

## 1. COCKPIT

### 1.1 FIRE EXTINGUISHER



- a) Must be fitted, charged and operational.
- b) Label must show valid date within two years of manufacture or service and recertification, and bottle must be mounted so that label is visible.
- c) Secondary external trigger must be marketed with a 10cm diameter decal depicting a red 'E' within a white circle with a red edge. It is recommended internal switch must be marked with smaller version of same decal.
- d) Safety pin must be removed, and any electrical system must be armed, prior to car entering circuit.

### 1.2 SEAT AND HEAD REST

- a) Any seat offered and intended for the relevant model of car is permitted, ie single seat may replace twin seat.
- b) Any modification to seats or headrests as supplied by Radical Motorsport is unauthorized and is at the sole risk of the Entrant/Competitor. Radical Motorsport Ltd accepts no liability or responsibility for injury or death as a result of unauthorized modifications.
- c) Any material covering the seat, including seat inserts must be of an approved fireproof material.
- d) The seating position of the driver shall be so that the headrest is fitted inline with the helmet, not the neck.

### 1.3 SEAT BELT

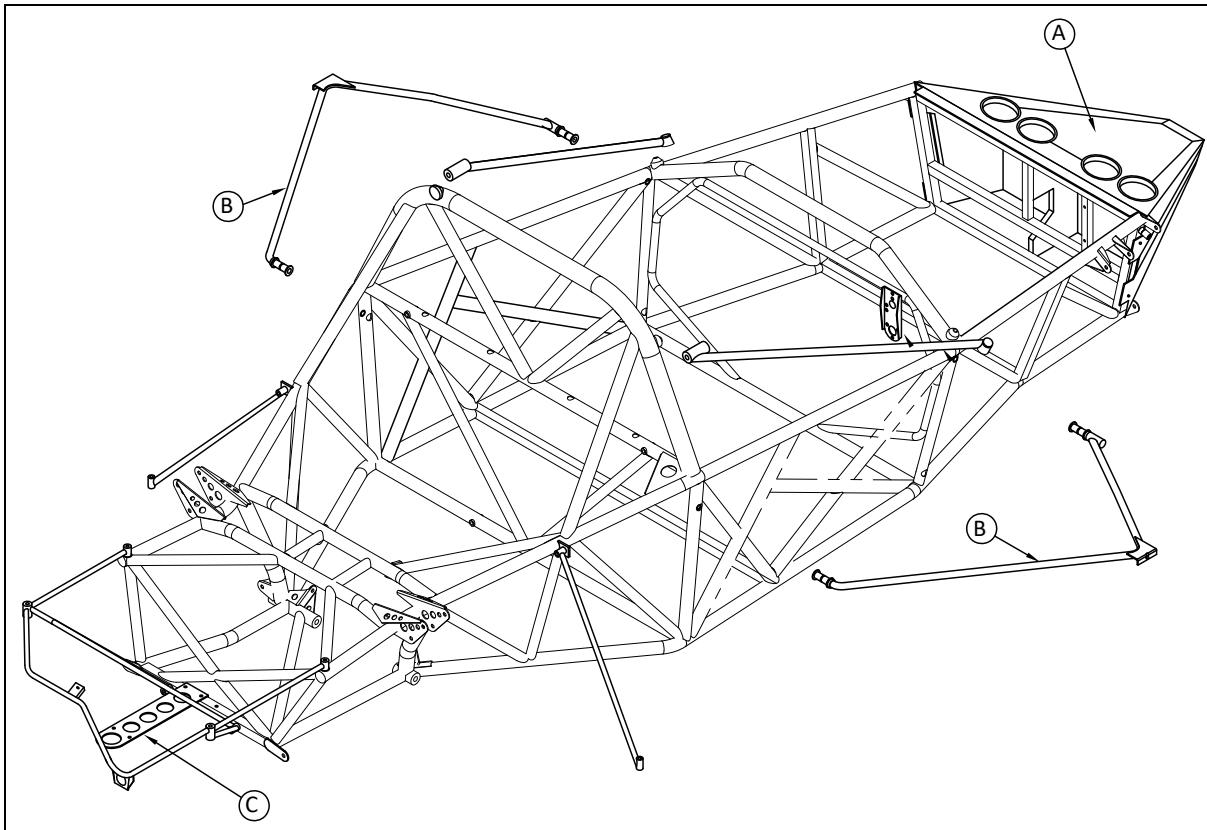
- a) Must meet FIA 8853-2016 and show valid date.
- b) Lap belts sit across driver as intended by manufacturer, tightly in the bend between the pelvic crest and upper thigh. Under no circumstances should the lap belts be worn over the abdomen.
- c) It must be ensured the safety belts will not be damaged by way of chafing on sharp edges, interference, twisting or edge loading.

