

BARN BURNERS SLOT CAR CLUB
RULES, PROCEDURES AND TECHNICAL SPECIFICATIONS
2019

1.1.2019

General Rules

Golden Rules

**As it is the purpose of this club, to promote Scale Model Car Racing
there are two Golden Rules that override all others**

- 1. If it is not expressly mentioned in the rules as permitted, then it is in fact prohibited.**
- 2. Courteous behavior is expected towards all fellow drivers, club members and guests.**

1.0 Basic Rules and Expectations

1.01 All participants are expected to remain courteous to all other drivers, spectators, the host, the Race Director and the Tech Director. U.S. political discussion is prohibited within any facility that is hosting a BBSCC event. Violators will be asked to leave the premises.

1.02 No controller with a retail price of more than \$70 is allowed. No digital controllers allowed.

2.0 Race Rules

2.1 General Race Rules

2.1.1 You must be on time to your Turn Marshal Post. We will not wait to start a race for you, and penalties may be imposed as noted in the “Turn Marshalling” section.

- 2.1.2 You must be on time to the starting grid for your race. We will start without you, and you will not be allowed to make up that heat.
- 2.1.3 The Race Director, at his/her sole discretion, will issue a warning to a driver exhibiting unsportsmanlike conduct. A second offense will cause the driver to suffer a ten lap penalty. A third offense will result in the driver's disqualification from the race.
- 2.2 Tech Inspection
 - 2.2.1 Tech inspections will be made on all cars participating in races and inspected by a Tech Inspector so designated by the one or more members of the Board. This officer will have any car they intend to race inspected by another designee.
 - 2.2.2 The starting and closing times for tech inspection will be announced by the Tech Director at the event.
 - 2.2.3 Any driver whose car is not inspected by the close of tech inspection will not race in that class.
 - 2.2.4 Magnet Marshal (or equivalent) will be used in tech inspections for all BBSCC classes. Cars may not exceed down force maximum for their class.
 - 2.2.5 All cars will be impounded after tech inspection and cannot be touched or worked on until they begin race, with the exception of tire cleaning or buffing prior to their first heat. Any driver found working on his/her car during the impound period will be disqualified.
 - 2.2.6 Post-race inspection may be conducted for the top three finishers of each class. Such inspections may be required by any member of the board, the Race Director, the Tech Inspector or requested by any driver(s) in that class. If requested by a driver, the requester will pay the club for the inspection. Cost \$1.

Any car found outside of compliance with the rules will have its results disqualified.

2.3 Track Call

2.3.1 Consistent with the rules below, a Track Call may be made by any driver by calling “Track”. Track Calls should not be made by the Race Director. Track Calls are permitted ONLY under the following conditions:

2.3.1.1 A car on the straight directly in front of the Drivers or on an inaccessible part of the racing surface. Inaccessible is defined as an unreachable car under a bridge or on the floor in an inaccessible location. A car on the floor is NOT automatically a Track Call.

2.3.1.2 Drivers may only reach for their car if it is directly in front of them and therefore NOT blocking the view of other drivers, or if the power is off and they are in the “Pit” area. Drivers violating this rule may be penalised 1 lap.

2.3.1.3 A car landing in another racer’s lane, i.e. a “rider”.

Note: The situation where a marshal has more than one car to re-slot is NOT a Track Call.

2.3.2 When a track call is made, the Race Director may, at his/her discretion, ask the driver calling “track” or “stop” his/her reason for doing so. If the Race Director determines the track call to have been unwarranted and/or in violation of the rules, the driver car will be penalized by 1 lap.

2.4 Turn Marshalling

- 2.4.1 As cars routinely leave the track's slots, there will be "Turn Marshals" for each heat. At the start of each heat, the next 4 racers in the rotation are required to corner marshal. The racer who has just finished his/her 4th heat will be allowed to waive being a Marshal if more than 9 racers are in the event. This gives racers a quick break before their next heat or turn at being a Marshal.
- 2.4.2 It is the Marshal's responsibility to get the cars on the track quickly and in the correct lane. In the case of multiple de-slots, every effort should be made to (a) re-slot in the order in which de-slots occurred, except when an initial de-slot causes a subsequent de-slot. In this case, the second car should be re-slotted before the car causing the accident. The intent is that re-slotting sequence be fair to a driver not at fault for a de-slot.
- 2.4.3 Failure to consistently Marshal correctly will result in elimination from a class.
- 2.4.4 All entrants are expected to Marshal and/or to assist the Race Director. If unable to marshal for any reason consult the Race Director.
- 2.4.5 Any driver failing or refusing to marshal as requested/required in a class in which he/she are competing will receive a five lap penalty for his/her race in that class. Unless otherwise excused by the Race Director.
- 2.4.6 Remember that you are marshaling the cars of drivers who will be marshaling when you are driving. Your constant and consistent attention to you marshal duties

will make the race more enjoyable and equitable for everyone.

