



2021 RADICAL CHALLENGE CHAMPIONSHIP

Sporting & Technical Regulations

DRAFT ONE

DRAFT COPY

Signed:

Mark Armstrong

Date: 22/12/2020

CONTENTS

1	SPORTING REGULATIONS – GENERAL	4
1.1	Title and Jurisdiction	4
1.2	Officials	4
1.3	Competitor Eligibility	4
1.4	Registration	5
1.5	Championship Events	6
1.6	Scoring	7
1.7	Awards	8
2	CHAMPIONSHIP EVENT MEETINGS & RACE PROCEDURES	10
2.1	Entries	10
2.2	Briefings	10
2.3	Qualification Practice	10
2.4	Races	12
2.5	Starts	12
2.6	Session Red Flag	13
2.7	Pits, Paddock & Pitlane Safety	13
2.8	General Safety	16
2.9	Race Finishes	16
2.10	Results and Classification	16
2.11	Timing Modules	16
2.12	Safety Car	16
2.13	Onboard Cameras	17
2.14	Race Control to Driver Radio Communications	18
3	SPECIFIC CHAMPIONSHIP REGULATIONS	19
3.1	Specific Championship Penalties	19
3.2	Infringements of Technical Regulations	19
3.3	Additional Specific Championship Penalties	19
3.4	Infringements of non-technical Motorsport UK Regulations and the Sporting Regulations	22
4	TECHNICAL REGULATIONS	23
4.1	Introduction	23
4.2	General Description	24
4.3	Safety Requirements	24
4.4	General Technical Requirements and Exceptions	24

4.5	Chassis	24
4.6	Bodywork / Aerodynamics	25
4.7	Engine	25
4.8	Weights	27
4.9	Suspension	28
4.10	Transmission	28
4.11	Electrics	28
4.12	Brakes	29
4.13	Wheels and Steering	29
4.14	Tyres	30
4.15	Fuel Tank and Fuel	31
4.16	Silencing	31
4.17	Competition Numbers/Decals	31
4.18	Suppliers	32
5	APPENDICES	33
5.1	Race Organising Club and Contacts	33
5.2	Commercial Undertakings	34

1 SPORTING REGULATIONS – GENERAL

1.1 Title and Jurisdiction

The 2021 Radical Challenge Championship is organised and administered by MotorSport Vision Racing Ltd (MSVR) in accordance with the General Regulations of the Royal Automobile Club Motorsports Association (incorporating the provisions of the International Sporting Code of the FIA) and these Championship Regulations. The organisers reserve the right to issue additional statements clarifying items in the rules and regulations and all such statements will be issued to all registered drivers by posting to the address on the registration form.

Motorsport UK Championship Permit No: **CH2021/RTBC**

Race Status: **Interclub**

Motorsport UK Championship Grade: **C**

1.2 Officials

1.2.1 Co-ordinator: Mark Armstrong - Radical Sportscars

1.2.2 Assistant Co-ordinator: Mark Ryhorski - Radical Sportscars

1.2.3 Licensed Eligibility Scrutineer Phil Mason
Assistant Scrutineers Rob Mason

1.2.4 Championship Stewards: Brian Hemmings
Eric Cowcill
Mike Dixon
Bill Shewan

Any three of the above may reach a decision

1.2.5 Clerk of the Course Gary Tanner or his appointed deputy

1.3 Competitor Eligibility

1.3.1 Entrants must:

- a) be members of MSVR and
- b) be registered for the Championship and
- c) be in possession of a valid 2021 Motorsport UK Entrants Licence.

1.3.2 Drivers and Entrant/Drivers must:

- a) Be current Members of the MSVR and
- b) be Registered for the Championship and
- c) be in possession of valid Competition (Racing) Interclub status Licence, as a minimum
- d) *Or be in possession of the highest grade of national Race licence or valid FIA International Licence, together with their ASN's written consent ((H)26.2. and FIA ISC Article 2.3.7.b applies)
- e) *If participation in the Championship requires absence from education a driver, in full time school education is required to have the approval of their head teacher and a letter stating such approval from their school in order to fulfil registration for the Championship. A driver shall not take time out of their education to participate in motor sport without the prior written approval of their education establishment.
- f) Any EU/non EU driver holding an FIA International Grade Licence must present a "Permission to Start" document either for a single event or for the full season.
- g) A Motorsport UK Race National minimum grade required for the Spa Francorchamps event

1.3.3 All necessary documentation must be presented for checking at all rounds when signing-on.

1.3.4 Membership of MSVR is free on race entry into an MSVR event.

1.4 Registration

1.4.1 All drivers must register as competitors for the championship by completing the registration form within the Radical online entry system and pay the registration fee prior to the Final Closing date of the first round being entered. Registrations will be accepted from 1st January 2021 until further notice.

1.4.2 The Registration Fee for this Championship is: £200 (+ VAT). The registration fee is payable to Radical Sportscars. All drivers must register for the championship in order to compete and therefore all drivers will be eligible for championship points regardless of how many events they contest.

1.4.3 Registration numbers will be the permanent Competition numbers for the Championship and will be allocated on a first come, first serve basis as allocated by the Championship coordinator. The number 1 will only be available for the previous season's Overall Champion.

1.4.4 The Radical Factory may, at any time in the season enter a "development" car that would be fitted with a modification of a part which would not be totally compliant to these regulations but by running in a race situation would prove the part to be "race-worthy" and would lead to that part being written into and consequently eligible for the Championship. The development car would be identified with the race number "0" and would not be eligible for points or prizes but would be eligible to take part in all aspects of the event provided that it complies with the Safety Scrutineering and Sporting Regulations.

1.4.5 Registration for the 2021 Radical Challenge Championship will be for:

- a) Solo Drivers - the same single driver, solely driving one car in the following classes: Challenge, Masters, Club Sprint and Club Enduro.

- b) Driver Teams - TEAMS of two drivers sharing the driving of one (1) car in classes: Challenge and Masters, as defined as follows:
- i) The Lead Driver must be the entrant as defined in Section B 2021 Motorsport UK Yearbook & Section H32, and as listed on the Championship Registration Form. Radical reserves the right to amend any lead driver status at each event, or for the overall championship.
 - ii) No more than 2 drivers per event are permitted.
 - iii) All drivers must be registered to that Team prior to their arrival at the Event
 - iv) One (1) driver MUST be nominated and registered as Lead Driver and MUST take part in all Events that the Team enters in the Championship in order for that Team to be awarded points.
 - v) On Registering, a Team will be issued a Championship Number. That number stays with the Lead Driver. IF the second driver changes Teams then he assumes the number of the Lead Driver in the alternate Team.
 - vi) A Registered Team may use more than one car over the season and still gain points provided that each car used is in the same class.

1.5 Championship Events

The 2021 Radical Challenge Championship will be contested over **6 EVENTS**.

An Event = qualifying + 3 races (2 sprint races and 1 endurance race per event)

Event	Date	Venue	Organising Club
1	24-25 April 2021	Snetterton 300	MSVR
2	8-9 May 2021	Brands Hatch GP	MSVR
3	4-6 June 2021	SpaFrancorchamps	RACSPA.BE
4	3-4 July 2021	Snetterton 300	BARC
5	14-15 August 2020	Silverstone GP	MSVR
6	18-19 September 2020	Donington Park GP	MSVR

EXCEPT:

Silverstone Grand Prix and Spa-Francorchamps 'Radical Festival' events. At these race events competitors will be joined by Invitational Class competitors from other Radical Official Championships globally. The Invitational Classes will permit unmodified Radical models other than those permitted under usual Radical Challenge Championship class regulations, running sealed standard RPE engines. Invitational Classes will contest to the Radical Challenge event format. Specific event supplementary regulations will be issued prior to the event regarding other classes.

For 2021 the additional Class Championships will be contested:

The 2021 Radical Masters and Supersport Championship will be contested over **6 EVENTS**.