### 1.4 STEERING WHEEL AND DASH

Edition	RSX		XX	XXR
Parts	SC0016	SC0112	SC0134 or SC0155	SC0155
<b>Description</b>	Radical or Sparco branded closed circle wheel, with separate Radical AIM MXL/MXL2 mounted to dash panel	Sparco branded open top wheel, with separate Radical AIM MXL/MXL2 mounted to dash panel	Radical AIM Formula wheel with integrated dash, with single rotary switch	Radical AIM Formula wheel with integrated dash, with single rotary switch
<b>Image</b>				

- a) Steering wheels of a different diameter, if supplied by Radical Motorsport for that model edition, are permitted.
- b) Minor modification to the mounting of the dash is permitted to improve visibility in model editions with standalone dash displays.

2. CHASSIS



- a) Any chassis repair work not carried out by Radical Motorsport Ltd is unauthorized and is at the sole risk of the Competitor. Radical Motorsport Ltd accepts no liability or responsibility for injury or death as a result of unauthorised repairs.
- b) The crashbox (A), part CC0036 (LHD, RHD) or CC0042 (CHD), is considered an integral component to the chassis, and must be free of damage.
- c) Side impact bars (B), part CI0014 (LH) and CI0015 (RH) must be fitted.
- d) Towing eyes/towing points front and rear (C) must be fitted.
- e) Additional clips and fasteners within the cockpit area of the chassis are permitted to secure hoses and cabling.

2.1 COCKPIT SAFETY STRUCTURE (CSS)

<b>Edition</b>	<b>Retrofit of Cockpit Safety Structure</b>
RS and earlier	Not permitted.
RSX	Prior 2022 production chassis: Only permitted with the fitment of a 2022 specification chassis. Requires pre-approval by factory.
XX	Jan 2022 – June 2022 production chassis: Only permitted with parts kit & instructions (welding required). Requires pre-approval by factory.
XXR onwards	June 2022 production chassis onwards: Permitted (chassis fully compatible).

## 2.2 PERMITTED CHASSIS UPDATES

Part	Image / Details	Introduced on	Permitted on
SC0151 (left hand drive) SC0152 (center drive) SC0153 (right hand drive) High Steering Column Retrofit Kit		-	RSX + XX

## 3. BODYWORK

Skid Block Locations	Genuine Part Decal
3 skid blocks on front diffuser + 1 under each sidepod	
Dzus Fastener	Bodywork Latch

