



## **BARONA SPEEDWAY MINI DWARF RULES 2020**

**RULE CHANGES ARE HIGHLIGHTED IN YELLOW!**

**YOUR INTERPRETATION OF THESE RULES AND ANY WORK DONE ON YOUR RACE CAR IN AN ATTEMPT TO COMPLY WITH THESE RULES IS SUBJECT TO TECH APPROVAL. ANY MODIFICATIONS NOT ADDRESSED IN THESE RULES WILL NOT BE ALLOWED UNLESS APPROVED BY TECH OFFICIALS.**

**ALL DRIVERS AND CREWMEN ARE REQUIRED TO READ AND COMPLY WITH THE 2020 BARONA SPEEDWAY GENERAL RULES & RACE PROCEDURES.**

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## 1. **ELIGIBILITY**

- A. 5 to 13 years old.
  - 1). Birth Certificate may be required.
  - 2). Two division are established by age:
    - a). Sportsman – Ages 5 - 8.
    - b). Masters – Ages 9 – 13.
- B. Wheelbase is 57½" – 58½".

## 2. **BODY**

- A. Car body style will be of a 1929 to 1939 vintage coupe, sedan, sedan delivery, or truck and must resemble the actual car. A body resembling an IMCA Modified will also be allowed.
- B. Car body can be sheet metal or aluminum.
  - 1). Vintage car bodies cannot extend beyond the inside of the wheels.
  - 2). Car bodies resembling a modified cannot extend beyond the outside of the wheels.
    - a). Plastic racing nose is OK.
    - b). Subject to Tech approval.
- C. Fiberglass or any other type material not permitted.
- D. Body panels must cover the sides of the car in the foot and leg area to prevent any intrusions.
- E. All cars must have a maximum ½" wire mesh windshield installed.
- F. Front Bumper:
  - 1). 23" wide and 5½" high.
  - 2). ¾" - 1" O.D. steel tubing mounted a minimum of 5" centered above the ground.
- G. Rear Bumper:
  - 1). 35" wide and 5½" high.
  - 2). ¾" - 1" O.D. steel tubing mounted a minimum of 5" centered above the ground.
  - 3). The bumper may be wrapped at the ends but must maintain the frontal width dimension (35").
- H. Cars with sharp edges, points or corners on any body parts, bumpers or nerf bars will not be allowed to race.

- I. All cars will follow the car numbering scheme listed in the Barona Speedway General Rules and Race Procedures with the following exceptions:
  - 1). Numbers must be a minimum of 8" high and 1.5" wide in a sharp contrasting color to the body schema.
  - 2). A 4" "S" must be included after the car numbers on both sides in the Sportsman division.
  - 3). A 4" "M" must be included after the car numbers on both sides in the Masters division.
  - 4). A number must be affixed to the rear of the car, minimum 3" high.

### 3. **SUSPENSION AND BRAKES**

- A. Front axle made of one solid bar with one or two spring front suspension.
- B. Spring only:
  - 1). No valving allowed.
  - 2). Sliders and springs are allowed.
- C. No rear suspension.
- D. Shocks must be drilled, we will check, It is best if you paint around the drilled hole so it is easy to see. **Air shocks may have Schrader valve removed.**
- E. One foot operated brake, disc or drum, on the rear axle with a return spring.
- F. Both rear tires must be locked in so both wheels stop when the brake is applied.
- G. Brakes may be mechanical or hydraulic.

### 4. **CHASSIS**

- A. Maximum height of the car from the bottom of the lower frame rail is 40".
- B. Maximum width is 42" centered in car with a maximum of ½" offset.
- C. Ground clearance is a minimum of 2½" at the bottom of the seat pan.
- D. Ground clearance is a minimum of 3" at the bottom of the frame rails measured at the rear axle.
- E. All cars must have driver protection bars built into the frame.
- F. Kick outs/Nerf Bars:
  - 1). Old style still legal however. Full length nerf bars, minimum 3 point mounting, not to extend beyond the outside of the tire width.
  - 2). Bars are to be ¾" x .060" or .095" tubing.
  - 3). Upright or vertical bars are to be mounted through upright or vertical door bars only.

- 4). Lower bar must be mounted in 2 places and parallel to the lower frame rail only.
- 5). No bars may be mounted to sheet metal only.
- 6). Any car with improperly mounted bars will not be allowed to race until such time as the bars are properly mounted.

