

MINI STOCK RULES

All general and safety rules apply to this class. Some rules in this class may be more stringent than the general or safety rules. The term "STOCK" as referred to in this section is defined as original equipment, manufacturer (OEM), parts that are mass produced and sold for use in production vehicles. Limits not to exceed what the OEM's specifications and limits are as produced in general production automobiles. Aftermarket parts are allowed but must be to manufacturer's specifications and materials. All specifications have been reviewed and approved by drivers in each class in order to achieve an even field of competition between all drivers in each class. No changes will be applied unless fully reviewed and approved by drivers and Board of Directors.

It will be required that all mini-stock cars meet the following rules, or the IMCA Sport Compact Rules will be enforced.

1. ELIGIBLE CARS

- A) Any 4 cylinder compact car or truck with a maximum 104 inch wheelbase. Must meet all other rules outlined. No sports cars (Miata's, Fierro's, Camaro's, Eclipse's).
- B) Engine must be located in front. No mid or rear engine configurations. No AWD or conversions.

2. CAR WEIGHT

- A) Weight rule of 1lb. per CC of actual engine displacement. Will be measured with all fluids "race ready" and with driver.
- B) Cars will be weighed after the main event with driver.
- C) Added car weight must be painted white, or highly visible silver, with car numbers included in block form (no Pellets), and must be securely fastened in place with 2, 1/2 inch bolts painted white with car number displayed on it.

3. GENERAL BODY REQUIREMENTS

- A) Original dimensions of all car bodies must remain as manufactured except changes which may be necessary for tire clearance. Fenders may not be altered other than for tire clearance. Any car not appearing stock may be penalized or not allowed to compete at the discretion of the tech.
- B) Body must be stock appearing with Steel or Aluminum. Aftermarket noses are allowed. All cars must have complete bodies, hoods, fenders, and bumpers in good condition at the official start of the race. Body may not be offset on the centerline of the chassis. Factory appearing hood scoops are allowed.
- C) No windshield allowed, a Full screen allowed. Must have 3 Vertical bars in front of the driver from roof to dash.
- D) Safety belts must be bolted to the cage as per manufacturer's recommendations.
- E) All doors must be welded or bolted shut. Stock floorboard must be complete from the rear package tray to front firewall. Driver must be well shielded from tires and driveline. The car must have a stock front firewall in stock location. All holes must be patched. Rear firewall must completely protect driver from fuel cell and rear tires.
- F) Radiator supports are allowed. Material will be no larger than 1.75 -.095 tubing. Nose hoops are recommended but are not to be built as battering rams.

- G) Spoilers must be a solid, non-adjustable part of the body, which controls the flow of air over one surface only. A front spoiler may be used with tech approval. The optional nonadjustable spoiler must be installed a minimum of 3 inches behind the lower trailing edge of the bumper and cannot extend over 2 inches below the lowest point of the frontal area. Front spoilers, as well as all of their support brackets, must be mounted perpendicular to the ground with no bends or breaks. All support brackets for front spoiler must be mounted to the rear of the spoiler. A maximum 5 inch tall rear spoiler is allowed.
- H) A window net must be installed according to safety rules. All door window glass must be removed. Lexan may be installed in the rear quarter windows on cars that come with a standard window post. Block out panels allowed in rear Quarter windows.
- I) Headlight, taillight, and parking lamp covers must be removed.
- J) Dashboard must be installed so as to not to block driver's vision. Rearview mirrors are not allowed. A master battery disconnect switch mandatory. The switch should be mounted so as to be accessible from inside and outside the car, being accessible from both sides.
- K) When cutting fender wells for tire clearance, original openings must be followed and rear wheel wells retained (can be patched if damaged). The top fender lines must be uncut with no bubble above.
- L) Stock appearing hood must be used. Cutting allowed for air cleaner. Inner hood support may be removed but outer U-channel must remain. Rear deck inner support may also be removed. Both hood and rear deck must be attached with pins, hinges, bolts or quick release. All cars must have hood and deck lid in place to compete.
- M) All cars must run a bumper strapped to the frame or fenders to prevent hooking. 0.095 pipe or box steel bumpers are allowed, may be covered with stock appearing bumper covers. The bumper is not to be used as a push bar or battering ram. The bumper must remain in standard location for make of car in reference to height and distance to body panels.

4. ENGINES

- A) 4cyl engines with maximum of 2500cc. (2.5L) No Turbo, Superchargers, NOS or other power add-on's allowed stock or otherwise. Engine must be located in stock location and is to remain manufacturer to manufacturer. Forward or rearward moving of the engine is not allowed. Engine mounts may be reinforced. Motor mounts must remain in stock location.
- B) Engine block must be factory production block. Aftermarkets are prohibited.
- C) Cylinders may be bored up to 0.060 over stock.
- D) NO OTHER MACHINE WORK ON SHORT BLOCK
- E) Rods, crank, and heads are to be OEM to engine used.
- F) ARP bolts are acceptable.
- G) No stroked engines allowed.