2.5 Black Flag

2.5.1 Any car suffering damage that makes it a hazard to other drivers due to constant de-slotting or that is damaged in a manner making it illegal under BBSCC rules (such as a loss of part of the body, loss of interior, or dragging on the track surface) may be black-flagged, at the discretion of the Race Director.

2.5.2 A car that is black-flagged must be immediately removed from the track until proper repairs are made. Failure to comply with a black flag will result in the driver's disqualification from the race.

2.6 Race Director Responsibilities

2.6.1 See to it that sufficient practice time is allocated prior to tech-inspection for any class which is about to race. Only those cars which are about to race should be allowed on the track during this practice session.

2.6.2 See to it that the track is turned off during Tech Inspection.

2.6.3 See to it that the race schedule is followed.

2.6.4 See to any necessary mid-race lap total adjustments due to riders, etc..

2.6.5 See to it that the race schedule is followed. Insure each driver knows when he/she will be starting each heat and which lane.

2.6.6 Record all lap charts and announce results.

2.7 Car Maintenance Prior To and During a Heat

2.7.1 Drivers may scrub and clean tires prior to placing the car at the start of the car's first heat.

2.7.2 Drivers may remove cars from the track during the heat, but only from directly in front of the driver's own driver station, to perform any maintenance required. Drivers may also request that a turn marshal provide their own stopped or de-slotted car for the purpose of performing maintenance. In this case, the turn marshal must re-slot the car at the location that it was removed from competition. Heat racing will continue.

2.7.3 Drivers may NOT remove cars from the track after power is cut at the end of any heat or at any time between heats except per the next rule.

2.7.4 Cars stopped in the area designated in front of the drivers station straight may be removed for maintenance or tire cleaning once the power is off. Drivers desiring to stop for tire cleaning or maintenance between a heat must stop between the yellow cones or white line on the driver's station straight before the power is removed from the track. This area is defined as the "Pit Area". Any car stopped in this area may be removed ONLY AFTER the power is turned off. If a car is removed in this area before the power is off, the driver will receive a 1 lap penalty. The start of the next heat will not be delayed for a car removed.

2.8 Race Time Limits

2.8.1 Except for the following classes, all race heats shall be 2-1/2 minutes.

- 2.8.2 Trans-Am and Sport prototype 3-1/2 minutes.
- 2.8.3 Endurance races will be conducted in four rounds of 4 minute heats or more depending on the event.
- 2.8.4 Wednesday Night Sprints (used for the Wednesday night races unless otherwise determined by participants) race heats of 1-1/2 minutes.
- 2.8.5 Other time limits or scoring methods might be designated by the Race Director for IROC races or Youth races. These alternate scoring methods will be communicated to the drivers in said race.

3.0 Technical Specifications

3.1 Definition of Groups

3.1.1 Cars should be stock with the following exceptions depending upon Group designation of the class:

Group 1: Changes to the motors and gearing as per the specific rules of the individual class. This group is open to fine tuning and preparation skills.

Group 2: limited or no alteration allowed. This group is intended to enhance driver-to-driver competition rather than car preparation and tuning skills

3.2 Chassis

3.2.1 Minimum 1/32 ground clearance on all cars. Gears are exempted as long as they don't contact the track surface.

3.2.2 Guide flag must not extend beyond front bodywork (may not be visible when viewed from above when pointed directly forward). F1 cars and Vintage Sport cars may be allowed to have the guide flag visible but must be approved by inspectors.