## 5. MASTERS ENGINE RULES

- A. The engine must be rear mounted and centered between the frame rails measured from the engine drain plug  $\pm 1$ ".
- B. All vehicles are restricted to a maximum of one 6.5 HP **Harbor Freight Predator** engine with a maximum of 212cc.
  - 1). The Honda engine is not allowed. No clone engines allowed.
  - 2). Hemi engines are not allowed.
- C. Removal of governor components is legal.
- D. All engines shall remain OEM stock and must use the following OEM parts: block, cylinder head, crank, rod, piston and valve train.
- E. The following exceptions are allowed:
  - 1). Minimum combustion chamber volume of 27.5cc with piston at TDC.
  - 2). Advancement of timing is allowed.
  - 3). Camshaft CL-1 improved grind by Dyno Cams (Part #CL11-PRED) (Keep Spec card for Tech).
    - a). Intake duration at .050" lift 219.00 degrees and at .200" lift 86.5 degrees. Peak intake lift .224".  $\pm 1$  degree upon inspection.
    - b). Exhaust duration at .050" lift 222.5 degrees and at .200" lift 98 degrees. Peak lift .231".  $\pm 1$  degree upon inspection.
    - c). C/L 112.5 ATDC INTAKE. C/L 106.0 BTDC EXHAUST.
- F. Flywheel:
  - 1). A SFI certified steel or aluminum flywheel is mandatory.
- G. Stock rockers with maximum lift measured with zero lash at the intake valve retainer of .246", and maximum lift measured with zero lash at the exhaust valve retainer of .254".
- H. Valve spring maximum wire diameter .698".
- I. Valve spring pressure of 10.8 lbs. maximum at .850".
- J. Tachometer and temperature gauges are permitted.
- K. Throttle:
  - 1). All cars must be equipped with a positive throttle return spring at the carburetor and at the foot pedal so the throttle will close when released.

2). The throttle must be operated by foot.

## 6. **SPORTSMAN ENGINE RULES**

- A. The engine must be rear mounted and centered between the frame rails measured from the engine drain plug  $\pm 1$ ".
- B. All vehicles are restricted to a maximum of one track official sealed 6.5 HP **Harbor Freight Predator** engine with a maximum of 212cc.
- C. No Honda engines. No clone engines.
- D. No Hemi engines.
- E. All Sportsman engines will be sealed by Division Tech. All sealed 212cc predator motors will have the governor components removed by tech official and sealed with the OEM cam. The side cover and cylinder head will be sealed with a tamper evident device. The seals of your motor(s) will be recorded for use in all inspections. Evidence of tampering with the engine seals will not be taken lightly and will carry a severe penalty. It is recommended that you take care of your seals so that they are not damaged.
- F. Tampered seals/engines will result in a multiple race suspension (minimum of 6 races for the season) and loss of all accumulated points for the season.
- G. Stock rockers with maximum lift measured with zero lash at the intake valve retainer of .246", and maximum lift measured with zero lash at the exhaust valve retainer of .254".
- H. In the case of a damaged engine seal, please contact Rusty Sexton (Pete's Auto Repair Julian CA) for instruction on having it resealed.
- I. Sharing a sealed motor must be approved by Rusty Sexton prior to use in competition to avoid disqualification.
- J. The following tuning exceptions will be allowed:
  - 1). Advancement of timing.
  - 2). Carburetor jetting is allowed. (See Carburetor section below).
- K. Flywheel:
  - 1). A SFI certified steel or aluminum flywheel must be used.
- L. Valve spring maximum wire diameter .698".
- M. Valve spring pressure of 10.8 lbs. maximum at .850".
- N. Gauges
  - 1). Tach and temp gauges permitted.
- O. Throttle
  - 1). All cars must be equipped with a positive return spring at the carburetor and at the foot pedal so the throttle will close when released.
  - 2). The throttle must be operated by foot.

## 7. **CARBURETORS AND MANIFOLDS**

### A. STOCK CARBURETOR only:

- 1). Choke must be installed and working.
  - a). Choke bore .810".
- 2). Venture .615" no-go.
- 3). Rear carburetor bore .751" no-go.
- 4). No fuel injection.
- 5). No pressurized systems.
- 6). No fuel pumps.
- 7). Jetting is allowed, including adjustable jets.

B. No aftermarket carburetor or intake may be used.

C. Aftermarket air filter and adapter is allowed.

D. No shaved down throttle plates or choke plates allowed.

## 8. **FUEL SYSTEM AND FUEL**

A. Gas tank may be relocated. Subject to Tech approval.

B. An aftermarket fuel cell or tank may be used if it is just a tank with no pumps etc. and is mounted in a safe manner.

C. Tech will have final say for approval on aftermarket tanks.

D. Gasoline only. Conventional Unleaded pump fuel only NO race fuel of any kind. NO Pump race fuels. No aviation pump fuels. No E85 or E15 fuels. We are aware that all pump fuels in the State of California are now lightly oxygenated. This will be taken into consideration during fuel inspections.

