



2017 BETHEL MOTOR SPEEDWAY 4 CYLINDER RULES (Last Updated 1/4/17)

1. GENERAL

The 4 Cylinder division has been created as an affordable, entry-level class. The intention of the division is to allow beginners and those on extremely low budgets to participate easily and still be able to be competitive. All modifications made to the cars in this division must be for safety reasons only. Since many of the drivers in this division will be inexperienced, the speedway would like to provide a reasonably large amount of laps to allow "seat time" needed for drivers to gain the experience necessary to move on to other divisions in the future. the 4 cylinder class is not intended for racers with the resources to build or purchase more complex race cars, as those teams should consider the Street Stock or Pro-Stock divisions.

NOTE: Any car which deviates from the intentions of this class may be disallowed at the discretion of the speedway management. Track Officials and management reserve the right, at their discretion, to place weight and/or other penalties on cars deemed to be overly dominant, in order to keep the competition fair. Any car deemed overly dominant may be impounded by the speedway management for a thorough tech inspection. So that this inspection can be completed to Speedway satisfaction, vehicle will be held until inspection is complete which can and will be beyond that night's racing events.

The 4 Cylinder class will be split into two divisions – Novice and Expert.

Drivers under the age of 18 will automatically be placed in the Novice division.

All drivers will remain in this division until they have finished in the top 3 final points positions, and/or collected seven feature event wins in a single season. Drivers aged 18 and up also may voluntarily elect to move up to the Expert class on their own free will. When one of these criteria has been met, the driver will be moved into the Expert division for the following season. Drivers who are over the age of 18 but new to racing will have the option to choose which of the divisions they wish to compete in, with the understanding that track management reserves the right to move any driver who starts out in the Expert division down to the Novice division, at their discretion, if the driver exhibits apparent difficulty competing with the more experienced drivers.

Drivers will be able to compete for points in only a single division, but the rules will be the same for both divisions, making it possible for a single car to be run by both a newer driver and a veteran one in the same night. In the event that a car is disqualified following the first feature of the night, that car will be unable to compete in the later feature unless the car can be corrected before the beginning of the later feature (it **MUST** pass inspection for the offending item prior to being raced). In the event that a driver (not the car) is disqualified for an infraction that occurred in their event, the car is still eligible for competition for the duration of the night's events.

2. SAFETY EQUIPMENT: While cost is a major factor in the rules and specifications for this division, the speedway vigorously recommends all participants to utilize all available safety gear. The following items are the minimum required and of course participants are encouraged to use additional safety equipment available to them.

REQUIRED SAFETY EQUIPMENT:

2.1. Snell 2010 or newer crash helmet (securely strapped on at all times). "M" prefix Snell rating helmets are **NOT** allowed.

2.2. Full long sleeve firesuit in good condition. Suits with holes will **NOT** be permitted.

2.3. 5 point racing style seat belt and shoulder harness, worn tight and secure at all times the car is on the track. (see Sec. 7.5)

2.4. Driver's side window net (see Sec. 7.7).

2.5. Properly installed 4 point roll cage (see Sec 7.6)

2.6. Neck Collar

2.7. Racing gloves and shoes

2.8. Aluminum Racing Seat (see Sec. 7.4)

HIGHLY RECOMMENDED SAFETY EQUIPMENT: Fire retardant underwear, helmet sock, and factory-manufactured head and neck restraint system. As per manufacturers' specifications, recertification of head and neck restraint systems every five years is highly recommended.

3. ELIGIBLE CARS: The 4 cylinder division is open to any steel bodied North American manufactured passenger car built from 1978 through 2002 which was originally available with a front wheel drive, four cylinder gasoline engine. Excluded are trucks, convertibles, four wheel drives, rear wheel drives, mid-engine, aluminum bodied, fiberglass or composite bodied, and special production sports cars. All cars are subject to approval by speedway management.

Any car deemed to be outside the intentions of the division will be disallowed at the discretion of the speedway management. If you have any question as to the eligibility of your car, please ask management to approve it before you waste valuable time and materials constructing a car which may be disallowed.

Any car deemed not structurally sound (i.e. excessive rust of the frame, etc.) will be ineligible to compete. The decision of track officials and speedway management will be FINAL.

4. WEIGHT: All cars must weigh 2,300 pounds after race, with driver in the car, no fuel added. Any car adding weight will do so, adding it evenly to right and left side. No left side bias allowed. Additional weight MUST be painted white in color, and be marked with car number, and must be attached with a minimum of two (2) GRADE 5 or better bolts, 3/8" diameter or larger, with locking nuts (no lock washers).

