged to be excessively loud, the competitor may be required to modify it REGARDLESS of the exact noise level produced. Some classes may require mufflers as a spec requirement as defined in each class supplemental regulations.
FENDERS	Fenders are mandatory and tires shall not extend beyond them or attached flaring.
FUEL	Readily available pump gasoline only (No Racing Gas or Additives).
HOODS & TRUNK LIDS	Hoods, rear hatches, and trunk lids must be double latched and secured by other methods than the stock latch. Acceptable methods are hood pins, bolts or straps
INTERIORS	All flammable trim or interior components should be removed. Vehicles may be gutted but must be free of sharp edges and must be done in such a way that the structure of the car is not weakened. Must be clean and free of loose items. All tools and equipment carried in the vehicle must be securely fastened. Fire extinguishers are strongly recommended and must be securely mounted so as not to come loose in the event of an accident.
MIRRORS	Two mirrors are mandatory. One outside and one inside at the beginning of the weekend.
MUD FLAPS	Mud flaps are required behind each rear wheel and front wheels in front wheel drive vehicles. Mud flaps must cover the entire tread face of the tire and reach to within 50 mm of the road surface, but not touching the road surface when the car is static on its racing tires and in racing trim. The mud flaps must be made from a material that will effectively prevent sailing.
TOW HOOKS	All vehicles must be equipped with at least one clearly visible and easily accessible tow loop at the front and at the rear of the vehicle. Tow loops must be non-protruding and designed to allow ease of hookup and prevent dragging (i.e.: no rope)
WINDOW GLASS	Window glass may be removed, but if used Windows must be clear enough for full racing vision. Stock drivers side window either has to be fully up or fully down. Regardless of window position a window racing net must cover the driver's window opening and it is recommended that it be attached to the roll cage and not the door. Window nets must be in good condition. The window net release shall be placed so that safety workers may easily find it in an emergency. If a stock window is used in the up position be aware that rescue workers may have to break the window to gain access. All windows may be replaced with an alternate polycarbonate material (Lexan not Plexiglas) but competitors must install the driver's door window with a view to easy emergency access from the outside.
WINDSHEILD AND WIPERS	Windshields must be kept clear of ice and fog at all times. Ice and/or fog obstructing the driver's vision will cause the competitor to be "Black Flagged". Windshield wipers are required on all competition vehicles. It is recommended the windshield be retained with exterior window clips.

## **18) SPECIFIC CLASS REGULATIONS**

If modifications to the car are not listed in each specific class regulations they will not be allowed, no exceptions. The answer to your question – “Can I?” – is no, changes must be listed as acceptable in the rules to be allowed.

### **CH CLASS (Chevette)**

VEHICLE ELIGIBILITY	Eligible vehicles are Chevette/Acadian/Scooter/T1000 built between the years of 1976 to 1987. All parts may be interchanged between all years with the exception of specific individual items as outlined elsewhere in these rules.
BODY	The entire body must remain stock, as produced, excluding safety modifications. 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.
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.). Cutting and heating of coil springs to alter ride heights is allowed. Shock absorbers are to be stock, or stock replacement units specific to the models listed. 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.
INTERIOR	Dash must remain intact. Cutting or removal of interior sheet metal is not allowed. All glass must remain stock and intact. Emergency entry into the rear hatch must be achievable from outside.
TRANSMISSION	Factory stock 4-spd. Or 5-spd. 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 3-spd. Automatic. Must be operable in all gears and retain stock torque converter.
BUMPERS	Factory stock bumpers and location must be retained. Factory stock impact absorbers must be retained (not modified or welded). Bumpers may be interchanged between model years.
REAR AXLE	Must be original equipment only. Ratios between 2.71:1 and 3.8:1. The 4.11:1 ratio (rare) is not allowed. Any traction improving modification is optional. The differential may be locked by any of the following means: Locker, spool, shimming or welding the spider gears.
BALLAST	Ballast is allowed and should be located in rear seating area or between rear rails or in spare tire well.
BATTERY	Must remain in stock location.
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.
AIR CLEANER ASSEMBLY	Must be Factory stock or stock replacement only. Air filter element may be eliminated. Aftermarket replacement filter element allowed. Inlet supply hose may be rerouted away from incoming ice and snow. For safety reasons, it is NOT permitted, to route inlet supply into driver's compartment.