- 1). Gas containing additives, such as additional alcohol and other oxygen enhancers, are not allowed.
- 2). It is up to each participant to make sure the fuel they are using is legal as it can and will be checked at any time by tech.
- 3). Barona Speedway and its officials reserve the right to drain any tank, test fuel and refill with gasoline at any given time.
  - a). If found to be illegal after testing, the car and driver will lose all points for the night and suspended from future races as set per the Tech Officials.

## 9. **DRIVE SPROCKETS, CLUTCH AND REAR END**

A. Any steel or aluminum split or solid drive sprocket ranging from 60 to 99 Teeth Only.

B. Total number must be visible to Tech Inspector.

- C. NO jack shafts permitted.
- D. A 12-tooth count clutch only.
- E. Drum style clutch only with a maximum of 2000 stall speed.
  - 1). No shoe work.
- F. All cars found to have an illegal clutch will result in a loss of points for the night and will not be allowed to race until the problem is corrected.
- G. Chain to be ran from clutch to drive axle only.
- H. No torque converters or belt drivers.
- I. A 1" or 1¼" axle is to be solidly affixed to the rear frame rails.
  - 1). A 36" axle is recommended however, any length axle may be used. You must maintain the overall 42" outside to outside car width measured at the tires.

#### 10. **EXHAUST**

- A. Aftermarket exhaust may be used.

#### 11. **ELECTRICAL SYSTEM**

- A. All engines must be recoil start.
- B. No electric starters allowed.
- C. Kill switch, preferably mounted on right side of driver, must be easily accessible from inside and outside of the car.

#### 12. **WHEELS AND TIRES**

- A. Tires must be Turf Tread.
  - 1). No slicks or bead lock wheels.
  - 2). Front tires 15 x 6.00 x 6" must be used.
  - 3). Rear tires 16 x 6.50 x 8" must be used.
- B. Steel or aluminum wheels can be used. 6" diameter Front rims with a maximum width of 6.5" must be used, and 8" diameter Rear rims **MUST** be used with a maximum width of 7".
- C. No ceramic bearings on wheels or axles.

#### 13. **WEIGHTS**

- A. All cars must weigh 375 lbs., with driver, minimum. Track scales will be the official weight.
- B. All cars that need weight added must have it securely fastened between the lower frame rails with a minimum of two 3/8" grade "8" bolts.



- C. The weights must be painted white and have the car number displayed on them.

#### 14. SAFETY EQUIPMENT

##### A. Driver's Suit:

- 1). A SFI approved flame retardant driver's suit is mandatory. No polyester clothing of any kind is allowed.
- 2). Neck collar or a Hans type device is mandatory.
- 3). Racing gloves mandatory. No welding gloves, gardening gloves, etc.
- 4). Racing shoes or leather boots/shoes required. No nylon shoes are allowed.

##### B. Helmet:

- 1). A full face shield, Snell 2015, SA approved or newer helmet with proper identification is mandatory and must have no signs of previous damage.
- 2). Motorcycle helmets (M rated helmets) with a Nomex sock will be allowed.
- 3). No motocross helmets.

##### C. Driver's Seat:

- 1). A commercially manufactured racing seat with padded headrest, securely mounted and attached to floor pan in a minimum of six (6) locations – four (4) on the bottom and two (2) on the back of the seat with 5/16" grade "8" bolts is required.
- 2). Each race seat must have a set (2) of side head supports installed.
- 3). Fiberglass seats are not allowed.

##### D. Driver's Harness:

- 1). A SFI certified, race approved, quick release 5-point racing harness is mandatory. Must have a minimum of 2" wide lap and shoulder belts and a 1" wide submarine strap.
- 2). Belts must be bolted to cage or frame with grade "8" minimum 5/16" bolts.
- 3). Harness must be date stamped no more than four (4) years old from the present date unless worn or frayed which must immediately be replaced.
- 4). Drivers harness must be worn at all times while in racecar.
- 5). Arm restraints are mandatory and must be worn properly to prevent the drivers hands or arms from reaching outside of the drivers compartment.

##### E. Window Net:

- 1). Window nets which are securely mounted to the car and covering the window openings are mandatory on both windows **OR** arm restraints must be used instead of window nets.