- 3.2.3 Magnets, where allowed, may be added to the underside of the chassis. These must be securely affixed so as to not be dislodged during a race and cannot be lower than any part of the car underpan or frame. Cartrix 50's F1 cars are allowed to have one button magnet mounted at the same location as the OEM magnet of the car. Maximum downforce allowed is specified in the Class Specifications.
- 3.2.4 The body mounting screws may be loosened. If they are, they **MUST BE COVERED** with tape to prevent debris on the track. The thickness of the tape will be included in the required clearance spec.
- 3.2.5 You may use any copper or aluminum braids.
- 3.2.6 Axle spacers may be used and axles may be shortened to prevent wheel slop.
- 3.2.7 Chassis may be trimmed to provide body float. The amount of the trimming must be no wider than an index card. No other chassis modifications are allowed unless expressly permitted by that class.
- 3.2.8 Axle Bushings and motors may be glued in place.
- 3.2.9 Most classes allow weight to be added to the chassis provided that it is: (a) secured in place, (b) not visible when the car is placed on the track, and (c) must be attached on the inside of the car.

3.3 Body

- 3.3.1 Only hard plastic or resin bodies are allowed. Vacuum-formed bodies that have been hardened and thickened may be allowed at the discretion of the rules committee, provided they weigh at least 25 grams.
- 3.3.2 Open cockpit cars require, at a minimum, a driver and a “shelf”; closed cars require a driver, front and rear glass and a cover over the mechanical. Full interior is not

always required although driver should have arms and at least top half of steering wheel. All interiors must be made of a polystyrene plastic, no vacuum form interiors allowed. This rule may be waived at the discretion of the rules committee for certain classes (e.g., for young driver events using impact resistant cars with blackened windows).

- 3.3.3 If the prototype car had a spoiler mounted, it must be in place at tech inspection and the start of the race. The spoiler must be securely affixed and should have at least a chance of being in place during the entire race.
- 3.3.4 Cars may be finished in real or fantasy liveries unless otherwise specified in class rules. They should still maintain the appearance of cars of their class and era. All cars are required to carry 3 sets of numbers.
- 3.3.5 You may trim wheel wells to insure proper tire clearance. Grinding with intent to lighten body is not permitted.
- 3.3.6 Group 1 bodies may be lowered on the chassis provided that (a) body panels are not trimmed, and (b) body and chassis both meet the track clearance requirements. Group 2 bodies must be stock, if a resin or model car body is used the car cannot be lower than a stock manufactured car of the same class. Exceptions, Group 2 Carrera Classic NASCAR's are allowed to be lowered so that the roll center is the same as the Monogram cars. Group 2 Monogram NASCAR cars need to have the magnet mount frame cut so that the car can pass ground clearance requirements.

3.4 Motor

- 3.4.1 Motor replacements in Group 2 cars must be of the approved motor for that class.

3.5 Wheels and Tires

- 3.5.1 All four tires must be in contact with the track surface. Front wheels must touch and roll on the track. If this requires adjustment when moving from a routed track to sectional plastic track, it is the owner's responsibility to assure compliance.
- 3.5.2 Tires must fit within body limits. Tires must be covered by the body as viewed from directly above the car. This does not apply to open-wheeled cars. Front tires must be of the original manufacturer; if a resin car, the wheels and tires must be approved by inspectors.
- 3.5.3 Some classes allow original equipment tires to be replaced with rubber or urethane aftermarket tires of the same width and diameter. Tires should be close as possible to prototype. Replacement wheels where allowed must be prototypical and have wheel inserts in place if necessary. In these classes, wheels may be replaced with set screw types; CB Design wheels are preferred replacement rims.
- 3.5.4 All tires must be of a rubber or Urethane construction. No O-ring (5mm minimum on front tires), sponge, or silicone tires. Tire width will be measured at the contact patch.
- 3.5.5 All tires must be run DRY and no traction compounds or treatments may be used. Cleaner residue must be removed before placing the car on the track. Any car that leaves a residue on the track surface shall be immediately disqualified and removed from the race.
- 3.5.6 Front tire treatments intended to reduce the traction of the tire, including the application of nail polish or similar substances are not permitted. "ZeroGrip" or similar low friction replacement front tires are not

permitted. The intent of this rule is that front tires should be equivalent to stock tires supplied with ready to race cars eligible in the class.

3.5.7 You may glue and true the tires. Slight beveling of the tires may be done, but not excessive rounding to purposefully narrow the tires. Tech inspection decision is final.

3.6 Gears

3.6.1 Some classes allow gear changes. In Group 1 – Gears can be replaced with set screw types. Alternative gear ratios are permitted. Group 2 – Cars must use the original crown gear but can change to a metal pinon gear of the same size as the original.

