

# Island Mini Stock

Racing Association

**4 cylinders**

**Based on Vancouver Island**

**MAX 4 CYLINDERS  
MAX 160 FACTORY RATED HP ENGINE**

2025 Rules Package

Ver. **2024.10.8**

## **DISCLAIMER**

Please remember that the rules set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events.

These rules shall govern the condition of all events, and by participating in these events, all participants are deemed to have complied with these rules.

NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OF OR COMPLIANCE WITH THESE RULES AND/OR REGULATIONS.

They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator or Official.

Specific Officials shall be empowered to permit minor deviation from any of the rules herein or impose any further restrictions that in his/her opinion do not alter the minimum acceptable requirements.

NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATION OF SPECIFICATIONS.

**Any interpretation or deviation of these rules is left to the discretion of the Officials/Management. Their decision is final.**

## **APPLICATION OF RULES**

1. The rules set forth in the various sections are designed to provide for the orderly conduct of racing events and set minimum acceptable standards of conduct and fairness.
2. Technical and Construction rules, Competition rules and Club & Membership rules are in effect without change. Changes to the rules is at the discretion of club management.
3. Safety and Safety gear rules of racing venues attended will supersede the rules within this package. Advisories may be issued to reflect the current operating procedures of the club and agreements in place with racing venues.
4. If in doubt of interpretation, contact the club Management.

# **TECHNICAL AND CONSTRUCTION RULES**

## **Preface**

These rules were not written for the betterment of any one car, chassis or engine. Any variation from these rules must receive prior written approval from the Technical Committee. Based on reasonable fact, the technical committee may recommend adjustments to these rules to level the competition.

No express or implied warranty of safety shall be taken from publication or compliance with these rules and or regulations, they are intended as a guide reflecting acceptable standard by the membership of the club and are in no way a guarantee against injury or death to a participant, spectator or Official.

Technical committee may permit minor deviation, impose further restriction and with discretion provide interpretation and deviation that in their opinion do not alter the minimum acceptable standard and provide equality of competition. Their decision is final.

## **Eligibility**

### **Parts sources**

1. Bodies, chassis and pans, suspension components, engines and transmissions are to be sourced from a 4 cylinder, minimum 4 passenger (forward facing seats) vehicle originally intended for sale in North America (except where otherwise noted in the rules).
2. Must be a front engine, FWD or RWD only. No Rear or mid-engine chassis permitted.
3. All components for declared vehicle must match the manufacture of declared chassis. No Mixing and matching of manufacturer components.

### **Prohibited**

1. Wagons, vans, t-roof or soft top cars, compact utility vehicles, independent frames (truck), all wheel or 4-wheel drives, 4-wheel steering.

If you have a car that you would like to build that falls in the prohibited list, please contact Club Management to open a discussion.

## Body

1. **Required Removal:** All Interior flammable material, glass windows and operators, door latches, (doors to be welded or bolted shut, or replaced with door skin), redundant wiring harness, door, hood and deck latches and hinges, exterior trim and moldings, lights and lenses and support assemblies.
2. Stock Glass or Lexan windshield, minimum 1/8" thickness, if no center bar is provided in cage, back up with a 1/2" x 1/8" bar or 1/2" diameter tube securely mounted.
3. All exposed metal edges to be rolled or suitably finished for safety.
4. Soft nose bumper skins, tailpieces, feathering smoothly to body lines, securely mounted with contact point at 16" ride height
5. Bumpers not to extend more than 32" *at contact point* beyond tires at front and 38" behind tires at rear.
6. Top of wheel tread to be contained within body line by either extending fenders or providing rigid fender extensions.
7. Body supports to be constructed of small diameter round tubing. No angle or square tube. All body components are to be fastened securely by smooth faced mechanical fasteners, (Exposed fasteners should be pan head bolts or rivets).
8. Rear of car to be enclosed. Sunroofs to be removed and enclosed.
9. Finished body to present smooth non snagging surface at any point where body contact may be expected.
10. Paint schemes to be contrasting tasteful graphics suitable to the class and visible in darkness.
11. Car numbers to be Minimum 12" high on both doors, 18" high on roof and 4" high on front/rear of car in contrasting color.
12. Top 5" of windshield to be left for series sponsor, when applicable.
13. Removable panels (hood and deck lid) are to be easily removable for emergency crews by use of hood pins or Dzus style fasteners not requiring specialized tools.
14. Removal; gutting of doors, trunk and deck lids, door posts, firewall above vertical upturns, wheel wells, interior liners and miscellaneous panels, to achieve a single layer body skin and floor pan.
15. Removal of body skin and replacement with fiberglass body skins, or portions of skin.
16. Street style ground effects, air dams and splitters, securely mounted, 3" min height above ground if solid/metal and no minimum height if flexible (bumper skin, rubber, etc.)
17. Air dams and splitters not to extend more than 3" in front of bumper or outside body lines on side.
18. Wings or spoilers, street styled, factory or similar design appropriate to car, rigidly mounted not to extend outside deck sides, beyond bumper or above roof. All wings and spoilers to be approved by tech committee. Maximum face dimension 12" wing, 8" spoiler.
19. Body swaps are allowed, wheel wells centered, and car scaled to fit.