An Event = qualifying + 3 races (2 sprint races and 1 endurance race per event)

The 2021 Radical Club Sprint Cup will be contested over **6 EVENTS**.

An Event = qualifying + 2 races (2 sprint races per event)

The 2021 Radical Club Enduro Cup will be contested over **6 EVENTS**.

An Event = qualifying + 1 races (1 endurance race per event)

- 1.5.1 In accordance with Motorsport UK regulation D11.1 the organisers reserve the right to amend the published list of dates and rounds, in which case, all registered competitors will be informed of the amendments by Official Bulletins posted to the address specified on the Official Registration Form.

In the event of Force Majeure, the Championship Organisers reserve the right to reduce the total number of Championship rounds in accordance with the current Motorsport UK Yearbook D.11.1.

1.6 Scoring

- 1.6.1 Solo Drivers competing in all Classes will accrue points in all listed races at each event

Driver teams competing will accrue points in all listed races at each event as follows:

- i) Race 1 = Lead Driver or Driver 2
- ii) Race 2 = Lead Driver or Driver 2
- iii) Race 3 = Lead Driver & Driver 2

- 1.6.1.1 The following points will be awarded to registered competitors listed as classified finishers in the Final Results as follows:

Endurance races -

80, 70, 60, 54, 48, 44, 40, 36, 32, 28, 24, 20, 18, 16, 14, 12, 10, 8, 6, 4 plus 2 points for each additional classified finisher in the class, plus 2 points for pole position in each class and 2 points for fastest race lap in each class.

Sprint/Shorter distance races -

40, 35, 30, 27, 24, 22, 20, 18, 16, 14, 12, 10, 9, 8, 7, 6, 5, 4, 3, 2, plus 1 point for each additional classified finisher in the class, plus 1 for pole position and 1 for fastest race lap in each class.

If there are 5 or less starters in a class at the start of the Event (Drivers Sign –on) points will be reduced as follows:

Endurance races

40, 28, 20, 10, 5 plus 2 points for pole position in the class and 2 points for fastest lap in the class.

Sprint/Shorter distance races

20, 14, 9, 3 1 plus 1 point for pole position and 1 for fastest race lap in the class.

- 1.6.2 The totals from all qualifying championship Events run will determine the final Championship points and positions.

- 1.6.3 Ties shall be resolved using the formula in (W)1.3.4. in the current Motorsport UK Yearbook.

- 1.6.4 Where the race distance has been reduced (2.6.) it shall still count as a full points scoring round.
- 1.6.5 Drivers not registered for the Championship may be permitted by Radical on an individual round basis and will:
 - (a) Be deemed guest competitors
 - (b) Guest competitors are limited to 1 event
 - (c) Not score points and for the purpose of point scoring will be ignored
 - (d) Qualify for Event awards
 - (e) At Radicals discretion the guest class may include other Radical models with technical variation when necessary and will be advised by supplementary regulations at some events.

1.6.6 RPE Teams' Trophy

The team classification is a classification independent from the driver classification. All competitor entries must be declared with a team, or the entry will automatically be classified as a privateer.

- 1.6.6.1 Points for the RPE Teams' Trophy classification will be allocated to the top two scoring vehicles from each team at each round using the points system below. Cars regardless of class, count towards the RPE Teams' Trophy.

- 1.6.6.2 40, 35, 30, 27, 24, 22, 20, 18, 16, 14, 12, 10, 9, 8, 7, 6, 5, 4, 3, 2, plus 1 point for each additional classified finisher, plus 1 for pole position and 1 for fastest race lap in the race.

1.6.6.3 Fangio Trophy

Before the first event the minimum age limit for the Fangio Trophy will be determined taking into account the average age of the registered competitors and communicated to all competitors.

All drivers, irrespective of class of car, who are the same or older age as the Fangio Trophy minimum on 01.01.2021 will be entered into the "Fangio Trophy". Points will be awarded as per 1.6.1 & 1.6.2 to drivers in this class irrespective of where they are placed in the main championship classes.

For example a driver is placed 4th as classified finisher in the SR1 class he will score 27 points but he is also the first classified driver in the Fangio Trophy he would also score 40 points in the "Fangio Trophy". Points scored within the Fangio Trophy are for this class alone & will not be taken into account for Championship title scoring purposes.

1.7 Awards

- 1.7.1 All awards are to be provided by Radical Sportscars
- 1.7.2 Per Round: Trophies to 1st, 2nd, 3rd in each class.

If there are 5 or less starters in a class at the start of the Event (Drivers sign-on) prizes will be reduced as follows:

Trophies to 1st in each class

1.7.3 Championship: Trophies to 1st, 2nd, 3rd in each class

Overall Championship Trophy to the driver scoring the most points overall irrespective of class.

RPE Teams' Trophy Trophy awarded to 1st place overall

Fangio Class Trophy Trophy awarded to 1st place overall

1.7.4 Bonuses: In the event of prizes or bonus schemes being introduced all registered competitors will be informed by official bulletin.

1.7.5 Presentations - Trophies are to be provided for the presentation at the end of each race or at an end of the meeting presentation ceremony.

1.7.6 Championship Trophies will be presented by Radical after all events are official.

1.7.7 Entertainment Tax Liability:

Prize money and Bonuses shall be posted to the Entrants within [*] of the results being declared final after each [*].

In accordance with current government legislation, the [*] is legally obliged to withhold tax at the basic rate on all payments to non-UK resident sportsmen/women and account to HMRC using form FEU1, the quarterly return of payments made to non-resident entertainers and sportsmen/women.

That is, those persons who do not have a normal permanent residence in the UK. The UK does not include the Isle of Man, Channel Islands or Eire. This means that, as the organiser, the [*] is required to deduct tax at the current rate applicable from any such payments they may make to non-UK residents.

Under certain circumstances, it may be possible for competitors to enter into an agreement with the Inland Revenue to limit the tax withheld. Any application for such an arrangement must be made in writing and not later than 30 days before the payment is due.

For further information contact: HMRC Personal Tax International, Foreign Entertainers Unit, St John's House, Merton Road, Liverpool L75 1BB. Tel: 0151 472 6488 F:0151 472 6483

1.7.8 If a competitor has monies/dispute outstanding with MSVR/Radical Motorsport/Radical Performance Engines/Radical Engineering or any series supplier, then all championship points accrued from the date of supply shall be withdrawn and trophies shall not be presented at the end of season awards ceremony.

2 CHAMPIONSHIP EVENT MEETINGS & RACE PROCEDURES

2.1 Entries

- 2.1.1 Competitors are responsible for sending in correct and complete entries via the online entry system with the correct entry fees prior to the entry closing date which shall be 10 days before each round. Race Entry Fees are non-refundable.
- 2.1.2 Incorrect or incomplete entries (Including Driver to be Nominated Entries) are to be held in abeyance until they are complete and correct and the date of receipt for acceptance of entry purposes shall be the date on which the Secretary of the Meeting receives the missing or corrected information or fee.
- 2.1.3 Any withdrawal of entry or Driver/Car changes made after the acceptance of any entry must be notified to the Secretary of the Meeting in writing. If Driver/Vehicle changes are made after publication of entry Lists with Final Instructions the Competitor concerned must apply for approval of acceptance by the Stewards of the Meeting BEFORE Signing-On.
- 2.1.4 The maximum Entry Fee for each round shall be as detailed in Supplemental Regulations for the event.
- 2.1.5 Qualification races will be held at the discretion of the Organisers.
- 2.1.6 Reserves are to be nominated on the Final List of Entries published with Final Instructions or Amendment Sheet Bulletins. Subject to the limitations of the event Track Licence, all reserves will practice and replace withdrawn or retired entries in Reserve Number order irrespective of class. If any reserves are given Grid Places prior to issue of the first grid sheets for any round the times set in practice shall determine their grid positions. If Reserves are given Grid Places after publication of the Grid sheet and prior to cars collecting in the Official "Assembly Area" they will be placed at the rear of the Grid and will be started WITHOUT time delay. Otherwise they will be held in the pitlane and be released to start the race after the the last car to start the GREEN FLAG LAP or last car to take the start has passed the startline or pit exit, whichever is the latter. Such approval to start MUST be obtained from the Clerk of the Course.