3.7 Resin Cars

3.7.1 In classes where resin cars are permitted, any resin body consistent with the class is allowed. Manufacturers include: RMS, Penelope Pitlane, Protoslot, Beardog, Monoplace, FPF Models, Maxi Models, Resilient Resins, Betta Classic Fiberglass, Startline, Slotwings, and George Turner. Other manufacturers will be considered at the discretion of the rules committee.

3.7.2 Body must be securely screw mounted with at least 2 screws.

3.7.3 Permitted chassis brands include: (a) any ready-to-race chassis from a brand permitted in the class, (b) any of the following aftermarket chassis: MRRC Sebring, Slot.it HRS, Penelope Pitlane or (c) a scratchbuilt chassis. Other commercially available aftermarket

chasses may be permitted at the discretion of the rules committee.

3.7.4 Scratchbuilt chassis must include a solid pan extending at least from the front axle to the rear axle, and from the left hand to right hand body panel.

3.8 Forbidden Modifications

3.8.1 Any motor rated at more than 21,500 RPM (unless otherwise specified in the class rules). The Tech Committee shall be permitted to request that any owner provide the specs for any non-original equipment motor.

3.8.2 Axle ball bearings

3.8.3 Motor ball bearings.

4 Competition Classes and Specific Class Rules/Specifications

4.1 Vintage Sports Cars

Cars must be Pre-1965 sport cars that raced in Le Mans or international Manufactures championship races Class.

Brands Allowed	Any manufacturer and Resin
Group	2
Chassis	Plastic and Plate Brass chassis are allowed. If using a brass chassis, it must be for a resin bodied, plastic car and of a Penelope Pitlane design or similar. No modifications to any chassis used is allowed. Min weight is 80g
Magnet Downforce Limit	0
Other Modifications	Only stock or rubber equivalent tires are allowed. Tires may not exceed 8mm width. No urethane or Silicon.

4.2 Classic NASCAR

Limited to car models run in NASCAR competition between 1955 and 1980.

Brands Allowed	Carrera, Scalextric, Monogram, Pioneer, Resin
Group	2
Wheels and Tires	Replacement rims CB design Classic Steel Wheels 17/8 only, Non-silicone tires may be installed.
Chassis	The exchanging of one manufacturer's chassis for another is allowed. Chassis must be of a Side Winder configuration. Chassis must still remain stock except for trimming to permit the body to fit the chassis. Car minimum weight is 100g
Magnet Downforce Limit	Non-Magnet
Other Modifications	Body Height: Carrera cars are allowed to have the body lowered but only by cutting the body mounts level with the front and rear bumper mount. No other lowering is allowed. The lowering cannot be lower than the top of the front and rear bumper mounts and the chassis cannot have the pan cut. The posts can be trimmed. Only motors of 18,000 RPM or lower. Replacement motors for FC130 cars are H&R HRMH1 only.

4.3 Modern NASCAR

Limited to car models run in NASCAR competition between 1992 and the present.

Brands Allowed	Carrera, Scalextric, SCX, Resin
Group	1
Wheels and Tires	Must be CB design and must be 15/8 or 15/10 or stock. Non-silicone tires may be installed.
Chassis	Must be a stock unmodified chassis. Weights may be added but must be on the inside of the chassis. Chassis may be trimmed to allow body float. The gap of the trimming can be no more than the thickness of a business card.
Magnet Downforce Limit	220g
Other Modifications	

4.4 GT – Group 5 / IMSA GTO

Production race cars with wide wheel flaring or stock appearance. Car racing from 1972 to present are allowed.

Brands Allowed	Race Sidways Chassis only
Group	2
Wheels and Tires	Urethane tires allowed
Chassis	Full plate plastic
Magnet Downforce Limit	220g
Other Modifications	Non-stock Plastic or resin Bodies may be widened to fit chassis

4.5 65-80 Sport Prototypes

Cars allowed include international sports prototypes that competed from 1966 to 1980.

Brands Allowed	Carrera, Scalextric, Monogram, Fly, Slot.it, Spirit, Resin, NSR
Group	2
Wheels and Tires	Metal Rims must have lug nut design engraved on the rim or have inserts installed. Urethane tires allowed
Chassis	Full pan plastic
Magnet Downforce Limit	220g
Other Modifications	Only original bushings allowed.