20. Emergency repairs may consist of quick straps or tape.
21. One non original hole in body allowed for exhaust, flush to body at surface
22. Trimming of wheel wells for clearance, edges to be rolled and smooth
23. Hood scoops not higher than 1.5". Hole on hood minimum 1" greater diameter than air cleaner.

## **Prohibited**

1. Removal of any portion of unibody without suitable reinforcement for structural strength.
2. Ram air boxes.

## **Driver compartment**

1. Firewall of minimum 0.020" steel sheet sealing engine compartment and fuel compartment
2. Installation of min 0.020" steel skin above driver(hoop) and door skin if fiberglass body is installed
3. Drivers compartment to be sealed from passage of flame, gas fumes and exhaust fumes
4. Seal all holes over 1" diameter with steel sheet
5. Protect all penetrations through firewalls with grommets to prevent chafing, maximum penetration diameter 1"

## **Cage Construction**

1. Full roll cage and door bars constructed of minimum 1 ½" diameter x 0.090 wall thickness seamless or electric weld rolled steel tube consisting of:
  - (a) main roll bar with diagonal brace from top to bottom, and lower and mid spreader bars.
  - (b) three horizontal driver side door bars with two vertical doors bars (top bar at top of door skin)
  - (c) two horizontal passenger side door bars with two vertical doors bars (top bar at top of door skin)
  - (d) two front vertical posts spread with a dash bar and transmission bar (transmission bar may consist of portions of existing floor pan and transmission support if restrained)
  - (e) Hoop (Halo) bar
  - (f) All connections of roll cage to be welded and gusseted with a minimum of 2" length to each gusset leg.
  - (g) Front and rear braces, seat support frame constructed of minimum 1½" diameter x 0.060 wall thickness seamless or electric weld rolled steel tube
  - (h) Weld 1/8" thick steel plates to factory sheet metal (floor pans and light

gauge frame rails) to allow distribution of forces when attaching roll cages and braces.

2. **Recommended:** Nose/tail pieces backed by rolled internal bumper, minimum 1 ½" diameter x 0.060 wall and mounted at 16" height, attached to frame clip with nested pipe or crush mounting and shear pins/bolts (¼" recommended). Ends to have radius and extend 4" alongside if car Crush zone of 12" from front or rear bumper to any rigid portion of the frame.
3. Bumpers or bodies on front wheel drives may be extended slightly to achieve this 7 - Nested or collapsible bumper mounting is not to project more than 4" into crush zone from a flat face on the frame
4. **Recommended:** Removable Nerf (Rub) rails of maximum 1" x 2" rectangular or 1.5" diameter steel tube extending to within 6" of tires, mounted at 16" height alongside of body, ends turned into body and smooth, rail face to be inside tire face.
5. All bars except nerf bars to be contained inside body skin.
6. Easily accessible hook up/lift points at front and rear of car. Points to be marked and labelled for emergency crews.

### Recommended

1. Windshield (Ernhardt) Bar
2. Centre Halo bar
3. Attachments to roll cage made by welding tabs or solid eye bolts
4. Additional reinforcement/cage to limit suspension mount/pan damage.
5. **HIGHLY RECOMMENDED – Foot bar** constructed of minimum 1½" diameter x 0.060 wall thickness seamless or electric weld rolled steel tube

### Prohibited

1. Excessive construction of roll cage and body supports that prevents crush of external skin or presents a puncture hazard to other cars.
2. Welding main roll cage directly to sheet metal without plates.
3. Drilling holes in main roll cage

