



Barn Burners Slot Car Club

RULES, PROCEDURES, AND TECHNICAL SPECIFICATIONS

08.9.2022

General Rules

Golden Rules

As it is the purpose of this club, to promote scale model car racing there are two 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

- 1.1 All participants are expected to remain courteous to all other drivers, spectators, the host, the race director, and the tech director. Political discussion is prohibited from any facility that is hosting a BBSCC event. Violators will be asked to leave the premises.
- 1.2 Electronic controllers with brake adjustability and throttle sensitivity adjustment such as the Difalco DD300 and Professor Motor 2110 are permitted. For club use verification of any other controllers, please check with a board member before purchase of said controller.



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 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 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 will be used in tech inspections for all BBSCC classes. Cars may not exceed maximum down force limit for any class, but a 5 gram leeway will be given on top of the maximum limit for each class to account for inconsistencies.
- 2.2.5 All cars will be impounded after tech inspection and cannot be touched or worked on until they begin the race with the exception of tire cleaning prior to their first heat. Any driver found working on his/her car during the impound period will be 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 are permitted only under the following circumstances. A "Track" call is a yellow flag and is a temporary stoppage of the race.

2.3.1.1 A car on the straight directly in front of the driver stations or an inaccessible part of the racing surface.

2.3.1.2 Drivers may only reach for their car if it is directly in front of their driver station. This is to prevent drivers from blocking the view of other drivers. Drivers violating this rule may be penalized 1 lap.

2.3.1.3 A car landing in another driver's lane, i.e. a "rider".

2.3.1.4 A corner marshal who has 3 or 4 cars wreck at the same time in front of them may make a "Track" call.

2.3.2 When a track call is made, the Race Director may ask the driver calling track his/her reason for doing so. If the Race Director determines the track call to have been unwarranted the driver will be penalized 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. If you are racing in a class, then you will be expected to turn marshal for that class.

2.4.2 It is the turn marshal's responsibility to get the cars on the track quickly and in the correct lane. In the case of 2 de-slots at the same time the marshal should try to re-slot the cars in the order they de-slotted. The exception to this is if one of the cars that de-slotted caused the other car to de-slot then the car that was hit should be re-slotted first since it was not the driver's fault.

2.4.3 Failure to consistently marshal correctly can result in a one lap penalty.

2.4.4 All entrants are expected to marshal and/or assist the Race Director if asked. 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 is competing will receive a 5 lap penalty for his/her race in that class unless otherwise excused by the Race Director.
 - 2.4.6 Remember that you are marshalling the cars of drivers who will be marshalling when you are driving. Your constant and consistent attention to your marshal duties will make the race more enjoyable and equitable for everyone. You should be watching your corner not the race.
- 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 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 black flag will result in the 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 the practice session.
 - 2.6.2 See to it that the track is turned off during the 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.
- 2.7 Car Maintenance before and during heats
- 2.7.1 Drivers may 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 to perform maintenance but only if the car sits along the straightaway directly in front of the driver driving the car.



- 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 in the next rule circumstance.
- 2.7.4 Cars stopped in the designated pit area in front of the driver's stations may be removed for maintenance or tire cleaning once the power is off between heats.

2.8 Race Time Limits

- 2.8.1 Except for the following classes all race heats will be 90 seconds (1.5 minutes) long.
- 2.8.2 Classic NASCAR class races will be re-fueling races and heats will be 120 seconds (2 minutes) long.
- 2.8.3 Trans Am class races will be re-fueling races and the heats will be 120 seconds (2 minutes) long.
- 2.8.4 Group C class races will be re-fueling races and the heats will be 120 seconds (2 minutes) long.
- 2.8.5 For endurance races of any class the rotation number will be increased from 1 to whatever is necessary to simulate the correct length of race.
- 2.8.6 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 before the races.

3.0 Technical Specifications

3.1 Chassis

- 3.1.1 Minimum 1/32" ground clearance on all cars. Gears are exempted as long as they do not touch the track surface. Class specific rules listed in the classes area below supersede this rule.
- 3.1.2 Guide flag must not extend beyond front bodywork.
- 3.1.3 Magnets in classes that allow them may be added to the inside of the chassis. They may NOT be placed to the very front of the car where the Magnet Marshal will not read them. They



must be affixed so that they do not come loose during racing. For Carrera classes they must be in stock locations only.

