

## **Super Mini Stock**

The purpose of the "Super-Mini" class is to give those drivers who have outgrown the "Zero" level cars and wish to race at greater speeds without incurring the costs of "Street-Stock", to race with others who respect the costs of owning a car that isn't an "Econo-Box", to enter this class you must have, 3 years at least in "Mini-Stock" or higher (exemptions may be granted on a case by case basis-class drivers make this decision). \* Everyone and Every car is welcome year one, restrictions apply after year one.

### **DESCRIPTION OF CAR**

Any stock four-cylinder, No 4x4 or rotary engine cars allowed. Cars must be 10 years or older. Cars to remain stock-appearing. No alterations or modifications will be allowed unless specifically mentioned in the following rules. The engine "MAX" size is 2.5 litres dual overhead cam 4 cylinders non turbo, the horsepower is limited only by stock hp produced by the engine. Must have been originally produced in a car with a seating capacity of 5. No Trucks, Uts, SUV, Vans

\*\*All "Mini-Stock" rules are followed with the following exceptions (there may be things allowed in "Mini-Stock" which are NOT allowed in this class), until the rules are fully established each grey area will be looked at on a case by case basis (when in doubt tech is always right) ask tech do not assume

### **ROLL-CAGE - SAFETY REQUIREMENTS**

- 1) Cage must be minimum 1 15/32" OD, .095 wall steel pipe. No exhaust pipe or galvanized pipe allowed. Four point roll cage mandatory. (door bars may not be welded to body).
- 2) A pair of "rear" supports may be added but are not required (6 point allowed)
- 3) NO touching the firewall allowed (no support may touch the firewall)
- 4) A 50 point bonus will be given to any car which installs a second seat (following all the rules for a driver's seat install), allowing a passenger. This is reoccurring (every season its installed the car receives 50 points)
- 5) Must have minimum four door bars on left side (extending into driver's door) and two door bars on the right side. Top bar to be no more than 4" below top of door. Must have at least two rows of vertical bars between driver's door bars. One vertical bar between passenger door bars. Anti-intrusion plate recommended on driver's door bars.
- 6) Posts to be welded securely to frame or to minimum 4" square 3/16" steel plate fastened to floor with a minimum of four 1/2" grade 8 bolts. Must have steel plate under floor with bolts going through top plate, floor and bottom plate. If welding cage to frame, gusseting or reinforcement allowed to strengthen mounting area. Contact tech crew.
- 7) Bars that could come in contact with driver must have approved padding on them.
- 8) Roll cage must be passed by tech crew.
- 9) Gusseting of cage recommended.
- 10) Must use racing seat. Must be securely attached to the roll cage from the lower left door bar to a bar in the center of the vehicle. Must be bolted down with min. of 4 x 5/16 bolts on the bottom and 2 x 5/16 bolts across the top below the shoulder belt opening. All seats will have headrests.

### **BODY**

- 1) All flammable materials, chrome trim, pot metal and glass to be removed.
- 1) Firewall to remain stock and have all holes covered or filled.
- 2) No body panels may be removed except for driver's door panel. This may be removed for door bar installation. Driver's "B" pillar may be removed to allow easier exit from car.
- 3) No modifications of body allowed (repairs allowed) must remain looking stock (this is to maintain structural integrity) One door mirror allowed (a single convex mirror (roll cage mounted) inside the body envelope drivers side allowed)
- 4) Fullview rearview mirror allowed electronic mirrors allowed (none protruding out of the body envelope) internal screens allowed to project images from electronic mirrors
- 5) Fenders may not be radiused.
- 6) Missing body panels must be replaced by the next race weekend.