5. BODIES:

5.1 All bodies must be steel and remain completely stock as manufactured. Body style must match chassis and engine being used. Chevy match Chevy – Ford match Ford, etc. Absolutely no interchanging of bodies. No homemade aftermarket or flat sheet metal body parts will be permitted. Stock O.E.M. or comparable steel aftermarket sheet metal only.

5.2 Body and interior must be completely stripped of all glass (except windshield), trim, lights, molding, etc. No gutting or skinning of body panels allowed (except doors, only if equipped with optional curved door bars extending to outer skin). Any car deemed to be excessively lightened by gutting/skinning of body panels will be disallowed at the discretion of speedway management.

5.4 Doors must be securely bolted or welded shut. Hoods and trunk lids must have the stock style latches removed and be secured shut with quick release type hold downs (hood pins recommended). No bungee cords or chains allowed on hoods or trunks.

5.5 Fenders may be reasonably radiused for additional tire clearance.

5.6 Bumpers must be stock O.E.M. style steel, aluminum, or plastic. No tubing or pipe bumpers or reinforcements allowed. Original bumper may be replaced with different stock bumper which is compatible in size and width for the car it is fitted to. No sharp edges on bumpers, bumper corners may be attached to fenders with sheet metal guards to avoid hooking and gouging. All bumpers must be securely fastened by bolting and/or welding, and may additionally be chained to the car's frame. No Rub Rails allowed (Lexan guards on doors are permissible).

5.7 Full front windshield mandatory. Windshields may be retained as long as any defects (crack, scratches, etc.) do not interfere with the driver's vision. If the stock windshield is removed, it must be replaced with full width heavy gauge wire mesh screen with at least one center support or full Lexan windshield with two minimum 1/8 inch x 1 inch center supports (inside and outside) from the dashboard to the roof. Straps must be solid, no pipe strap allowed. If for any reason the windshield gets broken, it must be replaced or taken out and replaced with wire mesh screen as described above. NO plexiglass allowed. Lexan windshield, if used, must be secured with rivets or threaded bolt with nut. No self-tapping screws or ZIP ties.

6. FRAMES AND SUSPENSION:

6.1 All frames, uni-bodies, sub-frames, etc., must remain completely stock as manufactured. Stock wheelbase and ride height is to be maintained, wheel base must measure the same on both sides. No lowering or torching of springs. No modifications to the shock/strut towers will be allowed (except for the repair of rusted sections). Minimum wheelbase for this class shall be 100", and must measure the same, side to side. No shortening of the left side. This measurement will be taken from the center of the rear hub to the center of the lower ball joint, with the car raised, and both front wheels removed.

6.2 Springs, shocks and struts must be stock "O.E.M." components only. Aftermarket "Quick Struts" will be allowed, provided they are exact duplicates of the OEM units. Cars using "Quick Struts" must use them on all corners (i.e., no "mixing and matching"). Maximum of ONE bump stop allowed per strut, and must not exceed stock size. No slotting of strut plates to increase camber/caster settings. Unaltered cambered bolts allowed for alignment purposes only. All ball joints; control arms, sway bars, track (pan hard) bars, or other suspension locating devices must remain completely stock as manufactured, with no modifications allowed. No jacking bolts allowed.

6.3 The maximum camber on front wheels shall be +/- 5 degrees. The rear hubs may NOT be shimmed at all. The rear wheels must be at or near 0 degrees camber as manufactured, and have equal toe in/out for the front and rear of rear wheels. No toeing in of rear wheels will be allowed. If the rear suspension is bent, you MUST replace the bent part.

6.4 Steering must remain stock as manufactured. Stock steering pump, rack (or box); column, tie rods, and spindle arms must remain completely stock as manufactured. A quick release type steering wheel (optional) is allowed on the stock column. Steering wheel hub shall be padded. OEM steering locks MUST be removed or disabled.

6.5 Brakes must be operable and effective on all four wheels (car must lock all 4 wheels upon inspection). All brake components must be stock "O.E.M." parts as manufactured. No modifications allowed to master cylinder, calipers, rotors, hubs, axles, drums, etc. Rear disk O.E.M. brakes will be permitted if they were originally installed. The emergency parking brake mechanism must be removed.