5. PISTONS

All pistons must be stock replacement or stock to engine used. Pistons may be dished or flat top. High performance, high compression, or ultra-light pistons are not allowed.

6. HEADS

- A) Heads are to remain stock production. Limited to 4 valves per cylinder. Titanium valves are not permitted. Port matching or flow work is not permitted. Heads may be milled 0.060 for clean up only.
- B) Three angle valve jobs permitted. Stone or grinding marks are not permitted above the bottom of the valve guides. Surface where the cutter or stone has touched must not be polished. Hand grinding or polishing is not permitted on any part of the head.
- C) Any external modifications, internal porting, polishing, or relieving is not allowed. Screw in studs are allowed, factory or aftermarket.

7. CRANKSHAFT

Crankshaft must be stock to engine used. Must be standard steel or cast production design OEM. Crankshaft cannot be knife edged, undercut or drilled to lighten crankshaft. An aluminum pulley is allowed. Balancing Rotating Assembly is allowed. Crank may be turned for cleanup. No aftermarket rods.

8. CAMSHAFT, VALVE LIFTERS, AND ROCKER ARMS

- A) Only steel camshafts are allowed. No rollers cams are allowed. No dual cam engines, VTEC, VVT or other variable valve systems. Only steel lifters allowed. Rocker arms must be stock. No roller rockers permitted. No Solid Lifter cams allowed.
- B) Maximum lift, as measured at the valve not to exceed .480
- C) Valve lift checked at valve (will be checked if proper protest is filed.)

9. INTAKE MANIFOLD

- A) All cars must run a stock intake manifold. These manifolds must remain as manufactured. Port matching or flow work is not permitted. Grinding or polishing is not allowed. High performance or aftermarket equipment is not allowed.
- B) May use adaptor plate to convert fuel injection to carburetor. Subject to inspection.

10. CARBURETOR

O.E. 2 barrel or stock replacement, or Holley 2300-4412, 2 barrel carburetor is allowed. A maximum 1 inch aluminum or phenolic spacer may be used. The choke may be removed. Other alterations are not allowed. Choke tower may be removed. Stock Fuel Injection only.

11. AIR CLEANER

Tubes, funnels, or any device which may control the flow of air is not permitted inside the air cleaner and carburetor.

12. ENGINE/CAR COOLING

- A) Radiator must remain in stock location. Aluminum radiators, aluminum water pumps, and radiator dust screens are allowed. Radiators must have a catch can or hose directed to the ground
- B) Ducting to cool the radiator is allowed.
- C) The top of the cooling fan must have some type of covering to prevent accidental body contact with fan.

D) Electric fans are allowed.

13. IGNITION /ELECTRICAL

A) Only battery-powered, camshaft driven, distributor type ignitions allowed. Magnetos, crank trigger, or dual point systems are not allowed. MSDS box, DUI or Stock appearing is allowed.

B) Alternator may be used but not required.

C) Stock computers for fuel injection only, NO automated electronics, record keeping devices, or digital readouts. A memory tachometer is allowed.

D) Battery must be relocated anywhere behind driver's seat. Battery must be in approved marine type battery box or the like. Subject to tech approval. The battery box must be secured to the car with bolts, straps or both.

14. OILING SYSTEM

A) Aftermarket pans Allowed. Crank scrapers, dry sump systems, external oil tanks, remote filter systems, or engine coolers of any kind are not allowed. Oil must be added from engine compartment only. The oil pan may not be modified for extra oil capacity.

B) Stock pumps only. External oil pumps are not allowed.

15. EXHAUST

A) Stock manifolds or headers permitted.

B) Thermal wraps allowed. Exhaust must exit behind driver. If brought through car, must be wrapped with thermal wrap and covered with minimum 20 gauge metal.

C) The exhaust must be a maximum 3 inch OD.

16. DRIVE TRAIN

A) Stock OEM clutch or replacement required and must be steel disc type assembly. Must be stock diameter.

B) The ring gear must remain the same size as standard for engine being used.

C) Transmission can be automatic or standard shift but must be stock OEM and in stock location with no gears removed or modified. Must have two working forward gears and one working reverse gear. If automatic transmission is used, a working torque converter is required. Transmission cooler for automatic transmissions only is allowed. No Direct drives or full locked up converters.

D) Locked differentials are allowed. Only steel axle housings permitted. No cambered rear axle housings will be permitted.