- 2). No string nets or close net off road type nets allowed.
  - 3). Window net release must be in front at the top of the window and workable from inside and outside of car.
- F. Steering Wheel:
- 1). Removable steering wheels are mandatory and must lock securely to the steering column.
  - 2). Center of steering wheel must be padded.
- G. Eye protection, helmets, harness, neck collars, gloves and driver's suit must be worn at all times when on the racing surface.
- H. Fire Extinguishers:
- 1). Each pit area must have an extinguisher located either within the hauler by the door or on the trailer. A 5-lb. ABC type extinguisher is the minimum size for this application.
- I. No radios, Bluetooth or iPods are to be used on the racing surface.
- J. No driver shall compete in any event with head or arm extended outside the confines of the roll cage. Failure to comply will result in immediate black flag and removal from race.
- K. Car and driver will be required to fix safety violations PRIOR to racing in any event.

## 15. **DRIVERS MEETING**

- A. The drivers meeting will be at 3:15.
- 1). Roll Call will be taken.
  - 2). If you are not present, you will start in the back.
- B. If you are late to staging, you forfeit your position and you will start in the back.
- C. Drivers who miss the roll call will start in front of drivers who are late to staging.
- D. If multiple drivers are late to staging, they will line up in the order that they arrive.

## 16. **INSPECTIONS**

- A. All cars and drivers are subject to inspection by the Tech Inspector or pit official at any time or any place on the premises of Barona Speedway.
- B. Only the driver and 1 parent are to be present during any race inspections.
- C. The First, Second and Third place drivers will have their cars & engines inspected by a Tech Official after every race, or at least after the main event.
- 1). The first, second and third place cars must go directly to tech after the main event for inspection.

- 2). Failure to do so will result in disqualification and loss of points for the night.
- D. The inspection may consist of, but not limited to: the removal of the carburetor, cylinder head, clutch and check of engine side cover and applicable seals/tags. Please read section 16.F. parts 1) and 2) below for details.
- E. If the driver or the car owner refuses the inspection of the engine or doesn't go straight to tech the driver will lose the event plus points for the night, and possibly a suspension from future races.
- F. **ENGINE INSPECTIONS**
  - 1). All engines may be **REMOVED** and inspected **AT THE TRACK** anytime by the division tech. The motor must be presented for inspection with the oil drained within 30 minutes or less. All engines must be removed at the tech inspection area. The side cover, carburetor, cylinder head may be removed to verify that the engine has not been altered beyond the rules. It must comply to all rules, including a cam lift check, or the motor will not be allowed to race until the problem is corrected. If the motor is inspected **POST** race (heat or main) and is found to be illegal, it will result in a loss of points for the night and a 1 or 2 race suspension for the parent, or crew chief of the car. Techs discretion.
  - 2). If the engine is a sealed sportsman engine, your engine is also subject to the inspections listed above in section 16.F.1). including the sportsman division engine seals. If a sealed sportsman engine **OR** seal is found to be tampered with and/or illegal, it will result in a minimum 6 race suspension for the season and loss of all accumulated points for the season.
  - 3). Regardless the outcome of the inspection process, it will be the responsibility of the car owner/crew to reassemble motors after inspections.

**G. Tech Officials:**

- 1). All problems concerning the Mini Dwarf racing divisions will be handled **ONLY** by the tech officials listed below:
  - a). Rusty Sexton (760)670-8055.
  - b). Jim Perkins (760)315-6751.

## 17. INTERPRETATION OF THE RULES

Though we have made every effort to provide rules that will be clear and precise, should there be any confusion in your interpretation, **ASK!! IGNORANCE IS NOT AN EXCUSE!** If a specific issue is not addressed in these rules, the official's decision is final. Any modifications not addressed in these rules will not be allowed unless approved by the Tech.

**We want all cars to be competitive with each other in their division. If you do something with your car that has been overlooked in these rules that we feel gives you an unfair advantage over your competitors, YOU will be required to change YOUR car.**

**These rules are provided to maintain orderly conduct of racing events and to establish requirements. By participating in Mini Dwarf events at Barona Speedway, each driver and parent agrees to comply with these rules and all general rules of the Speedway.**

**Should your car be found in violation of these rules it will be the Tech's discretion as to what action will be taken. A minor 1<sup>st</sup> time infraction may allow you to race that night, but require you to make necessary changes prior to the next race.**

**Should a racing advantage rule infraction be found, you may be asked to start in the back, or may not be scored or allowed to place in that event. You also may have to add weight to your car to compensate for the infraction. The amount of weight to be added will vary depending on the infraction, and will be determined by the Tech. You will need to find the weight required yourself, it will not be provided. Changes will need to be made to your car to comply with the rules prior to the next race night.**

**These rules will be in effect throughout the 2020 racing season. These rules are in no way meant to imply any guarantee of safety. There is no guarantee against injury or death to participants, spectators or others.**

**These rules may be amended at any time by the Official. Changes may be made for safety, or to keep the competition close.**

**The Barona Speedway management appreciates your cooperation in complying with these rules. We wish you all a safe and successful 2020 racing season.**