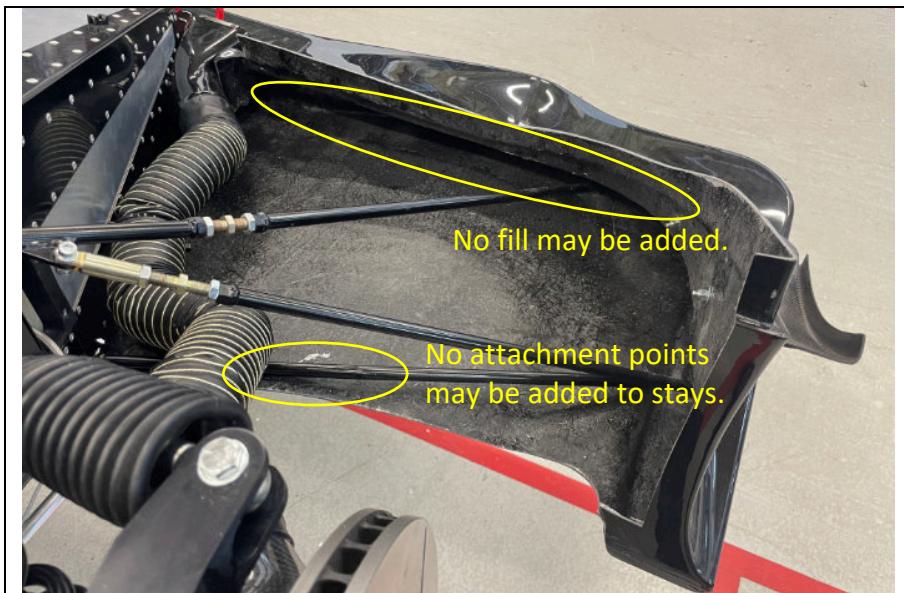
- All skid blocks must be installed, however there is no minimum thickness for the skid blocks.
- Tape may only be used to directly cover bodywork fasteners, or aid in a temporary repair.
- Bodywork may not be strengthened or reinforced beyond a typical repair, nor additionally braced or supported or attached with substitute or additional fasteners.
- The "Genuine Part" decal signifies genuine Radical components

## 3.2 DIVE PLANES

- Only dive planes permitted on each model variant may be used:

RS	RSX	XX + XXR
Up to two (2) per side	Up to one (1) per side)	Up to two (2) per side
Left Lower: MA0077/C1	Left: MA0093/C1	Left Lower: MA0093/C1
Right Lower: MA0079/C1	Right: MA0094/C1	Right Lower: MA0094/C1
Left Upper: MA0076/C1		Left Upper: MA0103/C1
Right Upper: MA0078/C1		Right Upper: MA0104/C1

3.3 FRONT DIFFUSER



3.4 REAR WING

RS	RSX	XX	XXR
MW0078 	MW0090 	Left: MW0101 Right: MW0102 	Left: MW0103 Right: MW0104 
Wing width: 1700mm MW0023 Main plane MW0024 Bi-wing	Wing width: 1600mm MW0087 Main plane MW0088 Bi-wing		

- a) The bi-plane must be fitted.
- b) Wing supports and brackets, with silicone, must be fitted.
- c) No gurney flaps may be fitted.
- d) Adjustment holes in the wing mounts, wings or endplates may not be added or slotted.

## 3.5 PERMITTED BODYWORK UPDATES

Part	Image / Details	Introduced on	Permitted on
Left: AM0030 Right: AM0031 RSX Carbon Mirror		RSX	RSX + RSX
Left: AM0059 Right: AM0060 XX Carbon Mirror		XX	RSX onwards
MR0098 Shark Fin Engine Cover		XXR	XXR onwards
MD0046/C1 Carbon Front Splitter		XXR	RSX onwards
MD0048/C1 Carbon Rear Diffuser		XXR	RSX onwards
MP0123 + MP0124 Swept Sidepod with Scoop	 Note: Swept front is different to SR10 design.	XXR	XXR only

## 4. ENGINES

 a) Permitted 1500cc engines and specifications are as follows:

	RS	RS	RS post 929 + RSX + XX	XXR
<b>Engine Generation</b>	RPE 1500 Gen 1 + 2	RPE 1500 Gen 3 (Short Stroke)	RPE 1500 Gen 4 (Long Stroke)	RPE 1500 Gen 5
<b>Identification</b>	1500 - ###	SS 1500 - ###	1500 - ###	G5 1500 - ###
<b>Airbox</b>	FI0050	FI0119	FI0154	FI0198
<b>Throttle Body</b>	42 mm	45 mm	45 mm	DBW 44 mm
<b>Check Gauge</b>	AT0113	AT0114	AT0114	N/A
<b>Exhaust</b>	38mm dia. Primary	41mm dia. Primary	41mm dia. Primary	41 mm ID dia. Primary

 b) Permitted 1340cc engines and specifications are as follows:

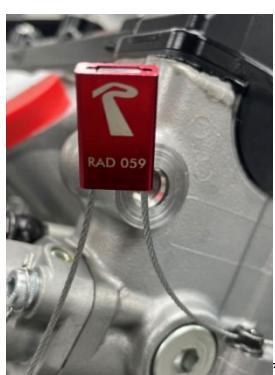
	RS	RS	RS post 929 + RSX + XX	XXR
<b>Generation</b>	RPE 1340 Gen 1 + 2	RPE 1340 Gen 3	RPE 1340 Gen 4	RPE 1340 Gen 5
<b>Identification</b>	1340 - ###	1340 - ###	1340 - ###	G5 1340 - ###
<b>Airbox</b>	FI0050 (see above)	FI0019 (see above)	FI0154 (see above)	FI0198 (see above)
<b>Throttle Body</b>	45 mm	45 mm	45 mm	DBW 44 mm
<b>Check Gauge</b>	AT0114	AT0114	AT0114	
<b>Exhaust</b>	38mm dia. Primary	41mm dia. Primary	41mm dia. Primary	41mm ID dia. Primary

 c) Technicians are at liberty to take oil samples at their discretion to confirm adherence to oil specifications.

 d) Note: The Gen 3 FI0019 airbox and Gen 4 FI0154 airbox are identical in shape, the only difference being the colour.

## 4.2 ENGINE BUILDING

 a) Engines may only originate from Radical Performance Engines and carry the following identification and seal

Engine Plate	Engine Seal
 Gen 4 RPE Engine Plate	 New Style
 Gen 5 RPE Engine Plate	 Old Style

b) All engines must be rebuilt or serviced, and sealed, by a Radical 'Approved Engine Rebuilder':

United Kingdom	USA (Nevada)	USA (Illinois) - 1340 only	Canada (West) 1340 only
<b>RPE (Radical)</b> 24 Ivatt Way Business Park, Peterborough UK PE3 7PG engines@radicalmotorsport.com Phone +44 (0) 1733 331 616	<b>Spring Mountain Racing</b> 3601 NV-160, Pahrump, NV 89048 service@springmountainracing.com +1 (775) 727 7564 www.springmountainracing.com	<b>Team Stradale</b> 3795 Centerpoint Way, Joliet, IL 60436 info@teamstradale.com +1 (815) 727-7234 www.teamstradale.com	<b>Radical Canada West</b> 338 Co-Op Ave Oliver, BC V0H 1T0 service@radicalcanadawest.ca +1 416 420 0057 www.radicalcanadawest.ca
	<b>USA (Arizona) - 1340 only</b>		<b>Canada (East)</b>
	<b>Crown Racing</b> 3930 W. Costco Dr Tucson, Arizona 85741 sales@crownconceptusa.com +1 (520) 900 7583 www.crownconceptusa.com		<b>Radical Canada East</b> 39 Ashwarren Rd North York, Ontario M3J 1Z7 robert@radicalcanada.ca +1 (416) 420-0057 www.radicalcanada.ca

#### 4.3 OIL/WATER COOLING

- a) Tape applied directly to the radiators or mesh screen in the duct inlet to control the temperature is permitted.
- b) Pre-heating of oil and water is permitted.
- c) 'Hanging' radiators with brackets to prevent them from wearing through the sidepod is permitted.
- d) Adding rubber or sleeves to protect oil and water lines from chaffing is permitted.
- e) Permitted oil/water cooling system updates are listed below:

Part	Image / Details	Introduced on	Permitted on
NEED PART NUMBERS XXR Mechanical Water / Scavenge Pump	NEED IMAGE AND DETAILS	XXR	RS onwards

#### 4.4 INDUCTION SYSTEMS

- a) Heat reflective tape may be applied to the outer surface of the airbox.
- b) The throttle bodies must remain as supplied by Radical Motorsport. See 4. Engines for throttle body diameter.
- c) Polishing the inside of the throttle bodies is not permitted.
- d) Officials may mandate the use of foam blocks in the air box to aid in meeting sound restrictions. These blocks must be used as supplied and may not be modified in any way.