6.6 Tow hooks, chains or cables must be provided to allow easy lifting or towing.

7. ROLL CAGE AND COCKPIT:

7.1 The driver's compartment (cockpit) must be completely stripped of all glass (except windshield), seats (except driver's approved racing seat), upholstery, headliners, insulation, excess wiring, lights, plastic trim, door panels, consoles, etc. (The dashboard may remain optional). If car is equipped with air bags they must be removed. All items such as shifters, steering columns, dash boards etc., that the driver's head, arms, knees could come in contact with must be adequately padded for safety. No sharp edges should be left in the driver's area.

7.2 All gauges, tachometers, etc. MUST be mounted below the dash line and out of the driver's direct line of sight. Gauge mounting is subject to inspection and approval by track officials.

7.3 Fire walls and floor pans must have all holes securely sheet metaled over to isolate the driver from the engine compartment and gas tank area. Hatch back style cars with a fuel cell installed in the trunk area must have a steel firewall and shelf installed to completely seal off the fuel cell's area from the driver.

7.4 Seat installation must be approved by the speedway. An aluminum racing style seat is mandatory, and must be securely fastened (bolted) to the roll cage. NO floorboard installations. The seat must be positioned completely to the left of the center line of the car. A high back seat or padded roll bar headrest is mandatory. A support from the roll cage cross bar to the back of the top of the seat is mandatory.

7.5 Seat belt installation must be approved by the speedway. A racing style 3" wide 5 point seat belt (in good condition) is required. Seat belts will be inspected by Track Officials, and must be dated within five years (i.e., in order to be legal for the 2017 season, the date stamped on the belts can be no older than 2012). Seat belts without a legible date stamp on them will NOT be allowed. The shoulder straps of the seat belt must be solidly mounted to the shoulder height crossbar in the roll cage and must be bolted to the cage, or properly looped for wrap-around type installation. The lap belt straps may be bolted into the original seat belt mounts at the floorboards (as long as original mounts are not rusted or otherwise damaged). Lap belts may not be installed into un-reinforced floorboard areas. Lap belts may be mounted to roll cage. The sub-marine strap may be 2" width and may be mounted to floor with large diameter heavy thickness washers required, or it may be mounted to a cage loop under the seat. Additional roll cage material may be added as an option, so that lap belts can be mounted to cage.

7.6 Roll cage construction must be approved by the speedway. A minimum 4- post roll cage is mandatory. Additional bars are allowed in the cockpit area as an option. All roll cage bars are to be constructed of heavy wall steel tubing (minimum

1-1/2" outside diameter and 0.095" wall thickness). Absolutely NO black iron pipe to be used at all in the cage. No angle iron, channel, exhaust, soft galvanized, or threaded pipe will be permitted. Heavy wall tubing is the ONLY acceptable material! The cage bar thickness will be measured with a thickness gauge. Any cage found to have less than the minimal wall thickness, even with the proper roll cage material, will be disallowed from competition. NO EXCEPTIONS! All roll cage joints must be fitted, notched, welded (no brazing or soldering) and gusseted to acceptable roll cage construction standards. Wherever the 2 main roll cage posts meet the floor pan of the uni-body structure on each side, a minimum 1/8" thick 3" x 3" steel angle channel must be attached to the car's structure, running parallel to and along the main unibody rail (rocker panel). It is to be a one continuous piece base on each side, extending along the entire side with both front and rear roll cage posts welded to it, to help distribute the forces of the roll cage on the uni-body structure in the event of a roll over. The roll cage must be welded to these 2 channels, the channels must be welded on both ends to the unibody, and the channels MUST be bolted through the rocker panel of the unibody. No less than (3) 1/2" diameter grade 5 or grade 8 bolts with large diameter washers and locknuts to be used on each side. These bolts must extend through the entire unibody rail. (in one side of rocker panel, and out the other). Bolting through the floorboard is NOT acceptable. A main hoop shall be installed just behind the driver extending from rocker panel to inside of the roof panel. The roll cage must be the full width of the car inside the door jamb area. A mandatory bar shall be installed at shoulder height, full width behind the driver's seat. This bar will serve to locate the shoulder straps of the seat belt and will support the back of the driver's seat. A crossbar at the front in the dashboard area is recommended. The main hoop of the roll cage must be connected to the front uprights of the roll cage with a bar at least 2" above the driver's head (with helmet on) on each side of the roof area. Additionally there must be 2 horizontal supports in the driver's side door. If doors are gutted, then door bars must be curved to extend to the inside of door skin. If straight bars are used in the door area, then door must remain un-gutted (complete door frame shall remain for extra protection). All roll cage bars which the driver's head could contact must be padded with racing style padding. All roll cage tubing must remain in driver's compartment. No roll cage tubing shall extend into engine compartment, except a front loop allowed: 1 brace to each strut tower, but not connected across the motor and single bar not exceeding 1-1/2" diameter may be installed ahead of the radiator under hood and not visible.