- 7) Bumpers must be strapped to metal body or frame with securely attached minimum 1/8" thick 2" wide steel.
- 8) Doors must be welded or bolted shut.
- 9) Stock latching of hood and trunk lid must be removed and replaced with hood pins (reinforced with large diameter washers).
- 10) All cars must have either a factory glass or Lexan windshield. No plexi-glass allowed. Must have a vertical bar in center of windshield to deflect hood upwards in case of accident. Must be min 1/8" thick 1" wide steel. Two bars required if using stock windshield. If factory glass windshield is used driver must wear either approved eye protection or a helmet with full faceshield.
- 11) All cars must have a driver's window net. Window net must be mounted so that it falls down when opened.
- 12) Quarter windows of tin or Lexan allowed for sponsors. No other windows allowed.
- 13) Must use racing seat. Must be securely attached to the roll cage from the lower left door bar to a bar in the center of the vehicle.
- 14) Driver's door may have top 4 inches (maximum) folded in to allow easier entry and exit. Top door bar must be at top of door opening if door is modified.
- 15) Seatbelts must be attached to cage with maximum size bolt that fits seatbelt mounts without modifying seatbelt mounts. Grade 8 or better.
- 16) No brazing allowed on car-parts must be bolted or welded only.
- 17) No plastic fire extinguisher mounts.
- 18) Optional spoiler on front and rear bumper, not to protrude past widest point of fender.
- 19) Rub rails optional. Rub rails with a maximum size of 1" x 1" 1/8" square tubing may be installed at the widest point of the body, touching the body during its entire length, wheel well to wheel well. It must be painted the same colour as the background it touches and be as inconspicuous as possible. Mounted with minimum 3 3/8" carriage bolts, with one bolt in centre of bar and one at each end, not mounted through to the roll cage. Ends must be cut and capped at 45° angle (to prevent hooking of other cars)

## **SUSPENSION**

- 1) Any non adjustable shock system Example Koni Orange OK - Koni Yellow NO GOOD (must provide component part numbers list to tech during tech in (this list will not be shared)) 1) NO Electronic suspension components allowed
- 2) NO Air dependent suspension components allowed
- 3) MAX lowering of 1.5" from stock (must provide component part numbers to tech during tech in)
- 4) Cutting springs ok as long as ride height is not lower than 1.5" under stock (may add spacers)
- 5) Camber all 4 wheels restricted to upper components only
- 6) no lower component changes allowed (that change track) if they change the cars factory track. Aftermarket parts ok to achieve this
- 7) NO Wheel spacers (no changes to stock track allowed)
- 8) Any "stock" component from Make & Model of car (re: any stock cavalier part can go on a cavalier, any stock civic part can go on a civic etc....)
- 9) Polyurethane Bushings allowed
- 10) Aftermarket rear sway bars allowed (May pre-load)
- 11) Any Tire size allowed, Minimum sidewall 3.75" as calculated by: [https:// tiresize.com/calculator/](https://tiresize.com/calculator/) (any profile, 60, 55, 50, 45, 40, 35 etc....) –
- 12) No Aftermarket rims (this will be looked at during next rules writing)
- 13) Stock factory aluminum rims allowed.
- 14) No studded tires allowed. Stock, DOT approved street legal tires only

- 15) No stager allowed
- 16) Stock size rims and tires allowed (if a combination does not conform the the next applies) – VIN dependent if it comes with a tire & rim that size and rating will be allowed "STOCK-CAR" (to a 3.75 inch sidewall min.) – this is a safeguard for future entries (higher than ZR?)
- 17) ZR tires allowed
- 18) Wheels and tires not to protrude past the fenders. No radiusing of fenders for tire fitment

## **BRAKES**

- 1) All brakes must be in working order
- 2) No aftermarket brake bias allowed
- 3) Drilled & Slotted rotors allowed – They are restricted to NON RACE Versions (receipts need to be provided to head tech to prove OEM/Stock-(like autoshack)),

## **ENGINE**

- 1) No stage 2 or above – No internal or External modifications (NONE! ZERO! NOT EVEN A LITTLE!)