4.5 EXHAUST SYSTEMS



- a) Only primary exhausts designed for the specific engine variant may be fitted. See 4. Engines for primary exhaust measurements.
- b) Coating or wrapping of the Exhaust is not permitted.
- c) Heat shield of maximum 150mm width is permitted to be fitted to the exhaust at the right side primary header merge collector, specifically to insulate the gear position wire.
- d) Officials may mandate the addition of a noise quietening product to the exhaust systems. These must be used as supplied and may not be modified in any way. Minor modification of the original standard system to attach the prescribed noise quieting product is permitted.
- e) Permitted exhaust updates:

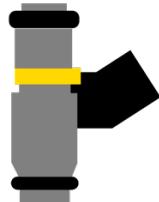
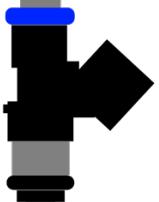
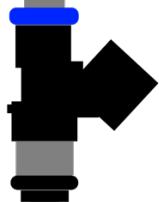
Part	Image / Details	Introduced on	Permitted on
RS Silencers EX0031 (Quiet) or EX0032 (Loud) plus associated parts	 	RS	RS only
RSX Silencers EX0232 + EX0233 (Quiet) or EX0222 (Loud) plus associated parts	  	RSX	RSX only
XX + XXR Silencers EX0232 + EX0361 (Quiet) or EX0360 (Loud) plus associated parts	NEED IMAGES	XX	RSX onwards

**4.6 IGNITION SYSTEMS / ECU**

- a. Only the Technical Delegate or Radical Factory personnel are permitted to re-program the ECU.
- b. Officials may mandate the reprogramming of ECUs to alter performance of a specific model or model variant.
- c. The Technical Delegate may on a regular basis supply a replacement ECU, which the competitor must use if requested.
- d. Heat shielding the ECU is permitted, but it must not restrict its removal.

**4.7 FUEL DELIVERY SYSTEM**

- a) The fuel delivery system including regulator and injectors must be standard as supplied by Radical Sportscars for that model edition. For Instance:

	RS	RS	RS post 929 + RSX + XX	XXR
<b>Engine Generation</b>	RPE 1500 Gen 1 + 2	RPE 1500 Gen 3 (Short Stroke)	RPE 1500 Gen 4 (Long Stroke)	RPE 1500 Gen 5
<b>Fuel Pump</b>	FP0030	FP0030	FP0032	FP0036
<b>Regulator</b>	FR0014 – 3 Bar	FR0014 – 3 Bar	FR0027	FR0005
<b>Injector</b>	FB0001 	FB0060 	FB0060 	FB0060 + FB0120 

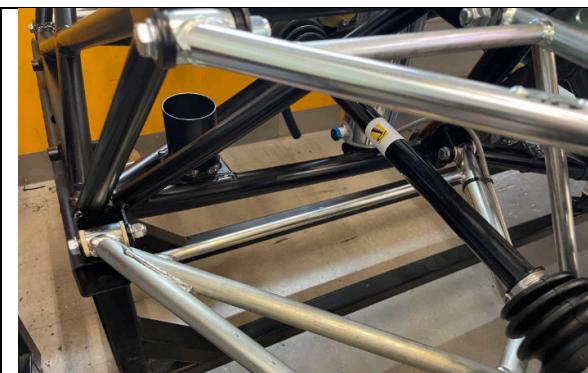
- b) Heat shrink, heat insulation, or the addition of rubber, to prevent chaffing of the fuel lines is permitted.
- c) Each car must be fitted with a Radical Fuel testing 'T' piece plus an FIA approved dry break valve fitted to the fuel line to facilitate safe fuel testing.

## 5. SUSPENSION

## 5.1 BUSHINGS

a) Roller bearings are not permitted, the standard bushings must be retained.

Type	SB0012	SB0014	SB0003	SB0005
Image				
Type	White Rubber	Metal Sleeve	Black Rubber	Plated Metal Sleeve
Dims (+/- 0.3)	Length :17mm ID: 13mm Small OD: 21mm Large OD: 26.6mm	Length: 41mm ID: 9.7mm OD: 12.9mm	Length :17mm ID: 12.3mm Small OD: 21mm Large OD: 26.6mm	Length: 41mm ID: 9.7mm OD: 12.8mm
Locations Used	Rear lower wishbones	Rear lower wishbones	Front lower wishbones Front upper wishbones Rear upper wishbones	Front lower wishbones Front upper wishbones Rear upper wishbones



Rear showing white bushings in lower wishbones



Front showing black bushings



b) Bolts and fasteners must be the same specification as supplied by Radical i.e. NAS fasteners are not allowed.

