

# 2012



# Rules & Regulations

FV1-12

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## **SERIES OVERVIEW**

The goal of the Radical Cup is to provide a safe, fun, and hassle free racing environment. This series is a factory-backed championship featuring two classifications of cars and drivers.

## **RACE DESCRIPTION**

The Radical Cup is a 30 minute sprint style race. The race will be not be determined by the number of laps, but by the amount of time allotted.

**NOTES:** Finishing the race on yellow will be permitted.

Passengers are not allowed during the race.

## **TITLE AND SPONSORS**

The 2012 Radical Cup is organized and managed in conjunction with Radical Ventures, Club Spring Mountain and Radical West through the bases set forth by Radical Sports cars UK. Along with Spring Mountain and Radical West, the series is supported by Powertec America and Dunlop tires.

## **DISCLAIMER**

Racing of any form is dangerous and all drivers/participants assume all risks associated with racing and related activities. While these rules serve to run an orderly event, it cannot be assumed that participation in this type of event carries no risks. These rules are intended as a guide for the conduct of this sport and are in no way are a guarantee against injury or death to a participant or spectator. Radical Cup reserves the right to change, add, or alter these rules at any time during the race year. In the event changes are made, drivers shall be notified.

**It is each drivers responsibility to obtain, understand, and comply with all the rules and regulations held within the Radical Cup rulebook.**

## **ELIGIBILITY REQUIREMENTS**

### **DRIVER**

All drivers to compete within the series must:

- Own a Radical Sportscar.
- Hold or have held (within the last 5 years) a regional level or higher racing license from an approved accredited organization such as SCCA, NASA, etc OR can show proof of completion of a racing program from an accredited racing school.
- Have a SCCA or equivalent medical form completed and on file with Radical Cup

**NOTE:** Racing is a demanding activity and as a driver competing within the series, one must be physically fit to be able to handle the stresses involved. It is mandantory that each driver have a complete physical examination by a qualified physician before competing in the series.

## RADICAL SPORTSCAR

All Radicals must meet and maintain the standard Radical specs set by the Radical factory in the UK. All vehicles must be powered by a Powertec engine and use the specified Dunlop tire to qualify and race for each event.

## SAFETY EQUIPMENT

All drivers are required to use the following equipment:

- Snell approved helmet; SA2005 or later will be permitted. You must see a club coordinator in order to obtain an approval sticker.
- Hans Device or similar neck support system.
- SFI rated suit, gloves, and shoes.

*NOTE:* We recommend that all suits be worn with SFI rated underwear; however, it is only required for those who only have a one (1) layer suit.

## CLASS SPECIFICATIONS

The Radical Cup will consist of three separate racing divisions. Each division will be scored separately.

- a.) **Radical SR3 Division.** All drivers with a factory configured SR3 1300 through 1500 CC Powertec engines.
- b.) **Radical Unlimited Division.** All drivers with factory configured SR5, SR8, Pro-6, and modified SR3's with more than 1500 cc Powertec engines.
- c.) **Radical Rookie Division.** Rookie drivers will be based on the following criteria:
  1. Have owned their Radical less than one year.
  2. Have raced less than 50% of the previous race season in the SMRRS or Radical Cup.
  3. Have no previous formal racing experience of any type within a specific series.
  4. Own a Radical SR3 division spec car. SR5, SR8, Pro-6, and modified SR3's are not permitted in the Rookie division.

*NOTE:* Division points are NOT transferable when a driver decides to change from one division class to another.

## REGISTRATION

All drivers must register as competitors for each race weekend via [www.motorsportsreg.com](http://www.motorsportsreg.com). A link to the registration site will be available through event information sent by e-mail or from <http://www.radicalracingusa.com>.

The registration fee for the series is will be published in the event information. Optional transport and track support will be available through Radical Ventures and information will be published on [www.motorsportreg.com](http://www.motorsportreg.com) and [www.radicalracingusa.com](http://www.radicalracingusa.com)

## **DRIVERS MEETINGS**

All participating drivers must attend the mandatory drivers meetings. A drivers meeting will be held prior to each race at a place and time specified in the weekend schedule. Attendance will be taken at the beginning of the meeting and any drivers who do not attend will NOT be allowed to race.

