

SECTION 10A

2009 4 Cylinders/Mini Stocks ANY DRIVER WINNING MORE THAN 5 RACES IN A SEASON MAY BE ASKED TO MOVE UP A CLASS

General Safety & Procedural Rules Apply to all Classes unless otherwise specified

The four cylinder stock class is designed with the beginner racer in mind. The idea behind this division is to keep the car as stock as possible in order to hold down expenses.

In multiple feature races, full points will be given to the driver for the 1st feature that his car competes in. Any additional features that the same car competes in without being qualified through a heat with a different number, the driver will only receive 1/2 points rounded down if it is an odd number of points. If driver-car changes are not reported to the pit steward in writing prior to the feature, the driver competing in the car and the car will be disqualified and receive no points or money for that event.

1. ENGINE:

- Engine must remain stock as manufactured for car being used.
- No Plastic Fuel Lines or Filters
- No headers or any racing parts whatsoever.
- No Windage trays
- Flat top or dish pistons only.
- No electric fuel pumps
- 185 pound compression limit, to be measured with track gauge. No rotary or fuel injected motors.
- .040 cleanup on cylinder bores allowed.
- 1" pipe plug installed in oil pan that makes viewing of rods and cranks possible with engine installed in car. Must pull 1" plug or pan for inspection.

- Stock stroke crank shafts only **(NO STROKERS OF ANY KIND)**. No light weight, cut down, or narrowed crank shafts allowed. No knife edging, No drilling to lighten before balancing, no polishing of counter weights.
- Pistons may not come above deck of block. (exception Toyota laser block - pistons do come above deck in stock form).
- No light weight pistons or rods. OEM replacement only for engine being used. Hypereutectic allowed. No forged pistons. Exception: 4 cyl Ford may use late model 2300cc Ranger pistons & rods.
- No high performance ignition or ignition boxes allowed.
- Cylinder Head:
 - adjustable timing gears allowed. Ford motors can use multi-key slot timing gear Part #M-6256-A231.
 - Sand blasting, bead blasting, acid-dipping, porting, polishing, and welding are prohibited. Special note: Heads will be pulled occasionally to check for illegal work being done in areas that can't be seen externally. (valve pockets, ports etc).
 - Milling at block mating surface, the legal head thickness on the Ford 4 cyl is 3.725" min, measured from side surface of valve cover rail to block mating surface. The Toyota minimum head thickness is as follows: Early head, up to 1989 has #23 embossed on head in cam 3.865" min. thickness. The Toyota laser head has #10 embossed on it in cam area and has 1 pipe plug under cam 3.710" thickness - minimum.
- Stock OEM Valves Only

- **Only composite OEM head gaskets allowed, no thin metal or copper shim type or Cometic head gaskets allowed. FelPro and Victor only.**
- **Hydraulic or solid lifter cams only as OEM manufactured maximum lift .460 measured at the cam. Aftermarket cams allowed. No roller cams. Only stock OEM non-roller cam followers or rocker arms on push rod motors. Ratio used to measure cam will be 1.640.**

○ **Carburetors:**

- **One carburetor only, OEM for engine used, no modifications.**
- **Stock 5200 stock carburetor only**
- **Stock carburetor plate or spacer for engine used , no tapering or modifications of any kind to said item.**
- **Only "1" OEM carburetor to spacer plate gasket allowed**
- **No air induction plastic carburetor inserts or other devices to direct air into intake. No Air diffusers are allowed.**
- **May run aftermarket air cleaners.**
- **Intake must be OEM as cast, no modifications, carburetor type manifolds only. No fuel injection manifolds allowed.**

2. TRANSMISSION AND DRIVE LINE:

- **Fly Wheel - Stock steel, no aluminum etc. minimum weight 18 pounds. No machining, except for clean up on clutch mating surface. Note: Fly wheels will be weighed. Escort flywheels are not allowed.**

- **Clutch must be OEM type only. No light weight parts. This means clutch disc and pressure plate. Note: These parts will be checked and weighed at the discretion of the tech staff.**
- **Transmission must have all gears working at all times.**
- **Drive shaft: steel only, no ultra-light steel drive shafts.**
- **Rear Differential must be locked. No spools or aluminum parts.**

3. CHASSIS AND BODY:

- **Stock original unibody with full floor, firewalls, trunks & inner fenders.**
- **No hood scoops. No holes in hood.**
- **Stock type rear spoilers allowed. Must be for the car it is installed on.**
- **Must be complete body as produced by factory.**
- **May fabricate frame front & rear using 2x3" tubing from strut tower in front forward & centerline of rear axle to the rear.**
- **Any 4 cylinder sedan, subcompact or compact two door cars: Toyota: Supra; Ford: Mustang, Escort, Probe, Thunderbird (trimmed two inches); Chevrolet: Chevette, Beretta, Cavalier, Corsica; Pontiac: Grand Am, Grand Prix, Sunbird, SunFire; Dodge Daytona; Plymouth/Chrysler Lazer; Mercury: Lynx, Cougar, Capri...**
- **No convertibles, station wagons, two seat sport cars, four-wheel drive, independent suspension or front wheel drive cars allowed.**
- **Must be front engine cars ONLY!**