**5.2 DAMPERS**

Intrax Single Adjustable	Intrax Triple Adjustable	Factory Bump Rubber	Factory Packer
	 Sealed from Feb '23 on		
FRONT: SS0034 REAR: SS0035	FL: SS0182 FR: SS0183 RL: SS0204 Hankook Spec RR: SS0205 Hankook Spec RL: SS0184 Dunlop Spec RR: SS0185 Dunlop Spec FL: SS0213 Sealed (Feb 23) FR: SS0214 Sealed (Feb 23) RL: SS0215 Sealed (Feb 23) RR: SS0216 Sealed (Feb 23)		1MM – SS0155 2MM – SS0156 3MM – SS0157 5MM – SS0158

- Only Intrax triple adjustable or Intrax single adjustable dampers supplied by Radical Motorsport can be fitted.
- Any seals fitted may not be broken.
- No modifications to internal specifications of the dampers are permitted.
- Non-factory bump rubbers, packers and spring platforms are not permitted. Only factory supplied bump rubbers (1 per damper) and packers are permitted:
- Spring rates, front and rear, are free.
- Fabricated uprights must have top and lower bolt safety wired.

## 5.3 PERMITTED SUSPENSION UPDATES

Part	Image / Details	Introduced on	Permitted on
Rear Adjustable Pushrod SP0032	 NEED BETTER IMAGE	XX	RS onwards
Billet Upright FL: SU0196 FR: SU0197 RL: SU0198 RR: SU0198		XX	RS onwards
Cast Upright FL: SU0190 FR: SU0191 RL: SU0192 RR: SU0193		XX	RS onwards

## 5.4 ROLL BARS

a) Front and rear anti-roll bars may be changed out for those supplied by Radical Sportscars for the specific model:

Front Roll Bars					Rear Roll Bars				
Soft	SN0006	5/8 in	15.8mm	Gold	Soft	SN0018	1/2 in	12.7mm	Gold
Medium	SN0005	3/4 in	19.0mm	Gold	Medium	SN0017	5/8 in	15.8mm	Gold
Hard	SN0004	7/8 in	22.2mm	Gold	Hard	SN0016	3/4 in	19.0mm	Gold
X-Hard	SN0071	7/8 in	22.2mm	Black	X-Hard	SN0066	7/8 in	22.1mm	Gold
					XX Hard	SN0073	7/8 in	22.1mm	Black

## 5.5 WHEELBASE/TRACK

a) Wheelbase is 2370mm, measured from the centerline of the front wheel hub to the centerline of the rear wheel hub.  
 b) Front and Rear Track is 1780mm, measured from wheel hub to wheel hub.

## 6. TRANSMISSION

## 6.1 GEAR RATIOS

Ratio	3.594:1	3.409:1	3.235:1	3.071:1	2.917:1	2.770:1
Input Gear	32T	33T	34T	35T	36T	37T
Part	A-3R1-20	A-3R1-22	A-3R1-24	A-3R1-26	A-3R1-28	A-3R1-36
Main Gear	46T	45T	44T	43T	42T	41T
Part	A-3R1-21	A-3R1-23	A-3R1-25	A-3R1-27	A-3R1-29	A-3R1-37



- a) The ratios in the Gear Drive Unit may be changed but are restricted to the above.
- b) The gears in the Gear Drive Unit must remain in sets, the Parts are marked on each gear as per above for inspection.
- c) Specific fixed ratios may be defined for a specific track in the final instructions or by official bulletin.
- d) The standard gearing in the engine must be retained and remain unchanged.
- e) The Gear Drive Unit Oil Pump must be fitted and operational.
- f) The Gear Drive Unit Reverse Gear and Mechanism must be fitted and operational.