## Chassis and suspension

1. Maximum wheelbase **105"**.
2. Maximum width **74"** measure to outside bulge on tires.
3. Minimum **3"** ride height to any rigid portion of car, or engine. Oil pan and transmission are not to be lowest point of cars.
4. Bay bars are permitted.
5. Spring location to match suspension declaration and component selection.
6. Floor pans must be complete from vertical upturn at front firewall to axle centerline at rear, and rocker to rocker. All cracks or damage in floor pans to be repaired with minimum 0.020" steel sheet. Existing floor pans may be reinforced with minimum 1 1/2" x 0.060 wall square tubing frame rails.
7. Frame horns may be reinforced or replaced with minimum 1 1/2" x 0.060 wall square tubing.
8. Arm and sub frame components may be fabricated to match dimension and style of OEM factory components.
9. Mounting points may be reinforced, slotted and elongated.
10. Stock or OEM replacement bushings, polyurethane bushings.
11. OEM steering components matching declared chassis manufacturer.

## Suspension

1. All suspension components must be OEM production parts from a USDM vehicle matching the manufacturer of the declared chassis.
2. All components, wheelbase and mounting for suspension must match make and model of declared chassis. Relocation of upper shock mounting location permitted.
3. Maximum of four shock absorbers, one per corner. *MacPherson struts may be drilled and drained. Heim ends allowed.*
4. Maximum of 4 height adjustments allowed, may be accomplished by ladder bars on leaf springs, jacking bolts on arm mounted springs, cut and turn of torsion bars and coil over sleeves over shocks/struts.
5. Strut towers may be removed, and custom mounts built. MacPherson struts may be adjusted for camber and caster by relocation of top mount or use of adjustment plates.
6. MacPherson strut lower spring cup may be repositioned by sleeve or clamped brackets.
7. Heim ends / bump sleeves allowed on outer tie rods.
8. Adjustable sway bars and Panhard bars
9. After market, Racing and cut OEM springs. No Bump Springs Permitted.

10. Shocks may be OEM style single adjustment replacement shocks, steel bodied race shocks allowed. Non Rebuildable.

## **Prohibited**

1. Aluminum or Coil over (threaded body) shocks, exotic racing shocks
2. Adjustable links and control arms
3. Spherical bearings or solid bushings.
4. Drop spindles
5. Re-valving or change of valving of shocks at track.
6. Any chemical alteration of tire compound.
7. Any form of suspension adjustment from the driver cabin.



## Engines

Please check with tech for legality of engine modifications

**a - Carbureted-** Any naturally aspirated single overhead cam 4-cylinder engines up to a maximum original factory horsepower rating of 160 HP, maximum 2440 cc original engine size.

### Permitted

1. OEM production block, crank and heads, stock stroke (same manufacturer)
2. Two-barrel carburetor not exceeding 350 cfm, 1.21" maximum venturi size, with original air horn
3. OEM intake may be port matched to head and carb, max 1 ½" depth, factory runner surfaces.
4. Any engine up to a maximum of 2440 cc original displacement with increase of bore to 0.040" (1.0mm) oversize
5. Smaller engines are not limited on bore oversize
6. Any cam and valve-train, hydraulic, roller or solid
7. Any OEM or forged piston
8. Stock or Oversize valves
9. Multi angle valve grind, maximum 75-degree seat angle.
10. Minor clean-up of casting imperfections such as ridges and sharp corners
11. Multi angle valve seats
12. Beaming, shot peening and balancing of rods
13. After-market steel alloy rods with solid web and beams
14. Compression up to a maximum of 12.0:1
15. Carburetor adapter plate and gaskets up to 2 1/4" maximum thickness
16. Carburetor may have choke assembly removed, power valves, and jets may be changed
17. Aftermarket ignition systems (MSD etc.), distributors and crank triggers

### Prohibited

1. Magneto ignitions
2. Dry sump oil systems
3. Internal modifications to carburetors/metering blocks
4. of crankshafts/ knife edging.

## **b - Fuel Injected**

Any USDM 4-cylinder engine up to a maximum of 2440 cc original displacement original factory horsepower rating of 160 HP.

Declared engine must match the chassis manufacturer of the declared vehicle.

1. All engine, air intake & fuel delivery, ignition and internal components to remain OEM, or OEM spec direct replacement for declared engine.
2. Fuel pressure to remain within factory spec.
3. Factory wire harness including all sensors related to engine and electronic control unit

## **Allowed**

1. Clean-up of head and block surface only, max .010 inches
2. Any air cleaner
3. Exhaust manifold/header change subject to technical committee approval
4. Removal of emissions controls (EGR, EVAP, Air Injection/pumps, catalytic converters)

## **Prohibited**

1. Modifications of any engine or control component, or mixing of components
2. Increase of bore.
3. Aftermarket electronics.