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 up to the stock bumper height. 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 10 cm by 10 cm by 1 cm thick, either by welding or by 4 each 3/8" bolts.
ENGINE	<p>1400CC/1600 cc factory engine only. Engine recondition allowed within factory specifications (No Performance modifications).</p> <p>Maximum cylinder overbore 0.040". Deck of cylinder block may not be resurfaced. 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 must remain stock or stock replacement. Timing cover may be removed.</p> <p>Factory stock cylinder head only. No cylinder head modifications are permitted (No port modifications allowed e.g. polishing, porting, port matching). Cylinder head may be resurfaced, but not beyond minimum spec of 3.550", as measured between head surfaces. Valve job must not extend any deeper than 0.375" below seating angle. Combustion chamber modifications are not allowed. Valves must be stock or stock replacement, and used as supplied, with no back cutting, undercutting, or polishing allowed. Stock or stock replacement valve springs only. Valve spring shim to correct the spring installed pressure is allowed.</p> <p>Factory stock or stock replacement camshaft only. Factory stock lift, duration, and lobe separation dimensions only. Camshaft timing may be altered to improve performance.</p> <p>Factory stock ignition system or stock replacement only. Distributor timing may be recurved.</p> <p>Factory stock carburetor or stock replacement only. May be interchanged between model years. Carburetor must carry a factory G.M. part number. Choke assembly, including choke plate may be removed. Modification, machining and/or polishing of venturies is not permitted. Accelerator pump circuits and discharge nozzles may be enlarged. Re-jetting of carburetor to improve performance is allowed. Pollution control equipment may be removed. Base gasket heater may be removed.</p> <p>Factory stock intake manifold and remain unmodified. (Polishing, porting, port matching, etc. prohibited.)</p>
RACE START PROCEDURES	Races are to begin from a standing position. (Standing start).

### MI CLASS (Miata's on Ice)

VEHICLE ELIGIBILITY	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 except for specific individual items as outlined elsewhere in these rules. No Mazdaspeed models are permitted.
BODY	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.

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 quickeners).
INTERIOR	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.
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.
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.
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.
WHEELS	Factory stock, original equipment, 14" or 15" steel wheels must be used. (No aluminum/magnesium wheels allowed).
ROLL CAGE ADDITIONAL ELEMENTS	A plate must be installed in 2 pieces ahead and behind the diagonal roof bar. The roof plate must fill the same area but can be installed as 2 triangles filling the two openings. 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).
HEADLIGHTS	Retractable headlights may be locked in the up position and the actuators may be removed.
BALLAST	Ballast is allowed and should be located in the trunk in the spare tire well.
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.
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.
AIR CLEARNER 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 permitted, to route inlet supply into driver's compartment.

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.
ENGINE	<p>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.</p> <p>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)</p> <p>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.</p> <p>Factory stock cylinder head only.</p> <p>Camshaft must be Factory stock or stock replacement only. Factory stock lift, duration, and lobe separation dimensions only. Camshaft timing must remain stock.</p> <p>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.</p> <p>Fuel injection must be Factory stock or stock replacement only.</p> <p>Intake Manifold must be Factory stock and remain unmodified. (Polishing, porting, port matching, etc. prohibited.)</p> <p>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.</p>

**NE CLASS (Neon Class)**

VEHICLE ELIGIBILITY	Dodge, Plymouth, and Chrysler Neons, 1995-2005 (95-99 first generation, 2000-05 second generation) SOHC two-door or four-door body models. No SRT-4, ACR or R/T edition cars or parts. No DOHC edition cars or parts.
BODY	The entire body must remain stock, as produced, excluding safety modifications. Hood is to be secured by at least two hood pins. The factory hood latch must be disabled.
STEERING, SUSPENSION AND BRAKES	Stock suspension components only. Stock springs may be cut to adjust ride height - 95-05 SOHC Neon parts only, no swapping between generations. Mixing and matching springs and sway bars is allowed - 95-05 SOHC Neon parts only, no swapping generations. Stock brake systems, after-market brake pads and brake lines are allowed. Mixing and matching discs and drums is allowed - 95-05 SOHC stock replacement Neon parts only.
INTERIOR	Airbags must be removed from the driver's side and removed or disabled on the passenger side. Stock dash (additional after-market gauges are allowed). All interior panels must be removed, including carpet, trim, etc., door panels may be retained. Drivers, passengers, and safety workers must be protected from sharp edges.

TRANSMISSION	Automatic or manual transmission from a SOHC motor only with no modification. No swapping between generations. Short shifters are allowed. No lightweight flywheels – no exceptions
BUMPERS	Factory stock bumpers and location must be retained. Cracked / broken bumper covers must be replaced prior to race day.
WHEELS	14 inch steel or aluminum wheels, after-market wheels are allowed.
BALLAST	No Ballast allowed in this class.
BATTERY	Battery may be relocated to trunk (must conform to WCMA rules).
EXHAUST SYSTEM	Exhaust modifications are allowed past the stock catalytic converter.
AIR CLEARNER ASSEMBLY	Air Filters may be removed and after-market filters are allowed. Stock airbox must be retained.
ENGINE	Stock single overhead cam engine (SOHC). No mixing and matching of DOHC and SOHC bottom ends/heads. No 2.4 liter engines – no exceptions. Stock intake manifolds only. Stock fuel tank may be retained or replaced with a fuel cell (must conform to WCMA rules). Mixed and matched throttle bodies are allowed from SOHC 95-99 within first generation cars only. First and second generation SOHC Neon ECUs - stock ECUs only – no swapping between generations.