## **POINTS AND SCORING SYSTEM**

Points will be awarded to participating drivers within their respective classes (SR3, Unlimited, Rookie). Classified finishers will receive the Final Results as followed:

1 <sup>st</sup> Place 30 pts.	2 <sup>nd</sup> Place 26 pts.	3 <sup>rd</sup> Place 22 pts.	4 <sup>th</sup> Place 18 pts.
5 <sup>th</sup> Place 16 pts.	6 <sup>th</sup> Place 14 pts.	7 <sup>th</sup> Place 12 pts.	8 <sup>th</sup> Place 10pts.
9 <sup>th</sup> Place 9 pts.	10 <sup>th</sup> Place 8 pts.	11 <sup>th</sup> Place 7 pts.	12 <sup>th</sup> Place 6 pts.
13 <sup>th</sup> Place 5 pts.	14 <sup>th</sup> Place 4 pts.	15 <sup>th</sup> Place 3 pts	16 <sup>th</sup> Place 2 pts.
17 <sup>th</sup> Place 1 pt.			

There will be an additional point given to the fastest driver in the qualifying session for each race, as well as an additional point for the driver that achieves the fastest lap during the race.

Any driver who qualifies for a race, but does not participate, will not receive any points. Drivers who start the race, but do not finish at least 50%, will receive a DNF and will earn one (1) point. Full positioned points will only be awarded to drivers who finish at least 50% of the race.

In the event there is a tie at the end of the series, an overall winner will be determined by the respective class based on the number of times the driver finished in first position during the race year.

## **QUALIFYING/GRID POSITIONS**

Each driver must complete a minimum of one (1) lap to receive a qualifying position. Qualifying positions will be based on your best lap time in any of your designated run sessions (note: lap times will not be taken other non specified track time). Drivers who do not position with a qualifying lap time will be positioned accordingly at the back of the grid.

**NOTE:** Only lap times that are recorded by the track's official AMB timing system will be used to position a driver or to determine final race positions.

Qualifying sessions are not exclusive to the Radical series drivers/vehicles.

## **SCHEDULE**

2012 Race Season will consist of 19 point races and a specialty race (no points).

Round 1	January 28,29	
Round 2	February 18,19	
Round 3	March 17,18	
Round 4	April 21,22	
Round 5	May 19,20	
Round 6	June 9,10	
Round 7	September 15,16	
Round 8	October 20,21	
Round 9	November 10,11	
Round 10	December 8,9	*Sunday's race does not count toward championship points; instead, Saturday's race will be double points.

## **TRANSPONDERS**

It is the driver's responsibility to ensure their Radical has an operating AMB timing transponder properly fastened in a position where a strong enough signal can be picked up from the track's loop at start finish.

## **COMPETITOR NUMBERS**

Each Radical must display competition numbers on both sides of the vehicle, as well as the front and rear. These numbers should be designed so they are clear and easily visible to identify. Each number should be no less than five (5) inches in height and be made from either a one, two, or three digit combination.

Number assignments are based off a drivers request and as long as there are NO DUPLICATE number combinations displayed, any number with the above specifications will be acceptable.

## **SERIES DECALS**

All drivers will be provided with official series decals for all supporting sponsors. These decals have no mandatory positioning, but must be prominently displayed.

## **PACE CAR(S)**

When available, two pace cars will used in each race. The first pace car will be designated for the SR3 and rookie division drivers and the second will be designated for the unlimited division. Radicals will be positioned based on qualifying lap times for start positions behind respective pace cars. Here after, the

SR3 division behind pace car #1, will be referred to as Group A and the unlimited division behind pace car #2, will be referred to as Group B.

## **RACE STARTS**

All starts are rolling starts and will be performed “double file,” where vehicles are lined up in two rows and the pole sitter takes the inside row. All vehicles must remain in the appropriate lane and position until they have received the green light / flag. Both lines should be perfectly in sync as the green is displayed; otherwise, the starter might abort the start. In the event there is a disabled vehicle in front of you, you may pass this vehicle when deemed safe. Once the pace car lights have been turned off, drivers must form into their designated position and establish pace set by pole sitter. When the pace car driver determines the grid has been formed accordingly, the pace car will accelerate off giving control to the pole sitter. After the pace car pulls away, weaving will no longer be permitted. Although racing begins prior to the START/FINISH line, timing, and scoring does not. Individual timing begins as each vehicle crosses the START/FINISH line.

## **SPLIT START PROCEDURES**

If race control determines Group A is ready to start, the green light will illuminate. After all drivers in Group A have crossed the START/FINISH line, the green light will be turned off. If race control determines Group B is ready to start, the green light will illuminate.