2.2 Briefings

Organisers should notify Competitors of the times and locations for all briefings in the Final Instructions / Supplementary Regulations for the meetings. Briefings are mandatory for all drivers and team managers. Any competitor/team manager who fails to attend briefings may be fined.

2.3 Qualification Practice

- 2.3.1 Should any Practice session be disrupted the Clerk of the Course shall not be obliged to resume or re-run the session; the decision of the Clerk of the Course shall be final.
- 2.3.2 Each driver shall complete a minimum of 3 laps in the car to be raced in order to qualify (Motorsport UK Regulations Q12.4).

- 2.3.3 The first Qualifying will be held over a scheduled duration of 20 minutes for the sprint races. A second Qualifying session will be held over a scheduled duration of 15 minutes for the endurance races.

Solo Driver:

Grid for Race 1 will be set by the fastest qualifying time and the grid for Race 2 will be set by the second fastest qualifying time.

The Grid for the endurance race (Race 3) will be set by the fastest qualifying time in the endurance qualifying session.

Driver teams:

The Grid for Race 1 will be set by the fastest qualifying time of the Lead Driver. The Starting Driver for Race 1 shall be the Lead Driver (see 2.5.1). The grid for Race 2 will be set by the fastest time from the Second Driver, the Second driver must start Race 2 race (see 1.4.5i).

The Grid for the endurance race (Race 3) will be set by the fastest qualifying time of the Lead Driver in the endurance qualifying session. Race 3 driver order declaration must be declared at driver sign-on (see 2.5.1)

It is the responsibility of the Drivers to make sure that the Driver Declaration Form is completed and is in the box at the correct time.

- 2.3.4 Driver Teams - At the start of the qualifying session, the Driver Declared on the Driver Declaration Form MUST be in the car. If the driver(s) qualify in the wrong order, the car will be placed at the back of the grid for Race 1.
- 2.3.5 Drivers competing in the Invitational Class at the Spa Francorchamps and Silverstone GP events must qualify based on their driver format (team/solo) as per 2.3.3.
- 2.3.6 A solo driver team may continue through qualifying without the requirement to make a pit stop. A member of the Radical Administration Team will be present in the Pit Lane to observe Driver Changes.
- 2.3.7 Driver teams Normal Pit Lane protocol MUST be observed during any driver change:
- i) The car must come to a complete standstill before the driver may undo or loosen the belts
 - ii) The engine must be switched off before the driver gets out of the seat.
 - iii) Driver two must be correctly belted into the car before the engine is re-started
 - iv) A single member of the team, must be present to make sure that the car is released safely into the pit lane
 - v) Any release judged by a) Pit Lane Marshals b) Scrutineers c) official observers to be deemed as "unsafe" will receive a penalty. See "Specific Penalties"
 - vi) Pit Lane speed limit is 60 kph. Any person exceeding this limit will be issued a penalty. See Specific Penalties"

2.3.8 In the case of Force Majeure, providing that the Driver has satisfactorily completed 3 (three) laps at a Radical Official day in that season and in a similar car at that circuit in the configuration to be used prior to the Event, it will not be necessary to complete 3 (three) laps of qualifying to qualify for the race. If this is the case, the Driver will be placed at the back of the grid for whichever race he has not completed the qualifying. Reserves who qualify during the Official Qualifying will take precedence over any Competitor who does not participate in the Official Qualifying session.

For avoidance of doubt, a Radical Official day is classified as a day where factory technical support is provided alongside the race centre hospitality.

2.3.9 In the case that more than one Driver fails to qualify but satisfies 2.3.8 then the grid positions shall be awarded in championship order at the back of the grid. If at the start of the season, ie there are no current championship standings, the grid positions shall be in Championship number order at the back of the grid.

2.4 Races

Should any race be disrupted the Clerk of the Course shall not be obliged to resume or rerun the race ((Q)5.4) (1.6.4. above applies)

2.5 Starts

2.5.1 Driver Teams must inform the Championship Co-ordinator via a Driver Declaration Form who will start Race 3. This information must be submitted at driver sign-on or at least 90 minutes before the start of the Endurance qualifying, whichever is before. Once posted and declared in the box no changes may be made.

This information will be passed on to the Clerk of Course, Timekeepers and an official driver starting list will be posted on the Official Championship Notice Board and on the Radical Hospitality Area Notice Board. It is the responsibility of the Drivers to make sure that the Driver Declaration Form is completed and is in the box at the correct time.

Failure to Declare the Start Driver in the correct timeframe will result in a penalty. See "Specific Penalties"

2.5.2 All cars will be released to form up on the grid prior to the start in formation as specified on the grid sheet.

2.5.3 The Countdown procedures/audible warnings sequence shall be:

All Races (1,2 & 3) shall have a Rolling Start following the guidelines as in the current Motorsport UK Yearbook Regulation Q12.19.11 (b).

2.5.4 The use of tyre heating/heat retention devices, tyre treatments and compounds is prohibited.

2.5.5 Any cars remaining in the Pit Lane/Assembly Area, removed from the grid after the 1 minute stage or driven into the pits on the Green Flag Lap shall be held in the pitlane and may start the race after the last car to take the start from the grid has passed the startline or the pitlane exit, whichever is the later.

It is not permitted to change tyres between leaving the Assembly Area and the start of the race. Any competitor wishing to change tyres must enter the pit lane to do so and will start the race from the pit lane as detailed.

- 2.5.6 In the events of a lights failure the starter will revert to the use of the National Flag.
- 2.5.7 Any change from the above procedure will be notified to competitors by Final Instructions or Bulletin.
- 2.5.8 Should the Start Driver not be the Declared Start Driver; the driver must make a pit stop within the first three (3) laps of the race and change to the Declared Start Driver. If this procedure is not completed within the specified timeframe i.e. three laps (3) then a sixty second (60) penalty will be applied to the final race time. Any mandatory pit stops and driver changes must still be adhered to.
- 2.5.9 In exceptional circumstances the following may apply, the race may be started behind the Safety Car. Ref regulation 2.12.2

2.6 Session Red Flag

Should the need arise to stop any race or practice, RED LIGHTS will be switched on at the Startline and RED FLAGS will be displayed at the Startline and at all Marshals Signalling Points around the Circuit.

This is the signal for all drivers to cease circulating at racing speeds, to slow to a safe and reasonable pace and to return to the pit lane, during practice, and to the starting grid area, during a race, unless otherwise directed by officials.

Cars may not enter the Pits unless directed to do so. Work on cars already in the Pits must cease when a race is stopped.

2.7 Pits, Paddock & Pitlane Safety

- 2.7.1 Pits & Paddock: Competitors must ensure that the Motorsport UK, Circuit Management and Organising Club Safety Regulations are complied with at all times.
- 2.7.2 Pitlane: The outer lane or lanes are to be kept unobstructed to allow safe passage of cars at all times. The onus shall be on all Drivers to take all due care and respect the pit lane speed limits.
- 2.7.3 Refuelling: No Refuelling is allowed during practice, qualifying or race. This may only be carried out in accordance with the Motorsport UK General Regulations, the Organising Club Regulations, Circuit Management Regulations and the SRs or Final Instructions issued for that meeting only.
- 2.7.4 Speed Limit: Pit Lane Speed Limit will be 60 KPH.

2.7.5 Race 3 – Mandatory Pit Stop

During Race 3 at each event it will be necessary for all competing cars to make a Pit Stop, irrespective of which class.

A maximum of two identified Team Members to work on any car or belt in a driver during the pit stop, identified by wearing a green armband.

Any number of the Radical Supplied Technical Team, identified by the wearing of a bright orange armband or a member(s) of the Tyres Technical Team, identified by the wearing of the championship supplier uniform, are the only other personnel allowed to 'work' on the car during the official pit stop.