## **General**

(these rules apply to all engines in conjunction with rules specific to engine type)

1. Exhaust system and muffler exiting to ground behind driver or passenger side, not exceeding 90dB noise level measured at 100 ft distance behind car. Also to meet track rules if more restrictive.
2. Mechanically sealed dipsticks
3. Minimum 1 Liter metallic radiator overflow/ catch can seal with rollover check valve
4. Minimum 1 Liter metallic oil vent breather overflow catch can with rollover check valve (sealed system).
5. Radiator remaining in stock location (front of engine) Mounting may be changed
6. Operating starter and (optional) Alternator
7. Engine mounts may be reinforced or manufactured (solid)
8. Oil pan capacity may be increased

## Prohibited

1. Engine setback. Engine location determined by bellhousing relation to firewall or front axle centerline.
2. No portion of a cooling system may be installed in a driver's compartment
3. Lightening/Balancing of crank or knife edging, non-stock counterweights
4. Turbo or super chargers, nitrous injection
5. Use of antifreeze or glycol compounds
6. Removal of any casting identification or serial numbers on engine parts, sensors and accessories.
7. No portion of exhaust is to be exposed in driver's compartment.

## Fuel

1. Automotive fuel dispensed from a retail service station (unmarked) maximum octane rating of 94 for EFI Motors. Carbureted motors are permitted to use Blended or Race fuels.
2. Fuel lines including (EFI) returns running through drivers' compartment must be enclosed in steel.
3. Electronic fuel pumps require a shut off switch (oil pressure switch) Momentary over-ride allowed for startup
4. Vehicles with stock gas tanks located forward of the rear axle are permitted. All other vehicles must have a Fuel Cell. ***It is highly recommended that all vehicles have a proper racing fuel cell installed.***
5. Fuel cell designed for circle track racing, max 8-gallon size enclosed on min 22-gauge steel, securely mounted and protected by 1 ½" x .125" strapping or 1x1 tubing, attached to cage or frame/body.
6. Fuel cell is to be located minimum 12" from bumper, in opposite end of car from engine, and have 10" ground clearance.
7. Fuel cell may only be filled through a cap mounted directly on cell.
8. Quick turn caps are to be tethered by safety cable. Metallic filler necks and cell components are to be grounded to car frame.
9. Fuel cell vent lines must have check valves for rollover

## Transmission and Drivetrain

### a - Standard Transmissions (OEM)

1. OEM stock clutch and single disc
2. OEM standard transmissions

3. Clutch scatter shield, min .250" steel or approved conveyor belt material, minimum 180 degree with full driver protection.
4. Operational first and reverse gear.
5. OEM stock flywheel may be lightened and balanced, or billet steel flywheel

### **Prohibited**

1. Aluminum flywheels, ram clutches, couplers, mini clutches or multi disc clutches.

### **Automatic Transmissions (OEM)**

1. Operational torque converter
2. Sealed dipstick

### **Prohibited**

1. Electronic control alteration

## **Driveshaft on rear wheel drives**

1. OEM steel drive shaft, painted white
2. Two drive shaft loops, min 1/4" x 1" within 8" of each end of shaft

## **Differentials on rear wheel drives**

1. OEM axle/differential, solid or independent depending on construction
2. Breathers preventing accidental loss of lubricants (rollover protection)
3. Open style or locked by welded spiders or mini spools
4. Same Manufacturer Rear end swaps maintaining same attachment, style and configuration.

### **Prohibited**

1. Quick changes rear ends
2. functional limited slips
3. full spools or lockers.

## **Brakes**

1. OEM type operational brakes required on four corners of car
2. OEM Stock mounts and brackets for front brake calipers.
3. Rotors must bolt to spindle/axle hubs.
4. Rear brakes may be converted to disc brakes using all OEM calipers and ferrous rotors
5. Tilton style/ proportional dual master cylinders permitted
6. Proportioning valves permitted
7. Custom brackets for rear disc brake calipers permitted

## **Prohibited**

1. After market or home grooving, drilling, venting of rotors

## **Electrical**

1. Battery restrained in a reinforced acid proof / container securely mounted to a solid portion of floor pan or frame in drivers compartment behind driver (unless otherwise approved by tech committee)
2. Battery terminals are to be protected against shorting.
3. Battery master (kill) switch mounted in a conspicuous and easily reached centered dash or tunnel position that is accessible by driver and track safety staff from both sides of car. On/Off positions to be clearly labelled

## **Wheels and Tires**

1. Tires to club spec for season Maximum 6 Tires per season. At club discretion additional tires may be allotted in the case of a cut down or racing incident.
2. Rims 13" or 14" diameter - maximum 7" width. Steel racing type wheel.
3. Aluminum or stock style steel wheels will be permitted for the 2025 season at the discretion of club management.