## **RESTART(S)**

If it is determined Group A is not ready, the green light will not be illuminated and the pace car will pick up the grid, requiring both groups to do one more pace lap under the pace set by the pole sitter. If it is determined that only group B is not ready, then the green light will not be illuminated and instead, a full course yellow will be displayed. At that point in time, Group A must remain in the order they are in and form a single file line. Group B, upon receiving a full course yellow, will now be required to start their race in a single file formation according to their qualifying positions. At the end of this pace lap and once all drivers are in a single file formation, drivers will receive a green light in the same fashion as the race start and proceed with race.

## **BLOCKING AND PASSING**

Blocking is prohibited. A driver is allowed one move per corner to defend their line. If a driver is found weaving back and forth multiple times per corner or lap, it will be considered blocking and a black light will be given. Racing and competition is encouraged, but a philosophy of co-existence on the track should prevail. While it is the primary responsibility of the overtaking driver to execute a safe pass, the overtaken driver must allow sufficient racing room for the overtaking driver to complete a pass without being forced to put a wheel off the track surface. If this does not occur, it will be considered blocking and a black light will be given.

## **PASSING DURING PRACTICE/QUALIFYING SESSIONS**

Passing is allowed without a point-by during all practice and qualifying sessions. However, it is highly recommended to give a point-by when possible, as qualifying sessions are not Radical exclusive and/or championship exclusive. Please pay attention to all blue lights as they indicate a faster vehicle is approaching.

## **PASSING DURING RACE**

A point-by is not required or needed during the race. The responsibility to pass another vehicle safely ultimately rests with the overtaking driver. The driver must realize that they have an advantage over the overtaken driver. The overtaking driver has a better view of the vehicle in the lead, than the driver in the lead vehicle has of the overtaking vehicle. The driver of the vehicle in the lead has an obligation to remain as aware as possible of passing vehicles and conduct themselves in a safe and sportsman-like manner. A pass is defined as being completed when the rear wing of the overtaking driver's Radical exceeds the front splitter of the overtaken driver's Radical.

On a straightaway, the overtaken driver shall remain aware of all passing vehicles and shall not attempt to block or impede the passing vehicle. In the corners, the vehicle in the lead at the "turn in point" of a corner has the "right of way" to the apex. Overtaking drivers that "dive" into a corner late, after the turn in point, will likely be held responsible for any incident, unless it is proven that the overtaken driver had the ability to see the overtaking driver's vehicle and could have avoided contact. If a vehicle establishes position (equal side by side) with another vehicle before the "turn in point," then the vehicles share the corner; they coexist and give racing room to each other. If a vehicle establishes partial position (less than splitter to splitter) with another vehicle before the "turn in point," then the overtaken driver will leave racing room if possible. Most corners and most situations allow coexistence when the overtaking vehicle has established reasonable, but not complete position. However, the overtaking driver is responsible to know which corners and which situations are reasonable for coexistence and which are not. The overtaking driver must be cautious and understand the potential risk of the driver in the lead possibly not seeing them. The overtaking driver must realize they are ultimately responsible for a safe pass and ready to "back out" if necessary to avoid contact.

If a slower vehicle is being lapped by faster traffic, it is courteous for the driver in the slower vehicle to point the faster vehicle (s) by and give racing room in the corners. The overtaking driver must be cautious and understand the potential risk of the slower driver not seeing them or misjudging the speed differential. The overtaking driver must realize that without a "point-by," they are ultimately responsible for the safe pass.

## **CAMERAS**

It is the driver's responsibility to ensure their Radical has an operating, forward facing **15GB** camera. An operating camera is defined as one that is capable of replaying video taken during a race. It is highly recommended, but not required, for each vehicle to also have a rear facing camera. If a vehicle does NOT have an operating, forward facing camera, the driver will not be permitted to participate in the race. If assistance is needed to bring the camera to race standards, the driver must request support at least one hour prior to race start.

## **ADVISORY BOARD**

If an incident occurs, the purpose of the Advisory Board will be to determine who is at fault. The Advisory Board will be selected during the Saturday drivers meeting. The board will consist of five (5) drivers: three (3) primaries and two (2) back up's, in case the primaries are involved in the incident. A member from the board that is involved in an incident will not be allowed to vote. The member must also be present for both races.

The members on the board will be responsible to review all angles of an incident(s) and will have the final say in the determination of who is at fault. Fault will be assigned to the driver who caused the "unnecessary contact" and/or was "aggressively" driving.