45 minute races

After 18 minutes of racing a 'Pit Lane Open' warning sign will be displayed at the control line to the first car that passes the sign and remains displayed for 1 lap, or for the time required for 1 lap at that particular circuit. After passing the displayed board on track, competitors may enter the pit lane to make their mandatory pit stop. This stop must be made within a time period which will be 10 minutes, after which time the Pit Lane Closed sign will be displayed at the control line for 1 lap or for the time required for 1 lap at that particular circuit.

2.7.6 Should a competitor enter the Pit Lane, to begin their mandatory pit stop without passing the "Pit Lane Open" board being displayed on the circuit then a Stop/Go penalty will be issued. The duration of the stop is to be determined by the Clerk of Course. This penalty will be taken as a separate action and not as part of the pit stop.

2.7.7 Competitors are allowed to enter the Pit Lane after the "Pit Lane Closed" sign has been shown, without penalty, provided that they do not pass the "Pit Lane Closed" sign on track.

2.7.8 This mandatory pit stop will be monitored by the Official Timekeepers by means of the pit lane timing loops. The pit stop duration will therefore be 45 seconds plus the time to pass through the pit lane complying with the pit lane speed limit, plus any accrued "Success Seconds"

2.7.9 A "Success Equalisation" in the form of "Success Seconds" will be applied to the pit stop in Race 3 (the "Endurance Races") at each event as follows:

The top five (5) classified from the previous Endurance Race in that season will receive the following addition to their pit stop:

Win: 20 Seconds

2nd Place: 15 seconds

3rd Place: 10 seconds

4th Place: 5 seconds

5th Place: 5 seconds

2.7.10 PIT STOPS – ALL CLASSES - Stop the car and switch off the engine. All seatbelts must remain fastened until the car has stopped and refastened before the car pulls away.

In the case of Driver teams : Driver one (1) changes place with Driver two (2). After a minimum of 30 seconds and when Driver two is securely and correctly belted in, re-start the engine. After the appropriate number of seconds, re-join the race.

In the case of Solo Drivers : Drive up to the Pit, switch off the engine. Wait a minimum of 30 seconds. Re-start the engine. After the appropriate number of seconds, re-join the race.

- 2.7.11 Work may be carried out on the car during the pit stop by 2 identified team members (identified by the correct wearing of green armbands). A third Team Member also wearing green armband will be responsible for the Timing and the Safe Release back into the Live Pit Lane but **MUST NOT WORK** on the car
- a) Work is defined for these regulations as “being in contact with the car” – The first two team members to touch the car are the only team members able to touch the car, once contact with the car has been made.
 - b) If after your mandatory scheduled stop time including any success seconds has elapsed a technical issue arises with the car, there is no limit to the number of personnel allowed to work on the car. Ref 2.7.19a)
- 2.7.12 If the number of team personnel working on the car exceeds this limit, then the Team will receive a “Stop/Go” penalty. This action is to be taken as a separate action and not part of the Pit Stop.
- 2.7.13 At the beginning of the race season or at the first event that the competitor participates, three (3) green armbands will be issued. The armbands must be worn as intended (on the arm) during the Pit Stop and be clearly visible by all other Team personnel and Pit Lane Officials.
- 2.7.14 If a Team fails to bring the green armbands to an event, they will be able to purchase more from the Radical Spares Truck at a cost of £20 each - £10 of which will be directly donated to the Marshal’s Charity.
- 2.7.15 If a car fails to re-start after its mandatory pit stop time has elapsed, as many staff as required are allowed to attempt to push-start the car until the engine fires. However the safe release is ultimately the responsibility of the Team Manager.
- 2.7.16 Any release judged by a) Pit Lane Marshals b) Scrutineers c) official observers to be deemed as “unsafe” will receive a penalty. See “Specific Penalties”
- 2.7.17 Failure to make a mandatory pit stop will lead to disqualification of the competitor(s) concerned from the results of the race.
- Note: Once the pit stop has commenced, under the “Pit Lane Open” sign there will be no penalty for completing the pit stop after the “Pit Lane Closed” sign being displayed.
- 2.7.18 If a competitor “short stops” ie the time taken from ‘pit-in to pit-out’ including the stationary time is less than calculated, the driver will be required to take a Stop/Go penalty of a duration determined by the Clerk of Course.
- 2.7.19 If a car needs to “pit” at a time other than the designated window for technical reasons, such as repairs to damaged bodywork, tyre punctures or engine issues, there will be no limit on the number of personnel allowed to work on the car.
- a) For avoidance of doubt, technical reasons is anything other than changing of tyres due to conditions, driver change or a penalty being served.
- 2.7.20 If there is a change in track conditions and tyres need to be changed from ‘wet’ to ‘slick’ or vice versa then only two (2) personnel wearing green armbands will be allowed to work on the car. Ref 2.7.11.

2.8 General Safety

- 2.8.1 Drivers are strictly forbidden to drive their car in the opposite direction to the race unless this is absolutely necessary in order to move the car from a dangerous position. A car may only be pushed to remove it from a dangerous position as directed by the marshals.

2.9 Race Finishes

After taking the Chequered Flag drivers are required to:

- i) progressively and safely slow down
- ii) remain behind any competitors ahead of them
- iii) return to the Pit Lane Entrance/paddock Entrance as instructed
- iv) comply with any directions given by Marshals or Officials and proceed to Parc Fermé immediately
- v) keep their helmets on and harnesses done up while on the circuit or in the pitlane.

2.10 Results and Classification

All Practice Timesheets, Grids, Race Results are to be deemed Provisional until all vehicles are released by Scrutineers after Post Practice/Race Scrutineering and/or after completion of any Judicial or Technical Procedures. (Motorsport UK regulation (D)26.3.)

- 2.10.1 All cars will be classified taking into account the number of complete laps they have covered, and for those which have completed the same number of laps, the order in which they crossed the Line.
- 2.10.2 For all speed races on circuits and of less than 4 hours' duration, only cars which have covered at least 90% of the distance covered by the class winner will be classified (rounded down to the nearest whole number of laps).

2.11 Timing Modules

- 2.11.1 All competitors will be required to fit Electronic Self Identification Modules to their cars for the purposes of accurate timing. Holders for these and detailed fitting instructions will be issued with the transponders and it will be the responsibility of the competitor to fit these in the car in the position and manner specified. The modules must be in place and functioning correctly for all Championship qualifying practice sessions and races. The setting and servicing of these items must only be carried out by properly authorised Motorsport UK licensed Timekeepers. Competitors will be charged by the timing company for replacement of the Modules due to misuse or loss at any time during the season. Transponders should be operational during all track activity.
- 2.11.2 Competitors may not place electronic timing equipment within 5 metres of the Official Start, Finish or any other official timing lines at any event or test day session/day. Any such equipment placed within these zones will be removed.

2.12 Safety Car

- 2.12.1 The Clerk of the Course reserves the right to introduce a Safety Car (Motorsport UK Regulation **Section Q, Appendix 3**) at any time during a race until such time as the race leader has completed 75% of the scheduled race distance.
- 2.12.2 The Safety Car will be used in accordance with the regulations as laid down in the Motorsport UK Regulations (**Section Q, Appendix 3**).
- 2.12.3 The Clerk of the Course may impose a Drive Through Penalty (as per **Q12.6**) or retrospective time penalty upon any Competitor or team who he considers has gained an unfair advantage whether inadvertently or not from a breach of these Safety Car Regulations. If in the opinion of the Clerk of the Course during the event that one Competitor breaches these Safety Car Regulations for the benefit of another Competitor then both may be penalised.