## 6.2 DRIVESHAFTS

Location	Part	Weight (built with grease)	Diameter
Left	TQ0260	+/- 5.75kg	25.6mm
Right	TQ0261	+/- 5.95kg	25.6mm

## 6.3 PERMITTED TRANSMISSION UPDATES

Part	Image / Description	Introduced on	Permitted on
TQ0731 GDU Upgrade Kit	 See Technical Bulletin 2023.24 for more info.		ALL
TQ0732 GDU Complete (New)	New style GDU featuring upgraded components.		ALL

**7. ELECTRICS**
**7.1 FRONT LIGHTING**

a) The minimum front lighting kit as described below must be retained, and be turned on in all sessions:

RS	RSX	XX	XXR
 No LED Array	 LED Array across top	 LED Array along side	 LED Solid across top
Headlight buckets, covers and (1) pair of running or driving lights.	Headlight buckets, covers and LED Array. (No headlamps required)	Headlight buckets, covers and LED Array. (No headlamps required)	Headlight buckets, covers and LED Solid strip. (No headlamps required)

**7.2 REAR LIGHTING**

a) For newer cars the Radical high intensity LED central Rain Light must be used. For older cars it is recommended a single high intensity FIA Approved or Radical LED rear Rain Light be fitted, however two standard tail lights installed equally spaced about the vehicle centerline emitting the equivalent of a 20 watt bulb are permitted.

**7.3 BATTERIES**

a) The battery(s) must be fitted, located in their original position(s), and capable of repetitive starts.  
b) Positive terminals of both the battery and alternator must be covered with a non-conductive material.

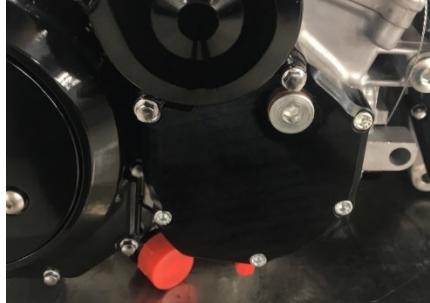
**7.4 ALTERNATORS**

a) Generators / Alternators must be fitted and operational, charging the batteries.  
b) The addition of ducts and duct work to cool the alternator is permitted.

**7.5 STARTER MOTOR**

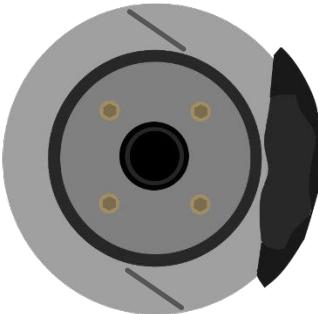
a) Starter Motor must be fitted, operational and capable of repetitive starts.  
b) The addition of ducts and duct work to cool the starter motor is permitted.

**7.6 PERMITTED ELECTRICAL UPDATES**

Part	Image / Description	Introduced on	Permitted on
ERR0024 Billet Starter Cover		RSX	RS, RSX, XX
LS0242 Potted Water Temperature Sensor	 See TB2023-22 - Potted Water Temperature Sensor ECT - LS0242	-	ALL

**8. BRAKES**

**8.1 PERMITTED BRAKE AND UPRIGHT COMBINATIONS**

RS	RS + RSX + XX + XXR	XXR
Hispec with Solid Discs	Hispec with Floating Discs	AP with Floating Discs
		
 260mm Vented Solid Discs LH: BD0003 RH: BD0003	 280mm Vented Floating Discs LH: BD0062 RH: BD0063	 XXXmm Vented Floating Discs LH: BD0144 RH: BD0145
NEED IMAGE  Radical-Hispec 4-pot Caliper FL: BC0006 FR: BC0007 RL: BC0008 RR: BC0009	NEED IMAGE  Radical-Hispec 4-pot Caliper FL: BC0002 FR: BC0003 RL: BC0004 RR: BC0005	 Radical-AP 4-pot Caliper FL: BC0131 FR: BC0132 RL: BC0131 RR: BC0132
 PFC Brake Pads BD0009 XXXX.01 Standard BD0010 XXXX.08 Endurance BD0137 XXXX.13 Alternative	 PFC Brake Pads BD0011 XXXX.01 Standard BD0010 XXXX.08 Endurance BD0137 XXXX.13 Alternative	NEED IMAGE  AP Ferodo Brake Pads BD0150 DS1.11 Standard BDXXXX DS3.12 Option  NEED AP COMPOUNDS
Permitted Uprights RS – Fabricated, Cast or Billet	Permitted Uprights RS + RSX – Fabricated, Cast or Billet XX – Fabricated, Cast or Billet XXR – Cast or Billet only	Permitted Uprights XXR – Cast or Billet only