Possible consequences for being at fault for an incident include, but are not limited to:

- Payment for damages done to another driver's vehicle; the board cannot force payment only ask that payment be made. If payment is refused, another consequence may be assigned.
- Ban the driver(s) from a number of future races.
- Disqualify the driver(s) from the race or a number of races.
- Take away points awarded to the driver(s).

## **PROTEST PROCEDURE**

After the race, a driver may protest any unjust actions that may have occurred, such as: getting passed on a yellow light, blocking, etc. The driver can inform the Advisory Board of the action and the board members will review all angles to determine if an infraction occurred. If the Advisory Board confirms the unjust action, the driver at fault will be positioned in the race as the board sees accordingly.

## **TECHNICAL REGULATIONS**

### **INTRODUCTION**

The following Technical Regulations are set out in accordance with the Radical Series specified format and it should be clearly understood that, if the following texts do not clearly specify that you can do it, you should work on the principle that you cannot.

The 2012 Radical Cup classification is a "one-make" race series for drivers participating with Radical Sportscars.

Each Radical is manufactured to an identical class specification. In the interests of fairness and safety, competitors may not depart from this specification under any circumstances, other than as specified below.

All Radical Parts must be supplied by Radical Sportscars and fitted to their original position.

Whilst the Eligibility Scrutineer is empowered to check all competing vehicles for compliance and has been provided with the data to determine the continuing eligibility for each vehicle, the responsibility for the eligibility of vehicles competing in the championship, rests with the entrant/driver. In the event of a

dispute concerning the compliance of a vehicle with these regulations, the onus will be on the entrant/competitor to satisfy the Organizers with regard to such compliance, and NOT the Organizers to prove non-compliance.

Test to establish the power output of any car may be carried out by Powertec. Such power testing will be carried out using Spring Mountain's rolling dynamometer equipment.

Where it is suspected that a component or structure fitted to the competing vehicle may render the vehicle ineligible under these regulations, the component or access to the component will be sealed by the Eligibility Scrutineer for subsequent examination. When ineligibility is subsequently proven, all points accrued by the driver from and including the date of sealing the said component, to the date of the examination, shall be forfeited.

Where costs are incurred as a result of any eligibility check, as may be reasonably requested either by the Eligibility Scrutineer or the Championship Organizers, these will be borne by the entrant/driver.

As a method of control, any component on a driver's vehicle may be removed by the Eligibility Scrutineer and exchanged for a similar component from the vehicle of another competitor, or provided by the Championship Organizers. This includes the ECU. Whilst efforts will be made to ensure that the condition of the exchanged parts is similar, responsibility for the care of exchanged components lies with the recipient. Exchanged components may be returned to the original owners on completion of the race.

## **GENERAL TECHNICAL REQUIREMENTS AND EXCEPTIONS**

All references to standard parts and/or materials in these regulations shall be taken as being the Radical Sportscar original specifications and drawings. In all cases of dispute, query, or classification or ruling these drawings and specifications shall be regarded as fact. All parts listed in the Radical 2012 International order form are eligible.

## **CHASSIS**

Powder coated tubular steel space frame chassis with aluminum panels and integral roll over bar completely standard and unaltered. This includes thickness of panels and rivet spacing.

Towing Point: All vehicles must provide 1 front and 1 rear tow point.

The collapsible crash box structure supplied by Radical Sportscars must be fitted to the chassis during championship events.

The Radical Sportscar is manufactured to a standard specification and may not be altered. All chassis repair work must be carried by an authorized Radical agent.

## **BODYWORK**

Any aerodynamic device listed on the Radical 2012 International order form may be fitted, i.e. front splitter, front diffuser, dive planes, single plane rear wing, double plane rear wing, high downforce and standard bodies, front cooling, and side cooling.

## **GROUND CLEARANCE**

The minimum ground clearance is 40mm (E12.19.10).

## **ENGINE**

All engine/gearbox and/or clutch units are prepared by and sealed by Powertec for Radical Sportscar Ltd. All repairs and rebuilds must be undertaken by Powertec.

Powertec Suzuki 1300/1400/1500cc with integral six speed gearbox

41 mm Keihin Flat slide carbs and Radical ram airbox

41 mm Jenre injection system

Cylinder head modified to Radical specifications

Modified sump and oiling system

Strengthened clutch

Optional race gears

Optional Radical dry sump system

Optional Radical injection system

The starter, generator and ignition system must be fitted as standard

## **COOLING SYSTEM**

The oil and water radiators as supplied as standard by Radical Sportscars must be retained. It is permitted to block off the radiator to control the temperature.