## **Vehicle Weight**

### Vehicle weight restrictions.

1. All carbureted vehicles will have a maximum weight of 1lb/CC of declared displacement. E.G. 2000cc built motor cars must weigh in at a min weight of 2000lbs
2. EFI engines please see weight chart below based on manufacturer declared HP Ratings of the declared engine.
3. Steel or Lead weights, minimum 10lb securely fastened to floor pan or frame by multiple fasteners and washers, painted white and labelled with car number.
4. Maximum Left Side Weight 56%
5. No limit to Rear weight.

### Communication

1. No two-way communication between crew and driver is permitted
2. Mandatory Raceceiver for one way communication from race control.

### Reference

<b>Rated HP</b>	<b>Min. Weight</b>
145-160 HP	2350 lbs.
130-144 HP	2200 lbs.
120-129 HP	2000 lbs.
< 120 HP	1800 lbs.



# Driver Safety

1. Each owner/driver is responsible for their own safety equipment as it pertains to condition and wear, expiry dates and suitability of use in racing events. Drivers should fully understand the limitations of protective ratings such as SFI ratings.
2. Annual service check of fire extinguishers
3. Installation or use of all equipment is to follow manufacturer's instructions, to be always kept available for inspection.
4. Driving suit, SFI rated or equivalent
5. Helmet rated for automotive racing (current Snell or equivalent)
6. Fireproof driving gloves
7. Fireproof driving shoes
8. Hans style neck restraint system
9. Five-point seat harness belt system, 3" double shoulder strap, 3" lap belt with quick release, 2" sub belt, mounted securely to cage on welded tabs and bolts, max 5 years old
10. Fire resistant Roll bar padding on all bars within reach of the drivers' limbs.
11. Window net manufactured for racing with quick release mechanism positioned for removal by both driver and safety crews
12. 2 ½ lb. class BC fire extinguisher in drivers' compartment
13. 5lb dry chemical extinguisher visible in pit area.
14. High back (headrest) one piece aluminum racing seat
15. **Highly Recommended:** Collapse mechanism on steering shafts with functional quick release on steering wheel
16. On board fire extinguisher systems, minimum two outlets, one to engine compartment, one to fuel cell area, release activation from drivers' position
17. Aluminum leg, rib, helmet and shoulder extensions providing further restraint/support of driver or containment seats

## Prohibited

1. Any frayed, damaged/cracked or soiled safety equipment.



# **COMPETITION RULES**

## **Sportsmanship and Conduct**

1. Car appearance to be maintained regularly – Owner/driver is responsible. owner and driver shall always be responsible for the appearance and conduct of their pit crew.
2. All persons entering the pits must sign in under a car number. When one signs for a pit pass, he/she accepts these rules and agrees that he/she and his/her crew will abide by them; “crew” means anyone signing in at the pit gate under that car number.
3. Drivers and/or a pit crewmember shall always be with their cars.
4. All participants at Club venues are expected to conduct themselves in a calm and courteous manner, speak in a respectful manner and remain mindful of the monetary investment made by all the members of the Club

## **Pit Rules**

1. Cars/Drivers must be registered with club before entering track.
2. Noone under the age of 14 will be allowed in the pits without track permission
3. All drivers and cars/trucks must be ready to run when called upon to do so, or they will lose their starting position.
4. Drivers are responsible for cleanup of their pit area.
5. Pit meeting attendance is mandatory for all drivers.
6. There will be a mandatory fine for each party involved in any fighting before, during, or after any racing event and removal from the venue

## **Rookies and Driving Ability**

1. Before competing, all rookies must complete a minimum of one practice session under the supervision of club management before competing in an event.
2. Anyone who has not completed 3 races at IMSRA level or above is considered a rookie.
3. Rookies shall always display yellow tape on rear bumper while on the track until the Driving.
4. Rookies shall start at the back of all races for a minimum of three races, or until they have demonstrated a level of confidence that is accepted by club management.
5. Drivers new to the club with elevated racing experience are not eligible as rookies. Defined as any driver that has completed 3 or more races in a class at a higher level of racing than IMSRA.