7.7 Window net on the driver's side window is mandatory. A string, ribbon, or mesh racing style net shall be required. Window net must be solidly attached at the bottom (no tie wraps) to horizontal door bar. At the top, the window net MUST be latched to the cage on both ends. The window net must have a quick release mechanism, so that the driver's compartment can be accessed quickly (seat belt type latches or similar required).

8. ENGINES AND TRANSMISSIONS:

8.1 ONLY stock as manufactured four (4) cylinder single-cam gasoline engines with a maximum displacement of 2650 cubic centimeters will be allowed. NO dual cam engines permitted. Carbureted or fuel injected will be permitted. No turbo charged, supercharged, diesel powered, rotary, or "QUAD-4" engines will be permitted. Engine must match body and chassis, Chevy to Chevy - Ford to Ford, etc. absolutely no interchanging allowed. No Ford-Mazda, or Chrysler/Dodge-Mitsubishi, or any other American/Import Combinations with Import motors allowed. Must maintain all stock dimensions and continue to utilize all stock O.E.M. components (including, but not limited to air cleaner, air filter, induction system, intake manifold, cylinder head, valves, camshaft, pistons, cylinder bore, crankshaft stroke, exhaust manifold, water pump, starter, alternator, flywheel and clutch, etc.) No altering, enlarging, or interchanging of injectors. Injectors must be stock to make and model. No porting and polishing of heads. Cylinder heads can be cut to a degree, but MUST maintain the OEM mill mark. Any head determined to be over milled/cut, will be considered illegal; not allowed. The air conditioning compressor, a/c condenser, air pump and catalytic converter may be removed. Note: Any engine deemed to be over competitive, or outside the intention of this class may be disallowed at the discretion of the speedway management.

8.2 Extra capacity radiator may be installed as long as frame does not require notching and hood still closes properly. No water additives of any kind. No Anti-Freeze – Water ONLY. No Heater Cores in cockpit area. No Coolant leaking in cockpit area. Cooling system must have overflow catch can minimum 1 QT. capacity.

8.3 Automatic or standard transmissions will be permitted. All transmissions, torque converters, and clutches must remain completely stock, with all gears including reverse functioning. No interchanging or modifications of any kind will be allowed. No aluminum flywheels. Must have access hole 1" in diameter drilled in the bell housing of all standard shift transmissions for inspection of the flywheel and clutch.

8.4 Batteries must be stock 12 volt only. Location of battery may be changed to protect it from being damaged in an accident, but it may not be located in the driver's compartment. All batteries must have an acid resistant cover over the top. The speedway must approve all battery mounts, and they must be securely mounted and held down with sturdy metal brackets-no bungee cords.

8.5 Exhaust systems must utilize a single stock style muffler. No straight-through muffler types. Inlet and outlet MUST be offset from each other, with baffles intact. Maximum inlet and outlet shall be single 2". Catalytic converters may be

removed. Exhaust systems must be securely mounted and sufficiently quiet. If car is determined to be too loud during a race it may be black flagged and removed from the race at the discretion of the speedway management. Exhaust must exit behind the driver's door on left side, or pointed toward the track surface.

8.6 Computer/ECM may be relocated to a position where it is protected from damage. Stock computer/ECM only. Officials will need to know location of computer and have easy access for inspection. Any computer that shows signs of tampering will become property of the Speedway. Driver will lose all points & money for that night, and may be subject to suspension and/or fine. The wiring harness must be fully accessible for inspection. Any car closing off an area of the wiring harness to permanently seal it, or otherwise prevent inspection, will be disqualified, and not allowed to compete until further inspection can be completed. The OBDII port for diagnostics MUST be relocated at least 18" outside of reach of the driver, to the center of car. No passenger, or driver side access, without actually getting inside of car. It must be solidly mounted, clearly visible, and marked with a bright color paint or tape.

9. FUEL SYSTEMS:

9.1 Fuel shall be standard pump gasoline only. If during inspection any fuel is found which has a colorful dye such as blue, purple, red, orange, etc. like racing fuel often has, it will be considered to contain racing fuel and therefore the offending car will be disqualified. No other fuel additives are permitted. No E-85 fuel (max 10% alcohol).