## **Exceptions**

- 1) Any engine used in Make & Model of car may be used up to 2.5l (Only Honda Motors in Hondas, only Chev in Chevs etc...)
- 2) If engine modification is required for an engine swap (supplied to rules max) the minimum required changes will be allowed (full report of modifications provided to head tech)
- 3) Air intake (not manifold\* (\*unless the manifold/throttle body swap are required during engine swap)) can use cold air/short RAM with air filter

No changes to the stock Throttle Body (must remain stock to engine which

- 1) in the car, this comes under the NO MODIFICATIONS Rule)
- 2) Shifter & cables
- 3) Motor mounts may be performance aftermarket (this is a durability issue not a performance issue) –
- 4) Can remove air conditioner pump (and related parts). –
- 5) Can install remote oil filter & cooler – – –
- 6) OBD2 Connector, if the car came from factory with it, must not be removed. If it is not there then automatically illegal. (must submit to a full scan at "techin" and after any record has been set).
- 7) NO TUNES - Engine and ECU must remain "Untouched" anyone caught violating this rule will forfeit all points gained prior to the infraction (if the driver admits to infraction before tech finds it only points gained that race day will be forfeited) the car will not race again until brought into compliance \*\* this rule will be deleted in year 2 if the class drivers agree there is a need for it to be allowed – If there is an issue that arises where the car is non functional without a "tune", the absolute least possible to get the car functional may be attempted – ONLY with tech permission & with 2 independent racers present for the "repair " (full report of modifications provided to head tech) May be videoed if no racers can be there.
- 8) Any electronic device which does not increase horsepower or could be used to increase horsepower is allowed (telemetry, gauges, live dash, throttle control, etc...)
- 9) Air cleaner is mandatory but type is optional. Air cleaner must not draw air from outside engine compartment.
- 10) May use aftermarket Engine mounts (encouraged for engine swaps), may have upper and lower sections welded, bolted or chained together (to prevent mounts from breaking in the event of a crash). – Maximum 94 octane pump gas only.
- 11) Transmission must remain stock for that model. – a replacement is ok when changing from or to a manual to or from an automatic
- 12) Must have all working forward and reverse gears.

- 13) Must use stock flywheel, torque converter, etc. for that model. – The use of Stage 3 Clutches or Lesser OK (this is a durability issue not a performance issue)
- 14) Aftermarket transmission coolers allowed. Rubber hoses to cooler must be double clamped and no longer than 6" in one spot. Coolers must be isolated from driver.
- 15)** Stock rear end (Transaxle) only for that vehicle model.
- 16)** No posi, welding of spider gears, etc. allowed (factory equipped allowed).

## **FUEL**

On carbureted cars with mechanical fuel pumps: stock fuel tank must be removed and replaced with an approved fuel cell or boat tank. removed and replaced with an approved fuel cell or boat tank. The tank must be mounted in

- 1) the trunk of the car as far forward as possible, preferably over the rear axle.
- 2) Plastic tanks or fuel cell must be encased in a metal box. –
- 3) Carbureted vehicles must have no more than 6 inches of rubber fuel line in any one place allowed with a maximum of 18" of rubber fuel line in the vehicle.
- 4) EFI and carbureted vehicles with electric pump must be plumbed with high pressure lines and is subject to tech crew approval (stock approved).
- 5) Stock fuel tank must have a skid plate under it. Must be a minimum 1/8" metal, the same size as the tank with sides open to allow spilled fuel to escape. Skid plate must be attached securely and will be subject to tech crew approval. Fuel filler must be inside trunk compartment. Tank must be completely isolated from the driver.
- 6) Factory fuel fill tube position can be retained when using the factory fuel tank (& lines) if recessed and covered with a door
- 7) Must have screw type cap. Must have minimum 3" hole under tank to allow any spillage to escape.
- 8) Tank must be securely attached to car with steel strapping 1" by 1/16", at tech crew's discretion. (stock hardware approved)
- 9) Must have fuel tank vent pipe extending below bottom of tank and on left side or an approved roll-over check valve. (exempt if using factory tank/fuel system)
- 10) Stock injectors & fuel rail that came with engine from factory (or OEM replacements) absolutely no exceptions
- 11) Attempt to maintain factory fuel pump (must when using a factory tank).
- 12) If car has an ECU with auto fuel shutoff or inertia switch from factory none other is required (Master shut-off covers the rest)
- 13) Fuel Cells are encouraged (will become mandatory in future) If a fuel cell is being used a suitable pump for the fuel cell may be used (must have an emergency over-ride (shutoff) installed) – once changed to fuel cell the fill tube must be in the trunk fuel cell must be sealed in a separate compartment from drive