2.13 Onboard Cameras

- 2.13.1 All competing cars must have an in-car camera fitted in accordance with Motorsport UK regulation J5.21. The camera must be mounted at the approved point, see approved drawing from Championship Coordinator. The camera must be operational with a memory capacity to hold enough footage for the next on-track activity. If the competitor does not have their own camera or their own camera is broken then the competitor **MUST** inform the Co-ordinator in good time so that an alternative camera can be fitted before the next on-track session.
- 2.13.2 At the end of Qualifying and racing the Clerk of Course may request to review the footage from any of the cameras. The Clerk of Course may then deal with any incident(s) arising from such review.

The Championship Scrutineers may inspect cameras before the track session and will inform both the team/driver and Clerk of the Course of inoperable cameras.

Only Official Radical Championship Staff may remove the memory cards from the cameras once the track activity has commenced (qualifying or racing) this includes whilst the cars are in Parc Fermé.

If a memory card is removed from the camera by a Team member or Driver during an Official Track Activity ie during a pit stop within qualifying or racing, or while the car is parked in Parc Fermé, without the permission of the Clerk of Course this will be notified to the Clerk of Course and a penalty may be applied. Ref regulation 3.2.

In the event that no data is available on request (other than due to a proven defect with the equipment) penalties may be applied. Ref 3.3.3.14. The burden of proof to establish the cause of such failure to record will lie with the competitor. The Clerk of Course reserves the right to request footage from any in-car cameras. In these instances the footage will be obtained in Parc Fermé by Radical Championship Officials for review.

- 2.13.3 The Clerk of Course reserves the right to request footage from other, non-official onboard cameras (e.g. Smarty Cams, Go Pros and similar owned/fitted by competitors) any in-car camera. In these instances, the footage will be obtained in Parc Fermé by Radical Championship Officials for review, if additional evidence is required.

- 2.13.4 Competitors must make available on request in car camera footage for broadcast or use on Radical Challenge social media, including, but not limited to posting the pole lap on social media platforms.

2.14 Race Control to Driver Radio Communications

- 2.14.1 A One-Way Receiver under the control of the Clark of Course/Championship Coordinator is mandatory for all competitors at every event in Qualifying and Races. Competitors may purchase a Raceceiver from Radical Sportscars Ltd.

A competitor not wearing a working Raceceiver in qualifying or a race will not be allowed to take their start position until rectified. If the problem is not rectified in time to take up their rightful start position a competitor may start from the pitlane once the Receiver is worn and working. The Receiver must be connected and working until the driver reaches Parc Fermé.

Should a competitor have a pit to car radio, (eligible to be used during qualifying and the 45-minute endurance races) an interrupter unit will be required to be purchased from Radical Sportscars Ltd. which gives complete priority to the Clark of Course communications.

3 SPECIFIC CHAMPIONSHIP REGULATIONS

3.1 Specific Championship Penalties

Breaches of driving standards will be firmly dealt with. If it appears from official video recordings, in-car video or any other track evidence that there may have been a breach of driving standards or behaviour, on or off the track, in a manner considered to have brought the championship into disrepute, the Championship Co-ordinator will be entitled to request that the Championship Stewards consider the inception of an inquiry into the matter, notwithstanding that the Clerk of the Course or the Stewards of the event may or may not have already investigated the incident. Penalties may include individual race bans, loss of points, awards, and/or end of season awards or disqualification from the MSVR 2021 Radical Challenge Championship.

In order to maintain standards of conduct, the Championship Co-ordinator, in consultation with the Clerk of the Course, may monitor any / all official reports of adverse behaviour at race meetings. If any individual is included on two such reports during one racing season he will receive written warning from the championship Co-ordinator that his driving / behaviour is to be specifically observed at future race meetings. Any adverse reports during this period of observation could result in official Motorsport UK action and will result in a Championship Stewards enquiry, with possible loss of Championship points and refusal of further entries.

Any competitor found guilty of a driving offence which generates penalty points under C2.1.5 will also have Championship points deducted proportional with the severity of penalty imposed. Any deduction of Championship points will be three times that of the associated license penalty points. i.e. formal written reprimand 6 points, fine or time penalty 9 points, exclusion from practice heat or race 12 points, exclusion from meeting 18 points.

3.2 Infringements of Technical Regulations

3.2.1 Arising from post practice or qualifying Scrutineering or Judicial action:

Minimum Penalty: The provisions of Motorsport UK Regulation C.3.3

3.2.2 Arising from post race Scrutineering or Judicial Action:

Minimum Penalty: The provisions of Motorsport UK Regulation C3.5.1 (a) & (b)

3.2.3 For infringements deemed to be of a more serious nature the Clerk of the Course and/or the Stewards of the Meeting are to invoke the provisions of Motorsport UK Regulation C3.5.1 (c)

3.3 Additional Specific Championship Penalties

3.3.1 As per the current Motorsport UK Judicial Procedure Regulations and the provisions of these Championship Regulations.

3.3.2 The Clerk of the Course reserves the right to impose Stop and Go or Drive Through penalties in accordance with Motorsport UK Q.12.26. Drive Through and Stop/Go Penalties are not subject to appeal and must be taken within 3 laps of the first signal being given. Failure to comply will involve automatic disqualification from the results of the session.

3.3.3 Specific Penalties

3.3.3.1 The following penalties will apply to all events within the Championship. The penalties in this section are indicative and not exhaustive.

3.3.3.2 Pit Stops including the Driver Change/Mandatory stop:

- i) Failure to execute mandatory stop/driver change within the allocated pit window – Stop/Go
- ii) Passing the 'Closed' board on circuit without having made the mandatory stop/driver change - Stop/Go
- iii) Loosening seatbelts whilst driving up to and from Team Pit Stop Area – Drive Through
- iv) Failure to execute 'Driver Change/Mandatory pit stop' within race distance - disqualification
- v) Short Stop - Stop/Go variable depending on how short the stop was
- vi) Unsafe Release - Drive Through
- vii) Team member(s) not wearing Identification - £100 fine to the Team (to be donated to the Marshals Charity)
- ix) Incorrect manning level - Stop/Go
- x) During the stop the engine must be switched off and prior to the car pulling away the driver must be seated and belted into the car. Failure to do any of these - Drive Through

3.3.3.3 Exceeding Pit Lane Speed Limit

Stop/Go with variable stop as below:

- i) Over limit up to 5kph - 5 seconds
- ii) 6 - 10 kph over limit - 15 seconds
- iii) 11 - 15 kph over limit - 20 seconds
- iv) 16+ kph over limit - 30 seconds

Should the above penalty(s) (3.3.3.2 & 3.3.3.3) be imposed during the last five (5) laps, or at the end of a race, then a 30 second time penalty will be added to the elapsed race time of the competitor concerned.

3.3.3.4 Crossing Pit Lane Exit Blend Line

- i) Qualifying - removal of fastest lap by the driver crossing said line.
- ii) Race(s) - Drive Through

3.3.3.5 Exceeding Track Limits - Drivers must use the track at all times and may not leave the track without a justifiable reason.

For the avoidance of doubt:

- (a) The white lines defining the track edges are considered to be part of the track.
- (b) A driver will be judged to have left the track if any wheel of the car either goes beyond the outer edge of any kerb or goes beyond the white line where there is no kerb.

3.3.3.5.1 Should a car leave the track for any reason the driver may rejoin. This includes when it is necessary to use 'outside assistance' in order to recover the car. However, this may only be done when it is safe to do so and without gaining an advantage.

3.3.3.5.2 Exceeding Track Limits Penalties

i) Qualifying Practice - Lap time will be deleted if advantage gained. Continual offenders can be disqualified.

ii) Races - On the second offence the driver will be shown a warning flag.

On the third offence, 5 seconds will be added to race time.

On the fourth offence, 10 seconds will be added to race time.

On the fifth offence a drive through penalty will be given.

On the sixth offence the driver may be disqualified and penalty points will be given.

3.3.3.6 On Track Incidents

A competitor involved with and viewed as the cause of said incident, the Clerk of Course may impose penalties prescribed in Motorsport UK Regulation C2.1. These may include a maximum grid drop of 10 places for that drivers next race. Or have a maximum of 2 minutes added to their race time. Or take a Stop/Go penalty up to a maximum of 60 seconds.