4.6 Group C Prototypes

Cars allowed include international sports prototypes that competed from 1981 to 1993.

Brands Allowed	Slot.it chassis only. Bodies may be substituted
Group	2
Wheels and Tires	Must be stock construction. Urethane tires are allowed.
Chassis	Must be stock construction, no modifications, minimum weight is 50g. Weight may be added. Only in-line motor configuration allowed. Magnet may be placed in whichever pre-designed magnet mounting location.
Magnet Downforce Limit	220g
Other Modifications	Only slot it orange or brown end bell motors allowed and Piranha. Guides must be stock.

4.7 Trans-Am

Only pony cars from the 1960's through 1970's allowed.

Brands Allowed	Scalextric, Monogram, Pioneer, Resin, model plastic
Group	2
Wheels and Tires	Wheels must be stock. Pioneer cars can replace rear rims with CB Design Classic Steel Wheels 15/8 Urethane tires allowed
Chassis	Min weight 75g
Magnet Downforce Limit	200g
Other Modifications	Only a sidewinder or Inline chassis made by Scalextric or Pioneer will be allowed in Resin or model bodied cars. Full interior is required. Only replacement motor allowed is an H&R HRMH1 18K motor.

4.8 Can-Am 1964-1974

Limited to cars that raced the Can-Am series 1964-1974.

Brands Allowed	Carrera, Monogram, Scalextric, Fly, HSRR, Vanquish, Slot.it, MRRC, Resin
Group	1
Wheels and Tires	Front tires and rims must be factory stock.
Chassis	No restriction
Magnet Downforce Limit	240g
Other Modifications	Motors: There is no motor restriction in this class. Gear Ratio: There is no gear ration restriction in this class.

4.9 Vintage F1

Must be a F1 or Indy car that was raced from 1910 thru 1939. All cars must be finished in a “national” color as raced in the series.

Brands Allowed	Shadow Fax, Monogram, Airfix or Resin
Group	2
Wheels and Tires	Only Shadow Fax tires white or black .
Chassis	Only Shadow Fax chassis are allowed
Magnet Downforce Limit	Non-magnet
Other Modifications	Only motors of 14,000 RPM or lower. FF can replacements must be purchased from the club.

4.91 50's F1

All cars must represent an actual car as raced in the series. Resin and hand built bodies are allowed.

Brands Allowed	Scalextric, Resin, Cartrix
Group	2
Wheels and Tires	The only setscrew wheels allowed are the BRM or Penelope Pitlane classic style or wheels of equal manufacture. Front tires should be 20x7, rears 22x9. BRM recommended.
Chassis	Plastic or brass. Front axles may not exceed 2”, rear axle 2 ½”
Magnet Downforce Limit	70g
Other Modifications	18,000 RPM: Motors must be purchased from the club.

4.92 70s – 80s F1

All cars must represent an actual car as raced in the series. Resin and hand-built bodies are allowed.

Brands Allowed	Scalextric, SCX, Carrera, Ninco, Fly, Slot Racing car, Resin
Group	1
Wheels and Tires	Setscrew wheels are allowed but must be of the same size as originally equipped. The same approximate width dimension of from outside of wheel and tire to the outside of other wheel and tire must be maintained.
Chassis	All chassis must be of resin or plastic construction. Min weight is 40g.
Magnet Downforce Limit	220g
Other Modifications	21,500 RPM motor limit. Presently Policars are NOT permitted in this class.

4.93 DTM

Group 2 class for Carrera DTM cars.

Brands Allowed	Carrera only
Group	2
Wheels and Tires	Stock or Paul Gage Tires
Chassis	No additional weight required
Magnet Downforce	220g Max (stock magnets only in stock locations) Magnets may be stacked
Other Modifications	Stock motor or H&R Hawk 18K RPM motor.

4.94 Caterham / Lotus 7

This is a Group 2 class limited to only the one car model.

Brands Allowed	Scalextric
Group	2
Wheels and Tires	Stock only
Chassis	No additional weight
Magnet Downforce	100 gram max.
Other Modifications	Stock motor or OEM replacement. Car can run with gear cover on or off.

4.93 GT3

Carrera GT3 cars.

Brands Allowed	Carrera only
Group	2
Wheels and Tires	Stock
Chassis	No additional weight required
Magnet Downforce	220g Max (stock magnets only in stock locations) Magnets may be stacked
Other Modifications	Stock motor