9.2 Fuel tank installation must be approved by the speedway. Racing style fuel cells are highly recommended. The stock fuel tank will be permitted to remain in place if it is in good (leak free) condition and mounted forward of the rear wheels (beneath the rear seat area). The condition of the mounting straps and filler necks should be routinely checked and kept in good shape. For cars which have fuel tanks located elsewhere (behind rear wheels, etc.), a racing style fuel cell must be installed in the trunk area and centered from side to side. Fuel cells must be contained in a metal enclosure and be securely mounted as far from the rear bumper as is practical.

A protection bar equivalent to the roll cage MUST be installed behind the fuel cell (inside the body). All cars re-locating the fuel cell to the trunk area must install a full steel firewall/shelf to completely isolate the driver's compartment from the fuel tank.

9.3 Fuel pumps must be stock OEM only. Must have Fuel Pump Kill Switch separate from the main ignition switch, and located within reach of the driver.

9.4 Fuel lines routed through the driver's compartment must be either made of steel tubing, high pressure type braided hose and fittings, or standard hose contained within a metal sleeve (such as electrical conduit).

10. TIRES AND WHEELS:

10.1 Wheels must be stock O.E.M. steel one piece, with a maximum diameter of 15" (nominal) and a maximum width of 6" (nominal). All wheels on the car must be the same size and offset (1/4" tolerance allowed). No mixing and matching from other production cars to gain any other offset than intended by the manufacturer. NO cutting and welding of wheel centers to gain a greater wheel offset. Wheels as provided from the car manufacturer only. No aftermarket wheels of any type allowed. The right front wheel may be reinforced to handle the extra loads encountered in racing. Each wheel must be attached with all lug nuts that the hub is intended for. (1" lug nuts recommended). No car will be allowed to race with broken or missing lugs. No 4 lug nuts with 5 studs. Any car found to have four lug nuts on a five lug rim will be immediately black flagged off of the track.

10.2 Tires must be stock type street DOT radial ply with a maximum tread width of 7" and a minimum wear rating of 375. No snow lugs, retreads, or made for racing tires will be allowed. All 4 tires on the car must be the same diameter and series. If you race 175/65-14, all four tires must be 175/65-14. Any car suffering a flat tire must leave the racing surface immediately, or be disqualified at the discretion of the speedway.

Sidewall markings MUST be legible on at least one side of the tire, and you may be asked to remove the tire for inspection if the outer sidewall markings are not legible. Any tire that does not have legible markings on at least one side is prohibited, and its use will result in disqualification. NO Tire Softener allowed.

11. SCORING:

11.1. All cars must display numbers acceptable to the scoring and handicapping officials. High contrast, legible numbers shall be located on both sides, and the top of the car.

11.2 Duplicate numbering or contrasts may require addition or modification to eliminate scoring confusion. The head scorer and/or handicapper will determine if change or modification is needed.

11.3. Electronic scoring is not required for regular scheduled events. Cars equipped with scoring transponders may, or may not, be tracked for lap time purposes. Lap times posted through the electronic scoring system may not accurately list finishing order.

11.4. Special events may necessitate electronic scoring and the use of the transponder will be required

12. COMMUNICATION/RADIOS :

12.1 One way scanners / radios are required for the driver to receive instruction from track officials.

12.2. Radios are to have the speedway driver frequency in place before the start of any practice or event.

12.3. Radios are to be mounted behind and out of reach from the driver

12.4. The driver must have a radio ear piece for the unit.

12.5. No other forms of one way or two-way communication is permitted.

12.6. Any car found to be without a working scanner may be black flagged and/or disqualified from the event. It is very important to adhere to the instruction of track officials. Check your batteries.

13. MIRRORS:

13.1 There shall be NO mirrors or reflecting devices permitted that allows the drivers to see the cars behind/around them. Gauges shall not be positioned to act as mirrors.

14. CLAIMER:

14.1. Complete cars shall be subject to a claiming rule from another active competitor within the specific division. Claiming driver must have finished the race on the lead lap. The claim monetary amount shall be \$3,500 (U.S. funds). Claimed cars shall be surrendered the night of the claim, at the track. The claims must be submitted with CASH only along with a written request of the claim, signed, and dated. Cars are only eligible to be claimed when they finish in a top 3 position at the conclusion of their main feature event. The claim must be made within 15 minutes from when the feature event officially ended to a track official who has a radio, preferably a tech inspector or pit steward. The claimed car includes everything except the racing seat, seat belts and any fire suppression system, if equipped. If a valid claim is refused by the driver of the claimed car, it will result in a disqualification from the feature event with a loss of points and monetary/prize winnings. Additional penalties will occur up to where the claimed car and/or driver will not be permitted to compete at the speedway until given further notice.