3.3.3.7 Failing to Comply with Flag Signals

i) Free Timed Practice - The Clerk of Course may impose penalties prescribed in Motorsport UK Regulation C2.1. These include but are not limited to a fine or a Race Grid penalty for at least one race at the event. Other penalties may be given.

ii) Qualifying Practice - Reports will be referred to the Clerk of Course who may impose penalties prescribed in Motorsport UK Regulation C2.1. This may include but are not limited to cancelling all the Driver's times and start from the back of the grid. Continual disregard of flag signals the Clerk of Course may disqualify the driver. Other penalties may be given.

iii) Races - Reports will be referred to the Clerk of Course who may impose penalties prescribed in Motorsport UK Regulation C2.1. In certain cases he may issue a Drive Through Penalty. Continual disregard of flag signals the Clerk of Course may add up to 60 seconds to the race time or may disqualify the driver. Other penalties may be given.

3.3.3.8 Working on the car on the grid after the 2 minute board is shown - Race - Drive through penalty

3.3.3.9 Ignoring penalty boards, black/orange flag or black flag

i) Free Timed Practice - The Clerk of Course may impose penalties prescribed in Motorsport UK Regulation C2.1. These may include but are not limited to a fine or a Race Grid Penalty for at least one race at the event.

ii) Qualifying Practice - Reports will be referred to the Clerk of Course who may impose penalties prescribed in Motorsport UK Regulation C2.1. These may include but are not limited cancelling all the drivers times and start from back of grid. Continual disregard of flag signals, the Clerk of Course may disqualify the driver or consider other penalties in accordance with C2.1

iii) Race - The Clerk of Course may impose penalties prescribed in Motorsport UK Regulation C2.1 including (but not limited to) disqualifying the driver.

3.3.3.10 Abandoned Cars

- i) If a driver has to abandon the car on the circuit or its adjacent area the driver is to ensure the Steering Wheel is correctly re-fitted and to leave it in neutral or with its clutch dis-engaged. Failure to do so may result in a penalty
- ii) Failure to attach the steering wheel while in Parc Fermé will result in 30 seconds being added to Race Time

3.3.3.11 Disobeying an Officials instruction including removal of car from Parc Fermé

- i) Free Timed Practice - The Clerk of Course may impose penalties prescribed in Motorsport UK Regulation C2.1. including but not limited to a fine, or a Race Grid Penalty for at least one race at the event.
- ii) Qualifying Practice - Penalties prescribed in Motorsport UK Regulation C2.1. including but not limited to cancelling times and start at the back of the grid.
- iii) Race - penalties prescribed in Motorsport UK Regulation C2.1. including but not limited to disqualification from race.

3.3.3.12 Drivers Briefing

Non -attendance at the Drivers Briefing will be reported to the Clerk of the Course for the application of a fine in accordance with Motorsport UK Regulation G5.3.8.

3.3.3.13 Failure to Declare Drivers in the correct timeframe

- i) Failure to declare drivers for Qualifying will result in the drivers fastest qualifying time being removed for each qualifying session.
- ii) Failure to declare the Start Driver for Race 3 (2.5.1) in the correct timescale will result in a 5 place grid penalty for that race.

3.3.3.14 Failure to provide video footage – For example, onboard cameras failing to record due to an unreported fault or full SD Card or SD Card missing

- i) Free Timed Practice– Verbal Warning
- ii) Qualifying -Practice – 3 place grid penalty
- iii) Race – 3 place penalty

3.4 Infringements of non-technical Motorsport UK Regulations and the Sporting Regulations issued for the Championship

As per 2021 Motorsport UK Judicial Procedure Regulations.

4 TECHNICAL REGULATIONS

4.1 Introduction

- 4.1.1 The following Technical Regulations are set out in accordance with the Motorsport UK specified format and it must be clearly understood that, if the following texts do not clearly specify that you can do it, you must work on the principle that you cannot. All references to the Motorsport UK Yearbook (blue book) relate to the current edition. Therefore, everything that is not specifically authorised and anything not specified in these regulations or any official championship bulletin, is strictly forbidden.
- 4.1.2 The 2021 Radical Challenge Championship is a 'single-brand' race series, for competitors participating in the following classes:
- Supersport Class (S): Radical SR3 1500 – Any model variant
- Masters Class (M) Radical SR8 (any variant with the 2.7 RPX engine), SR10, RXC Coupe (all variants) and RXC Spyder (all variants)
- Club Sprint Class (C) RadicalSR3 1340/1300 – Any model variant
- Club Enduro Class (E) RadicalSR3 1340/1300 & SR1 1340 – Any model variant
- 4.1.3 Each Radical model 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
- 4.1.4 All Radical parts must be supplied by Radical Sportscars, fitted in their original position and as supplied, unless specifically stated in these regulations. Parts may only be fitted to the appropriate designated model.
- 4.1.5 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 of each car, the onus of responsibility for the eligibility of vehicles competing in this Championship, rests with the entrant/Competitor. 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 Organisers with regards to such compliance, and NOT the organisers to prove non-compliance.
- 4.1.6 Tests to establish the power output of any car may be carried out by Radical Engine Department. Such power testing will be carried out using rolling dynamometer equipment, owned by Radical Engine Department and operated in accordance with the equipment manufacturers instructions.
- 4.1.7 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. Where ineligibility is subsequently proven, all points accrued by the competitor from and including the date of sealing the said component, to the date of the examination, shall be forfeit (C3.4). **(C3.4 - Competitors whose vehicles are subject to a pending eligibility check must advise this fact in writing to the Clerk of the Course of any event in which they wish to take part. The results of any such event will remain provisional until the eligibility decision has been made. Failure to inform the Clerk of the Course will result in a fine.)**

- 4.1.8 Where costs are incurred as a result of any eligibility check, as may be reasonably requested either by the Eligibility Scrutineer or the Championship Organisers, these will be borne by the Competitor / Entrant concerned.
- 4.1.9 As a method of control, any component on a competitor's car may be removed by the Eligibility Scrutineer and exchanged for a similar component from the car of another competitor, or provided by the Championship Organisers. If necessary the ECU may be subject to detailed examination. 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 their original owners on completion of the race.
- 4.1.10 Any infringement of these Technical Regulations will render the competitor liable to penalties as defined in Article 4.1 of the Sporting Regulations.

4.2 General Description

The 2021 Radical Challenge Championship is a 'single-brand' race series for Radical race cars as specified herein.

4.3 Safety Requirements

Motorsport UK Section K Safety Criteria Regulations will apply as applicable: -

Specifically K2.1.2 (minimum) and K3.1.2(a). See also Motorsport UK Appendix J and Appendix Q.

4.4 General Technical Requirements and Exceptions

DEFINITIONS: Motorsport UK Section B definitions apply. All references to standard parts and or materials in these regulations shall be taken as being the Radical Sportscars original specifications and drawings. In all cases of dispute, query or clarification or ruling these drawings and specifications shall be regarded as fact.

All parts listed in the Radical 2021 International order form or online spare parts store for the relevant models are eligible unless otherwise indicated in these regulations.

4.5 Chassis

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

4.5.2 Towing Point – All vehicles must comply with Q19.1.3

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

4.5.4 All Radical models are manufactured to a standard specification and may not be altered. All chassis repair work must be approved by a Radical Sportscars Ltd nominated representative.

4.6 Bodywork / Aerodynamics

4.6.1 Any aerodynamic device manufactured by Radical Sportscars for the particular model may be fitted as supplied, i.e. front splitter, front diffuser, dive planes, single plane rear wing, double plane rear wing, rear diffuser or roll bar fairing.

Any SR3 RS manufactured before April 31 2014, cannot be fitted with SR3 RSX / XX body work or rear wing.

Any SR3 RSX / XX cannot be fitted with SR3 RS bodywork or rear wing.