## **INDUCTION SYSTEM**

The entire induction system, including carburetors, must be standard for the engine as sealed by Radical Sportscars. It is permitted to change the main jet. The standard air box and filter as supplied by Radical Sportscars must be retained and used.

## **EXHAUST SYSTEM**

The exhaust system, including silencer, must be standard as supplied by Radical Sportscars.

## **IGNITION SYSTEM**

The standard Radical Sportscars ECU must be retained. It is not permitted to reprogram the ECU. The Eligibility Scrutineer will on a regular basis supply a replacement ECU, which the competitor must change on request.

## **FUEL DELIVERY SYSTEM**

The standard fuel pump supplied by Radical Sportscars must be retained and remain standard.

## **SUSPENSION**

The front and rear suspension is double wishbone. The front and rear suspension must retain the Radical Nik-link anti-roll system, the shocks must retain the standard valving and consist of either the AVO or Intrax shock absorbers.

Spring rate front and rear are free and alternative front and rear anti-roll bars supplied by Radical Sportscars may be used.

## **TRANSMISSION**

The standard integral 6-speed gearbox must be used with the following ratios:

1 <sup>st</sup>	2.733
2 <sup>nd</sup>	1.947
3 <sup>rd</sup>	1.590
4 <sup>th</sup>	1.333
5 <sup>th</sup>	1.153
6 <sup>th</sup>	1.035

The Radical Pneumatic paddle operated shift system may be fitted.

The reverse drive system as supplied by Radical Sportscars must be retained and operational by the driver when seated in the driving position at all times.

The final drive must retain chain or gear drive and gear ratios are open as long as they are supplied by Radical Sportscars. The limited slip differential as supplied by Radical Sportscars must be retained and remain standard.

## **SILENCING**

Standard loud and extra quiet exhaust systems available by Radical Sportscars is the only approved exhaust. If additional silencing is required to meet track standards, additional components must be approved by the Scrutineer of the event.

## **ELECTRICS**

### **EXTERIOR LIGHTING**

Cars may run with or without the full lighting kit supplied by Radical Sportscars. Headlight covers must be fitted in either case. Brake lights must be fitted and in working order and must not be wired in a way that allows them to be switched off.

### **REAR FOG WARNING LIGHT**

Radical Sportscars' high intensity rear lamp must be fitted and be in working order.

### **BATTERY**

An electrically powered starter motor and battery are mandatory and must be operable by the driver when normally seated and capable of repetitive starts.

### **ALTERNATOR**

Must be standard as supplied by Radical Sportscars and be in working order.

## **DASHBOARD INSTRUMENTS**

Data loggers are permitted. However, these will be used for drivers' guidance only. Official times will be provided by the official timekeeper. The fitting of a transponder is mandatory. The Radical lap timer, as supplied by Radical Sportscars may be fitted. Official times will be provided by the official timekeeper.

## **BRAKES**

Standard and upgraded brake calipers and rotors available through Radical Sportscars only.

The fitting of a cockpit adjustable bias adjuster as supplied by Radical Sportscars is permitted.

## **TIRES**

Worn tires used in previous events may be used in subsequent rounds.

The use of tire heating equipment/heat retention devices, tire treatments or compounds, are prohibited. Radical supplied Dunlop tires are required.

## **MINIMUM WEIGHT LIMIT**

Minimum weight requirements only apply to the SR3 and Rookie divisions.

Minimum weight limit with driver, including racing clothing and helmet is as listed below:

1300cc: 1400lbs

1400cc: 1450lbs

1450cc: 1450lbs

1500cc: 1500lbs

K7 pre 2009 chassis: 1450lbs

K8 2009-present chassis: 15000lbs

Radicals will be weighed when full of fuel. Ballast weight to achieve the minimum weight must be supplied by Radical Sportscars and secured to the car using the mounting point provided in the chassis under the driver's seat. Provision must be made for Scrutineers to affix seals to any ballast fitted.

## **FUEL TANK AND FUEL**

### **TYPE OF FUEL TANK**

The Standard 44 liter tank as supplied by Radical Sportscars must be retained. Optional fuel cell supplied by Radical Sportscars may be fitted and is recommended.

### **FUEL**

Only fuel provided by the authorized agents may be used during qualifying and races.

The use of power boosting or octane boosting additives by competitors in any fuel is prohibited.