17. FRAMES

- A) No holes may be cut in frame rail to lighten the vehicle. All frames are subject to tech approval. Any frame rejected by tech for showing poor workmanship will not be allowed to compete until necessary changes have been made. Frame and front clip must be stock OEM for car being used. Front and rear clips may be connected through upper roll cage only but no shortening or lengthening of front and rear clips is allowed. All repairs must be tech approved.
- B) Front Cross member must be stock and remain in stock location. No cutting of cross member at all.
- C) Nerf bars may be used. Material for Nerf bars must not exceed 1 1/2 inch 0.095 steel round or 1 inch x 2 inch box tubing. Nerf bars allowed between front and rear tires, in front of front tires, and behind rear tires. Cannot exceed 2 inches from original body lines. Ends must be rounded or rolled (no sharp edges).

18. SUSPENSION

- A) All suspension must stay in stock location.
- B) Either rear coil or leaf springs will be allowed, only stock rear independent suspension will be allowed. Only cars that came originally with leaf springs may use leaf springs, and cars which came with coils must use stock coil springs.
- C) Springs may be cut, heated or changed, but must remain in stock location. Transverse coil spring mounts are not allowed. Weight jacks are not allowed. Multi hole shackles, adjustable spring spacers and soridson sliders are allowed.
- D) Stock style shock absorbers only. Air shocks are not allowed. Tie-rod end shocks are not allowed. Stock shock must mount in stock location and be non-adjustable.
- E) A-arms must be stock OEM to car used. Lower A- arms must be stock to production car used and mounted in stock location. Offset spindles are not permitted. Spindles must be stock OEM to chassis being used. Strut mounts may be slotted for camber/caster adjustment. No cutting or welding of mounts.
- F) Any one piece Anti-sway bar. Any mount is allowed and it may be adjustable.

19. WHEELBASE

Maximum wheelbase allowed is 104 inches. Longer wheelbase trucks must be approved by tech. Cars must run wheelbase as specified by original manufacturer. When measuring wheelbase, one side must meet wheelbase per chassis used. The opposite side wheelbase is allowed a maximum of 1/2 inch tolerance.

20. STEERING

Stock steering to chassis must be used. Only listed changes are allowed. Quick release steering hub allowed. Steering column must be collapsible or unsupported u-joint. No straight through columns allowed. Center of steering wheel must be padded with at least 2 inches of resilient material. Quick Steer will be allowed.

21. BRAKES

- A) Brake cooling is allowed. No proportioning valves or bias adjusters allowed.
- B) No rear disc conversions permitted.

22. FUEL AND FUEL CONTAINERS A)

No Alcohol allowed.

B) Fuel cells mandatory, and must meet the following requirements:

- 1) Must be encased in a container of no less than 20 gauge steel.
- 2) Must be recessed in trunk.
- 3) Must be located as far forward and between frame rails in trunk.
- 4) A steel firewall of 20 gauge minimum must be located between the drive and trunk area.
- 5) Must be secured with 2 steel straps which measure a minimum of 1 inch wide by 3/16 inch thick securely bolted to mounting frame for cell.
- 6) Think safety when mounting fuel cell! Protection of tank or cell by roll bars is strongly recommended.
- 7) Fuel injected cars may use stock fuel tank located under the car and in front of the axle.

C) Fuel line may go through driver's compartment, but must be totally encased in a metal tube with no holes!

D) Tube must extend a minimum of 1 inch through front and rear firewall away from driver.

E) A high volume mechanical pump allowed but must be mounted in stock location for chassis used. Electric fuel pumps allowed with oil pressure kill switch. Mount as close to fuel cell as possible, not allowed anywhere in cockpit.

F) F) Cooling of fuel system is not allowed.

G) Only one line may supply fuel pump from fuel cell or tank.

H) Stock fuel tanks must be removed.

23. WHEELS AND TIRES

A) Wheels must be a maximum of 8 inches wide. Only steel wheels are permitted. 2 piece wheels are not allowed. Bleeder valves are not allowed. Magnesium, aluminum, or slotted wheels are not allowed.

B) Must use Hoosier H12130MED, DOT tire with a maximum width of 8 inches, or Stamped IMCA G60 Hoosier tires No low profile tires or wheels permitted.

C) Chemical softening of tires is not allowed.

24. ROLL BARS

A) Steel roll bars are required, must pass inspection by the Tech Committee, and must include gussets.

B) Roll cage must be a minimum four (4) point cage with a minimum of three (3) horizontal bars on both the driver and passenger door or X on the passenger side. No butt welds unless bars are sleeved. All cage components must be 1 3/4 inch O.D x .090 pipe, or 1 1/2 inch O.D x .095 pipe.

- C) All four (4) main upright bars must be fastened to floor of unit body with a minimum of 3/16 inch thick pads on top and bottom of floor pan. All four (4) pads will be 4 inch x 4 inch with four 3/8 inch bolts in each pad.
- D) Roll bars must be padded at any point where driver may come in contact with the cage.
- E) Driver side door plates recommended.