4.6.2 GROUND CLEARANCE: The minimum ground clearance is 40mm (J5.20.11) Under no circumstance can any part of the bodywork, or of the suspended part of the car, be below a horizontal plane passing 40mm above the ground, the car being in normal racing trim with the driver aboard. A gauge of 40mm may be used by Scrutineers before or after races or qualifying practice to check the ground clearance. Location of ride height flat patch to be determined and communicated by the scrutineers at each event. Note: Wooden skid blocks must be fitted, but are exempt from the minimum ground clearance

4.7 Engine

4.7.1 All engine/gearbox and or clutch units must be prepared by and sealed by Radical Engine Department for Radical Sportscars Ltd. All repairs and rebuilds must be undertaken by Radical Engine Department.

4.7.2 All competitors who have previously raced in a Radical Official Championship must have all out of season engine work carried out by Radical Engine Department before the 2021 Radical Challenge Championship commences.

Any Competitor who has not used their car in a Radical Championship before, must make sure that their engine carries a Radical Engine Department seal before attending their first event.

Competitors not having out of season work carried out will have their Radical Engine Department/Motorsport UK engine seals inspected by the Eligibility Scrutineer prior to qualification for the first event.

Once registration for the 2021 Challenge Championship has been accepted ALL engine work for the duration of the 2021 championship must be carried out by Radical Engine Department.

4.7.3 Radical Engine Department technicians are at liberty to take random oil samples at their discretion to confirm adherence to oil specifications. Failure to conform to recommended oil specification and service intervals would render the engine warranty null and void.

4.7.4 **SR3 Class (Class S)**

RPE Suzuki 1500cc Generation 1 motor

RPE Suzuki 1500cc Generation 2 motor

RPE Suzuki 1500cc Generation 3 Short Stroke motor

RPE Suzuki 1500cc Generation 4 Long Stroke motor

RPE Suzuki 1300cc Generation 1 motor

RPE Suzuki 1340 cc Generation 2 motor

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

SR3 Class (Class C & E)

RPE Suzuki 1300cc Generation 1 motor

RPE Suzuki 1340 cc Generation 2 motor

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

Masters Class (Class M)

SR8 Radical Performance Engines 2700cc RPX V8 engine

RXC Spyder Radical Performance Engines 3000cc SS V8 engine

RXC Spyder Ford EcoBoost Twin Turbo 3500cc V6

RXC Coupe Ford EcoBoost Twin Turbo 3500cc V6 (GT3 Spec) without restrictor

RXC Coupe Ford Cyclone n/a 3700cc V6

SR10 Radical Performance Engines 2.3 Litre turbocharged engine

SR1 Class (Class E) RPE Suzuki 1340 cc Generation 2 motor

4.7.5 **Cooling System**

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

4.7.6 **Induction System**

The entire induction system must be standard for the engine as sealed by Radical Sportscars. The standard air box and filter as supplied by Radical Sportscars must be retained and used.

Throttle body diameters must be as specified for the following engine variants:

RPE Suzuki 1500cc Generation 1 motor – 42mm

RPE Suzuki 1500cc Generation 2 motor – 42mm

RPE Suzuki 1500cc Generation 3 Short Stroke motor – 45mm

RPE Suzuki 1500cc Generation 4 Long Stroke motor – 45mm

RPE Suzuki 1300cc Generation 1 motor – up to 45mm

RPE Suzuki 1340 cc Generation 2 motor – up to 45mm

Any SR3 manufactured before April 31st, 2014 cannot be fitted with SR3 RSX throttle bodies.

Heat resistant tape may be applied to the air box.

Class M The entire induction system including injector system must be standard Radical parts for the engine. The standard air box and filter as supplied by Radical Sportscars must be retained and used. All SR8 cars must run the RX induction system. The RXC Race Spyder should run the Spyder induction system.

4.7.7 Exhaust System

The exhaust system including silencer must be standard as supplied by Radical Sportscars for that model and generation. Insulation wrapping of the exhaust is not permitted. Ceramic coating is not permissible.

Any SR3 manufactured before April 31st, 2014 cannot be fitted with SR3 RSX exhaust manifold or exhaust system.

4.7.8 Ignition System

The standard Radical Sportscars ECU must be retained. It is not permitted to reprogram the ECU. The Eligibility Scrutineer may on a regular basis supply a replacement ECU, which the competitor must change on request. The ECU must be located in the position as supplied from the factory. Heat shielding of the ECU is free but it must not restrict removal when required.

4.7.9 Fuel Delivery System

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

4.7.10 Heat shrink or heat insulation of fuel lines and wiring looms or wires may be fitted. This must be easily removable for inspection, if required.

4.8 Weights

Cars may be weighed during Parc Fermé – after qualification and again as required by the Eligibility Scrutineer, after any of the races.

Cars will be required to meet the following minimum weights with finishing driver and driver equipment

SR3 (S, C & E) Classes: 715kg

Master Class: Minimum weight

SR8 800kg

RXC Spyder V8 890kg

RXC Spyder TT 1050kg

RXC Coupe 1160kg

SR10 805 kg **TBC**

SR1: 600kg

Ballast must be fitted in accordance with the relevant 2021 Motorsport UK Yearbook requirements (regulation J5.15).

4.9 Suspension

- 4.9.1 All cars must be fitted with AVO or INTRAX shock absorbers supplied by Radical Sportscars. No internal modifications are permitted.
- 4.9.2 Spring rate front and rear are free. Alternative front and rear anti-roll links supplied by Radical Sportscars may be used. Competitors are permitted to disconnect the rollbar by removing the bolt through the rose joint. Rollbar must remain in place.
- 4.9.3 The front and rear suspension is double wishbone. The front and rear suspension is fitted with the unique Nik-link anti-roll system (except RXC models with inboard pushrod suspension).

4.10 Transmission

- 4.10.1 The standard integral 6-speed gearbox must be used. Relevant Radical models competing in the Masters class are allowed to use the standard integral 7 speed gearbox as fitted to the car.

The Radical Pneumatic paddle operated shift system may be fitted.

- 4.10.2 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.
- 4.10.3 The final drive system must be standard as supplied by Radical Sportscars. Drive ratios may only be adjusted by changing sprockets/gears supplied by Radical Sportscars.

4.11 Electrics

4.11.1 Exterior Lighting

Cars may run with or without the full lighting kit supplied by Radical Sportscars. Headlight covers and light buckets 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. DLR's to remain fitted.

4.11.2 Rear Fog Warning Light

Radical Sportscars' high intensity LED rear lamps must be fitted and be in working order. Two lights to be installed equi-spaced about the vehicle centreline, or a single FIA centrally mounted light shall be installed. Rear lights to be a minimum intensity of 21w with a surface area between 20 & 50cm²

When Wet tyres are fitted then the car MUST run with its high intensity LED rear lights switched on.

4.11.3 Battery

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

4.11.4 Alternator

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

4.11.5 Dashboard Instruments

a) Only Data Loggers supplied by Radical Sportscars on the current price list or on the Radical web shop are permitted, however these will be used for drivers' guidance only. Official times will be provided by the official timekeeper.

b) The fitting of a transponder is mandatory. The Radical lap timer, as supplied by Radical Sportscars may be fitted. This however, will be used for driver's guidance only. Official times will be provided by the Official timekeeper.

c) The scrutineer shall have access to data and data equipment.

4.12 Brakes

4.12.1 The Radical 4-pot calliper front and rear, ventilated front and rear brake disc of 260mm diameter or an upgrade floating disc, 280mm supplied by Radical Sportscars may be fitted.

Any SR3 manufactured before April 31st 2014 cannot be fitted with SR3 RSX brakes or brake lines.