## 8.2 MASTER CYLINDERS

Front	Rear	Clutch
BM0092	BM0093	BM0091
0.7	3/4	5/8



## 8.3 PERMITTED BRAKE MODIFICATIONS

- a) The fitting and removal of brake duct grills is permitted.
- b) The use of tape to regulate the amount of air flowing through brake ducts is permitted.
- c) Radical Motorsport and the Technical Delegate may allow extra brake cooling to be fitted to cars based on specific track conditions. This will be notified by a Technical Bulletin issued to all teams for a specific event only.
- d) It is permitted to flip the brake bias bar over to achieve greater front bias.

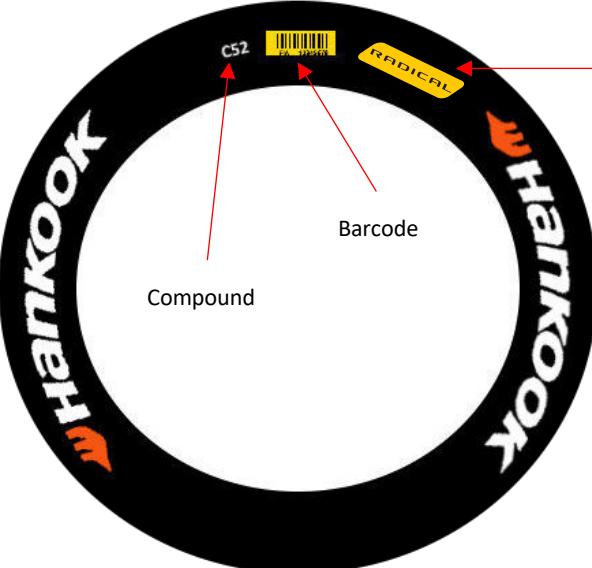
See Technical Bulletin 2024.2 Brake Bias Settings for more information.

9. WHEELS

Radical Single Piece	Braid Radical Single Piece
	
Front: 15 inch diameter x 8 inch wide WC0015 Silver WC0017 Black WC0019 Graphite	Front: 15 inch diameter x 8 inch wide WC0066
Rear: 16 inch diameter x 10.5 inch wide WC0016 Silver WC0018 Black WC0020 Graphite	Rear: 16 inch diameter x 10.5 inch wide WC0067

- a) Only single piece wheels supplied by Radical Motorsport of the following specification are permitted.
- b) All wheels must be clearly labelled with the car number.

10. TYRES

	Official Radical Marking, design 1 or 2			
1				
2				
Type	Front Dry (Slick)	Rear Dry (Slick)	Front Wet (tread)	Rear Wet (tread)
Size	200/580 R15	260/610 R16	200/580 R15	260/610 R16
Compound	C5 (C52)	C5 (C52)	W7 (W72)	W7 (W72)
Hankook Material Code	F200 1016453	F200 1017748	Z207 1024635	Z207 1024636
Radical Part Number	WS0054	WS0055	WW0045	WW0046

- a) Only official Hankook tires marked with the Radical seal, supplied by the official series Hankook agent, and of the specific compound may be used.
- b) Barcode and/or unique 8-digit number may be logged to ensure correct sets are being used.

**11. WEIGHT**

Model	Minimum Weight with Driver
SR3	720kg

**12. FUEL TANK**

- a) It is permitted to update older cars with newer available fuel tanks.  
See TB2023.8 Fuel Pump Part Numbers for more detail.
- b) It is permitted to update older cars with newer available fuel pumps.  
See TB2023.8 Fuel Pump Part Numbers for more detail.