- All glass must be removed and a screen placed in the windshield area.
- Must have front loop.
- Must have a complete 6 point roll cage, installed in a safe, professional manner. 1-1/4" .095 wall steel tubing minimum with three door bars on driver's side and two door bars on passenger side.
- All roll cage in driver's area must be padded.
- Front loop to protect drivers legs and feet. No sharp pointed objects in driver's area.
- Fuel shutoff must be in reach of right hand of driver and master switch on left hand side of steering column face of dash.
- Racing Fuel cell is MANDATORY. Fuel cell must be mounted in a safe and professional manner. Must have a protection loop behind fuel cell.
- PVC Valve on outside of tank located on vent tube.
- Fuel cell must be protected front, bottom, and both sides with minimum 18 gauge steel, minimum 12" from ground.
- Must have firewall between driver's compartment and the trunk area.
- WEIGHT: 2500lbs. minimum weight with driver after race. Any weight inside drivers compartments must have a 2"x2"x1/4" minimum plate on the back side of weight attached with at least two (2) 1/2" bolts to be approved by Tech Department.
- BATTERY: Any battery inside drivers compartment must be in a Marine- type container, and a master switch on left hand side of steering column face of dash.

4. SUSPENSION:

- **Racing Springs are allowed**
- **Any spring wedges used must be rubber only, NO steel twist in style wedges allowed**
- **All suspension parts are to be for the chassis being used**
- **Wheelbase from side to side is to be within 1" margin**
 - **Must have stock suspension.**
 - **No racing shocks.**
 - **All front control arms & rear trailing arm pivot points must be in stock position.**
 - **All cross members must be in stock position, no slotting of holes or repositioning of cross members to alter the wheel base or change angle of control arms & trailing arms.**
 - **NO offset bushings allowed. OEM as manufactured. No drilling to soften or alter in any form**

5. BUMPERS:

- **Must run a stock type fascia/or bumper front & rear. No aluminum bumpers. No exterior bracing. All exterior tubing must be round.**
- **Side rails must have maximum of 1 3/4" O.D. All tubing must be radiused back into and attached to the frame or cage, or anchored within 3" of the end, and sealed with NO sharp edges 18" centers from ground.**
- **Valance bars for fuel tank and radiator only not more than 1-1/2" maximum size. Face of front and rear loops must be at least 1/2" behind leading edge of hood and trunk.**
- **Front and rear tow hooks MANDATORY.**

6. EXHAUSTS: Proper installation and maintenance is the responsibility of the car owner.

- Exhaust installed inside the car, must be covered with tin.
- These mufflers, properly maintained, will produce a 100 decibel reading or less measured at the flag stand or infield. Any car with loose exhaust, lost muffler, or leak, etc. that creates over a 95 decibel reading during any racing event may be disqualified and black flagged until the exhaust problem is corrected to meet the 95 decibel reading. Any driver not abiding by this rule may result in a fine , loss of points, and loss of point monies. Track decibel meter reading will be final. This rule is made to protect the drivers, crews and spectators from hearing loss and preserve the sport of racing now and into the future. Also any non racing oval muffler of equal or less cost of spec muffler not to exceed 95 decibels will be allowed.
- Exhaust manifolds must be stock cast iron only with no modifications.

7. WHEELS, TIRES, AND BRAKES:

- Stock reinforced steel wheels **ONLY** or approved steel wheels on right side. . Stock wheels on left side.
- No light-weight racing wheels. Standard weight after market wheels allowed (ex.: Bart Wheels). No re-welded or altered wheels allowed.
- 7-inch width maximum. 3-inch offset minimum, measured from the back edge of the rim to the axle mating surface. Must maintain same offset on all four wheels.
- **NO** wheel spacers allowed.
- Stock tires or recaps on DOT passenger car casing **ONLY**. DOT tread pattern.

- **Maximum width of 7".**
- **A minimum durometer reading of 50 hot.**
- **No racing retreads, example: Marsh, Diamond Back, Towel City.**
- **No aggressive tread design (ex: Blizzard, Snow or Ice Winter Tread). Note: All tread designs must meet with approval of tech staff prior to racing.**
- **BRAKES: Four (4) wheel brakes required. Must be capable of locking and sliding all four (4) wheels. Brakes may be checked at any time.**

8. APPEARANCE:

- **All cars must be neatly and brightly painted. Dark cars not recommended.**
- **Numbers must be painted on both sides of car and on the roof in a color offering distinct contrast to color of car. Numbers must be legible - 3" wide and 18" high. All numbers will be legible or they will not be scored.**
- **One or two digits only, NO LETTERS. Car numbers must be pre registered with handicapper (Mary Hoose at 607-535-2003, except Wednesday or Thursday Evenings).**

9. SAFETY:

- **Must use aluminum high back racing seat or racing seat with padded head rest that is securely fastened.**
- **Must have 5-point racing seat belt harness, no more than 5 years old, securely fastened with bolts.**
- **Neck brace is mandatory.**

Index

PENALTIES FOR RULE INFRACTIONS

1. DISQUALIFICATION, LOSS OF POINTS, AND MONIES FOR NIGHT:

- **Wheels and tires: size, offset, and compound.**
- **Drive Shaft.**
- **Differential (if it can be viewed with scope).**
- **Transmission.**
- **Ignition System.**
- **Pulleys and Timing Gears.**
- **Carburetor, Spacer and intake manifold (visual)**
- **External Head measurements.**
- **Crank and rods**
- **Failure to make weight.**
- **Cam Lift.**
- **Brakes.**

2. DISQUALIFICATION, LOSS OF 100 POINTS, AND MONIES FOR NIGHT:

- **Anything that requires a tear down of motor for tech purposes, including removal of head for height measurements. The pulling of the clutch setup or fly wheel to check weight or material made from.**