Class M:

RXC Spyder, Radical 6 pot front and 4 pot rear calliper Vented Discs, Front 360mm, Rear 330mm Optional Vented Discs 350mm front and vented 310mm

SR8/SR10 Radical 4 pot calliper front and rear Vented 280mm discs Optional 300mm vented discs or Optional carbon 280mm vented discs

RXC Coupe Radical 6 pot front and 4 pot rear calliper Vented Discs, Front 380mm, Rear 330 mm

SR1 Only Radical 4-pot calliper front and rear, ventilated front and rear brake disc of 240mm diameter by Radical Sportscars, may be fitted.

4.12.2 Only brake pads supplied by Radical Sportscars may be fitted.

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

4.12.4 The fitting of brake duct grilles is optional.

4.13 Wheels and Steering

1-piece wheels supplied by Radical Sportscars.

Maximum wheel size:

SR3, SR8, SR10 any variant

Front: 15" x 8"

Rear 16" x 10 1/2"

SR1: Cast 1-piece wheels supplied by Radical Sportscars must be fitted.

Maximum wheel size: Front 13" x 7 1/2" Rear 13" x 9"

RXC: Radical centre lock, single-piece cast aluminium wheels 18" x 10.5" dia. front and 18" x 11.5" dia. rear

- 4.13.1 Steering wheel diameters may be changed to suit driver preference and must be supplied by Radical Sportscars.

4.14 Tyres

- 4.14.1 Tyre specification for the championship will be determined by a championship bulletin prior to the first event.

- 4.14.2 Each car will be allowed to use a maximum of 6 slick tyres per event for all Challenge classes.

For the first event of the Championship that a Competitor attends, the car **MUST** be fitted with four brand new slicks and have 2 spare tyres (1 front, 1 rear) that can be either new or used. At the discretion of the scrutineer, competitors may be eligible to scrub new tyres on Friday testing.

EXCEPT:

Radical Club Sprint:

Each car will be allowed to use a maximum of 4 new slick tyres per 2 events.

For the first event of the Championship that a Competitor attends, the car **MUST** be fitted with four brand new slicks and have 2 spare tyres (1 front, 1 rear) that can be either new, scrubbed or used.

EXCEPT:

Radical Club Enduro:

Each car will be allowed to use a maximum of 4 new slick tyres per 2 events.

For the first event of the Championship that a Competitor attends, the car **MUST** be fitted with four brand new slicks and have 2 spare tyres (1 front, 1 rear) that can be either new, scrubbed or used..

- 4.14.3 Wet weather tyre quantities are unrestricted.

- 4.14.4 Serial numbers from all slick tyres used must be declared on the Radical Championship Tyre form. (Note; the tyre form maybe in electronic format). Top copies of the form are to be retained by the team/driver and the bottom copy must be handed to the Eligibility Scrutineer, prior to the start of qualification, or the first time of use. Once declared to the scrutineer the tyres are locked in and cannot be changed, regardless if they have been declared and not used.

Should a competitor require an additional tyre(s) during the race weekend the competitor is permitted to purchase a replacement tyre(s). If the replacement tyre puts the competitor over his/her permitted tyre allocation then 7 championship points per tyre over the championship tyre allocation, will be deducted. Replacement tyres shall be declared on a tyre form. If the replacement tyre is required due to an on-track incident, then new tyres can be used without incurring the aforementioned penalty at the Eligibility Scrutineers discretion.

4.14.5 For "guest" competitors only 1 set of slicks may be declared, **plus 2 used spares (1 front, 1 rear)**

4.14.6 The use of tyre heating equipment/heat retention devices, tyre treatments or compounds, is prohibited.

4.14.7 When necessary the organisers may set a maximum wheel camber setting, toe settings and tyre pressures to be adhered to at a particular event. This will be communicated by Championship Bulletin and may require parts to be sealed by the Eligibility Scrutineer. Failure to comply with specified values will warrant the vehicle ineligible.

4.15 Fuel Tank and Fuel

4.15.1 Type of Fuel Tank

The standard aluminium fuel tank or FIA fuel cell as supplied by Radical Sportscars for that respective model must be retained.

4.15.2 Challenge Championship fuel: Motorsport UK specification fuel supplied by Sunoco Race Fuels (aaoils.co.uk) is mandatory for all official championship testing, practice, qualifying and race sessions. Compliance with this regulation will be verified by fuel testing carried out throughout the season. To allow comparison testing to be carried out, competitors must have a minimum of 3 litres of fuel left in the fuel tank at the end of any session.

Except:

Radical Club Sprint and Radical Club Enduro entrants: Only pump fuel as defined by the 2021 Motorsport UK Yearbook is permitted.

Competitors must have a minimum of 3 litres of fuel left in the fuel tank at the end of any session.

4.15.3 Fuel used must be at Ambient Temperature

4.15.4 Each car must have a Radical Fuel Testing 'T' piece plus a Radical dry break valve fitted to the fuel line to facilitate safe fuel testing.

4.16 Silencing

Specification as per Motorsport UK regulation J5.17 – J5.18.

4.17 Competition Numbers/Decals

4.17.1 Positions - Racing numbers must be affixed in accordance with Motorsport UK regulations. Radical and Sponsors decals as issued for the current year must be affixed to the vehicle as laid out in the diagram issued with those decals. Radical nose badge must be affixed to the vehicle. Each of the three classes will be required to secure a different colour number background to make it clear which class they are racing in. Failure to comply will render the car ineligible.

<u>Solo Challenge</u>	(Class S)	Red Box, white backgrounds/black numbers
<u>Masters Class</u>	(Class M)	Blue Box, white background/black numbers
<u>Club Enduro and Club Sprint</u>	(Class E)	Yellow Box, white background/black numbers

- 4.17.2 Sponsor decals are to be positioned as per drawing available from Championship Co-ordinator. Failure to comply will render the car ineligible.
- 4.17.3 Sponsors may require drivers to display a badge on their overalls. Patches will be supplied as required from the Championship Coordinator.

4.18 Suppliers

Decal packs including one complete set of numbers plus backgrounds, Club and Sponsor will be sent to each competitor FOC on receipt of completed registration form. Club, Sponsor and number decals will also be available on the Radical Spares Truck at each event.

5 APPENDICES

The following Commercial Undertakings are not subject to the judicial Procedures of either the Championship Stewards or the Motorsport UK / MSC

5.1 Race Organising Club and Contacts

5.1.1 Vehicle Manufacturer

Radical Motorsport Ltd
24 – 26 Ivatt Way Business Park
Westwood
Peterborough, Cambs PE3 7PG
Tel: 01733 331616 Fax: 01733 264959
Email: sales@radicalsportscars.com
Website: www.radicalsportscars.com

5.1.2 Eligibility Scrutineer

Phil Mason
16 Beaufort Drive
Bourne, Lincolnshire PE10 9PN
Tel: 01778 424877 (H) 07535 524326 (W)

5.1.3 Championship Organiser

MotorSport Vision Racing
Brands Hatch
Fawkham
Longfield
Kent
DA3 8NG
Tel: +44 (0)1474 875263
Fax: +44 (0)1474 874766
e: simon.gp@motorsportvision.co.uk

5.1.4 Championship Co-ordinator

Mark Armstrong
Radical Motorsport Ltd
Tel: 01733 331616 ext 275
Fax: 01733 264959
E-mail: mark.armstrong@radicalsportscars.com

5.2 Commercial Undertakings

5.2.1 Vehicle Presentation

The presentation of the car is fundamental to the profile of the championship/series, its sponsors and its audience. Therefore in considering whether to permit any car to the race, at any point during the season, the organisers will regard as paramount the presentation of the car. In taking into account its appearance inherent in which is the standard of its presentation they may disqualify any car which they consider may prejudice the reputation of the championship/series or is otherwise acceptable. This will include where the car is presented at a race event bearing accident damage sustained at a previous event and which has not been subject to the completion of a full and proper repair. A double header is regarded as one event for the purpose of this regulation. Radical Sportscars will park its trucks and awnings centrally in the paddock space allocated by MSVR. All teams are required to park their vehicles in an orderly manner adjacent to the Radical Trucks, as directed by the Paddock Parking marshals.