- 3.1.4 The body mounting screws may be loosened. If they are, they **MUST BE COVERED** with tape to prevent them from falling into the track. The thickness of the tape will be included in the ground clearance measurement.
- 3.1.5 You may use any copper or aluminum braids.
- 3.1.6 Axle spacers may be used, and axles shortened to prevent wheel slop.
- 3.1.7 Chassis may be trimmed to provide body float. The amount of trimming must be no more than the thickness of an index card. No other chassis modifications are allowed unless expressly permitted by that class.
- 3.1.8 Axle bushings and motors may be glued in place.
- 3.1.9 You may add weight to most classes. The only stipulations are that the weight must be secured, not visible when the car is placed on the track and must be attached inside the car.

3.2 Body

- 3.2.1 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.
- 3.2.2 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 the top half of the steering wheel.
- 3.2.3 If the racing car had a spoiler mounted, it must be in place at tech inspection and at the start of the race. The spoiler must be as securely affixed as possible and at least have a chance of being in place the entire race.
- 3.2.4 You may trim wheel wells to ensure proper tire clearance. Grinding with intent to lighten body is not permitted.



3.2.5 Bodies may be lowered on the chassis unless specifically specified in that classes rules that it is not allowed. Body and chassis must both still meet ground clearance requirements. Classic NASCAR cars are allowed to be lowered so that the roll center is the same as Monogram cars. Monogram NASCAR cars need to have the stock magnet box cut to allow for ground clearance.

3.3 Motor

3.3.1 Motor replacements for any class need to be approved per the rules for that class.

3.4 Wheels and Tires

3.4.1 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 ensure compliance.

3.4.2 Tires must fit within the 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 tech inspectors.

3.4.3 Some classes allow original equipment tires to be replaced with rubber or urethane aftermarket tires of the same width and diameter. Tires should be as 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 the preferred replacement rims.

3.4.4 All tires must be of a rubber or urethane construction. No O-ring, sponge, or silicone tires. Tire width will be measured at the contact patch.

3.4.5 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 residue on the track surface shall be immediately disqualified and removed from the race.

3.4.6 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 the stock tires supplied with ready to race cars eligible in the class.

3.4.7 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.

3.5 Gears

3.5.1 Some classes allow gear changes. Please see the specific class rules in this document for gear change rules.

3.6 Resin Cars

3.6.1 In classes where resin cars are permitted, any resin body consistent with the class is allowed.

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

3.6.3 Permitted chassis brands include: any ready-to-race chassis from a brand permitted in the class or any of the following aftermarket chassis: MRRC Sebring, Slot.It HRS, Penelope Pitlane, or a scratch-built chassis. Other commercially available aftermarket chassis may be permitted at the discretion of the rules committee.

3.6.4 Scratch-built chassis must include a solid pan extending at least from the front axle to the rear axle and from the left hand to the right-hand body panel.

3.7 Forbidden Modifications

3.7.1 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.

- 3.7.2 Axle ball bearings
- 3.7.3 Motor ball bearings

4 Competition classes and specific class rules

4.1 Active Classes

4.1.1 Carrera GT

Brands Allowed	Any Carrera GT car
Wheels and Tires	Stock Rims – Paul Gage urethane tires permitted
Chassis	No Modifications
Magnet Limit	No Magnets
Other Modifications	Stock motor or any 18K motor is permitted

4.1.2 Carrera DTM

Brands Allowed	Carrera Only
Wheels and Tires	Stock Rims – Paul Gage urethane tires permitted
Chassis	No Modifications
Magnet Limit	220g Max (5 gram leeway) only in stock locations
Other Modifications	Stock motor or any 18K motor is permitted

4.1.3 50s F1

Brands Allowed	Scalextric, Resin, Cartrix
Wheels and Tires	Wheels should be a classic style for the period. Front and rear tires should be no wider than 5 mm for contact patch. BRM or CB Design wheels and Paul Gage urethane tires permitted.
Chassis	Plastic or brass. Front and rear track may not exceed 2.25"
Magnet Limit	No Magnet
Other Modifications	Stock motor or 18K or lower motor permitted



4.1.4 65-80 Sports Prototype

Years Allowed	International Sports Prototypes that competed from 1965-1980
Brands Allowed	Scalextric, Carrera, Monogram, Fly, Slot.it, Spirit, Resin, NSR, Thunderslot
Wheels and Tires	Metal rims but have lug nut design engraved on the rim or have inserts installed. Urethane tires allowed
Chassis	Full pan plastic
Magnet Limit	220g (5g leeway is permitted)
Other Modifications	Any 21.5K motor is permitted