## **EXHAUST**

- 1) Allow "factory built" CAT delete pipes (no headers) this gets around the requirement for "tunes" –
- 2) Factory exhaust size pipe after CAT delete pipe allowed (can be run without resonators & mufflers) must exit the car behind the driver and away
- 3) Or 2.5" MAX whichever is greater

## **COOLING**

- 1) No modifications from stock (race rads (&/ pumps) may be looked at in future (to save costly engine repairs)) – Until then the same rules as "mini-stocks" –
- 2) No antifreeze allowed. –
- 3) Must have minimum ½ gal overflow container mounted in engine compartment.

## **ELECTRICAL**

- 1) A "Master " kill switch be installed to kill all electrical in car - "Mushroom Button" (operation must be self explanatory) "inside car envelope" this would negate the need for all other emergency shut-off requirements – The master kill switch should be located at the forward drivers window position (so safety crew can kill power to car in the event the driver is unable)
- 2) Battery must be securely fastened to the roll cage and completely isolated from the driver. It must be either in a plastic boat box or metal box and secured with steel hold-downs.
- 3) Battery must be covered and must have plastic or rubber over the terminals. Installation must be passed by tech crew.
- 4) All switches must be clearly labelled and be located where safety personnel and driver (while strapped in) can easily reach them. –
- 5) Alternators must be used and working. –

## **STRUCTURE**

- 1) May add crash bars to protect underside of car (engine, fuel tank, suspension) –
- 2) all cars could benefit from oil pan skid plates – \*
- 3) \*NO FORTIFICATION ALLOWED\*\* – the purpose (of underside crash bars) is strictly protection of underside (protecting the track from oil/fuel damage) –
- 4) no added "bracing" allowed anywhere (except) – Strut braces allowed Front and Rear

## **REPAIRS (RAD SUPPORT)**

- 1) if a rad support gets damaged a repair will be allowed as long as it is obvious that the size and thickness of the steel used is similar to that of the rad support No obvious strengthening supporting structure to maintain the rad upright allowed following the same rules (not allowed to be attached to firewall).
- 2) any structural damage should be brought back to stock frame alignment specs (as close as possible - no twisted cars will be allowed back
- 3) Any & All other structural repairs must be passed by the tech crew as to their compliance with the no fortification rule

## **BUMPERS**

- 1) Stock bumper covers must be retained (& in place during races)
- 2) Cover must be replaced if torn off, by next race day
- 3) Bump bars may be installed extending to the limits covered by the stock bumper covers (a rad hoop may be installed to bump bar as long as it remains hidden behind stock grill).
- 4) If Bump Bars are used the stock Bumper must be removed material used must not exceed that of the roll-cage material must not be reinforced with supplemental struts (attached at bumper mounting points only)
- 5) OEM parts allowed
- 6) Stock parts which exceed the rules allowed (VIN dependant)
- 7) NO cutting, welding, stretching of factory designed parts to maintain structural integrity and should be the path forward as newer cars enter the track, there is less need to reinvent the wheel today and a lot of choices to get similar results without destroying the integrity of the cars.
- 8) Cars moving from Zero or Mini in 2025 are grandfathered in with modifications no new grandfathered cars allowed after the 1st season.