4.1.5 Can Am

Years Allowed	Limited to cars that raced in Can Am series 1966-1974
Brands Allowed	Carrera, Monogram, Scalextric, Fly, HSRR, Vanquish, Slot.it, MRRC, NSR, Resin
Wheels and Tires	Front tires and rims must be factory stock. Any urethane tires are permitted
Chassis	No restriction
Magnet Limit	240g (5g leeway is permitted)
Other Modifications	No motor or gear ratio restriction in this class

4.1.6 Group C Prototypes

Years Allowed	International Sports Prototypes from 1981 to 1993
Brands Allowed	Slot.it chassis only. Body may be changed
Wheels and Tires	Urethane tires allowed (Paul Gage)
Chassis	No restriction



Magnet Limit	220g (5g leeway is permitted) in stock magnet locations
Other Modifications	Slot.it 23k motor

4.1.7 Classic NASCAR

Years Allowed	Limited to car models that ran in NASCAR between 1955 and 1980
Brands Allowed	Carrera, Scalextric, Monogram, Pioneer, Resin
Wheels and Tires	Replacement rims CB Design classic steel wheels 17mm x 8 mm only. Paul Gage urethane tires may be used.
Chassis	Chassis swapping is allowed. Must be of sidewinder or inline configuration. 3D printed chassis permitted.
Magnet Limit	No Magnet
Other Modifications	Carrera cars are allowed to have body lowered by cutting body mounts. Cannot be lower than top of front and rear bumper mounts and pan cannot be cut. Max motor size is 18k.

4.1.8 NSR 86/89 F1

Brands Allowed	NSR only
Wheels and Tires	Any NSR wheels and tires permitted even though they are rubber. Paul Gage tires are also permitted if urethane is preferred. Same approximate width must be maintained. Rear wheel max stance 2.625"



Chassis	NSR chassis only
Magnet Limit	240g (5g leeway is permitted)
Other Modifications	21.5K RPM motor limit

4.1.9 Trans Am

Years Allowed	Only pony cars from the 1960's through the 1970's are allowed
Brands Allowed	Scalextric, Monogram, Pioneer, Resin
Wheels and Tires	Wheels can be CB Design period correct style wheels 15mm x 8 mm. Paul Gage urethane tires are permitted.
Chassis	No restrictions, 3D printed chassis permitted
Magnet Limit	No Magnets allowed
Other Modifications	Hard plastic interior is required. Any 18K motor is permitted.

4.1.10 Classic Sports Cars

Years Allowed	Cars must be 1963 or earlier that raced in Le Mans or International Manufacturers Championship races
Brands Allowed	Any manufacturer and resin
Wheels and Tires	Only stock or rubber equivalent tires are allowed. Tires may not exceed 8mm width. Paul Gage urethane tires permitted.
Chassis	Plastic and plate brass chassis are allowed. No modification of stock chassis is allowed.
Magnet Limit	No Magnet
Other Modifications	18K motor or less permitted



4.1.11 Pre War Cars

Years Allowed	Cars must be 1939 and older that raced in Formula 1 or International Manufacturers Championship races
Brands Allowed	Any manufacturer and resin
Wheels and Tires	Wheels should match the period/original car. Only stock or rubber/urethane equivalent tires are allowed. Tire contact patch may not exceed 4mm width. Front and rear track maximum width is 2.400"
Chassis	Plastic, resin and plate brass chassis are allowed. Minimum ground clearance is .100"
Magnet Limit	No Magnet
Other Modifications	18K slimline Predator motor, Pendle Slot Racing 16k slimline motor, or 14k H & R motor is permitted

4.2 Inactive Classes

4.2.1 Caterham/Lotus 7

Years Allowed	Limited to only the Caterham car
Brands Allowed	Scalextric
Wheels and Tires	Stock only
Chassis	No additional weight
Magnet Limit	100g (5g leeway is permitted)



Other Modifications	Stock motor or OEM replacement. Can run car with gear cover on or off.
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4.2.2 70-80s F1

Years Allowed	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
Wheels and Tires	Set screw wheels are allowed but must be of same size as originally equipped.
Chassis	All chassis must be or resin or plastic construction.
Magnet Limit	220g (5g leeway is permitted)
Other Modifications	21,500 RPM motor limit

4.2.3 Modern F1

Brands Allowed	Scalextric, SCX, Carrera, Ninco, Fly, Slot Racing Car, or Resin
Wheels and Tires	Set screw wheels are allowed but must be of the same size as originally equipped. The same approximate width must be maintained.
Chassis	All chassis must be of plastic or resin construction.
Magnet Limit	220g (5g leeway is permitted)
Other Modifications	21,500 RPM motor limit.