

# **2024 RAW SR Race Series Technical Regulations**

The RUSH Auto Works Inc (RAW) SR Race series shall be conducted following the Sporting Regulations, CCR's, GCR's... of the organizing entity. Those Sporting Regulations shall be supplemented by these RAW SR Race Series Technical Regulations.

These Technical Regulations have been established to control the spec nature of the RAW SR Race Series. The intent is to ensure that the focus of the series is on a driver's ability in the car rather than their wallet. The whole Ethos of RUSH Auto Works Inc and the cars we build will always be to make our sport, even at a high-performance level, affordable and attainable. These Technical Regulations have been developed to promote that Ethos through our RAW SR Race Series.

As with any spec series set of Technical Regulations, these regulations will be interpreted by our technical staff as a clear written rule. **In short if it does NOT say you Can, then you Can't.** Do so and expect to be handed the penalty as defined by the Sporting Regulations, Race Director or Technical Stewards as appropriate! The rules are not extensive, so they are not open to varied interpretation or the ability to find a loophole that allows performance advantages to be found.

## **1.0.0 Car Eligibility**

- 1.1.0** Only RUSH SR race cars manufactured by RUSH Auto Works Inc and maintained in original spec condition, are eligible for competition within the RAW SR Race Series.
- 1.2.0** Any car found to have modifications of any form not permitted with these Technical Regulations shall be deemed disqualified from the event.
- 1.3.0** The technical stewards shall have the right following any competition event to draw drivers exiting the track into Parc Fermé for technical inspection of these regulations. No driver or mechanic shall be allowed to make any adjustments, modification or additions to the car while in Parc Fermé.
- 1.4.0** The Technical Stewards will have the right to inspect all parts of the car as deemed necessary, including all body work, chassis components, engines, engines and gearbox control systems, electronics & wiring, tires and wheels, including the right to download any session data from the data logger.
- 1.5.0** The Driver shall be allowed to have 1 mechanic present with them while in Parc Fermé to assist with removal of body panels or parts for inspection by the Technical Stewards.
- 1.6.0** Pre event technical inspection, "safety inspection", or "Tech" is not deemed as a compliance inspection with these Technical Regulations.

## **2.0.0 Minimum Weight**

- 2.1.0** The RAW Race Series shall be conducted on a basis of minimum contested weight of the car and driver as exiting the track following any competition session. The Technical Stewards will have the right to ask the competitor to scale while in Parc Fermé. This may be done with the driver alone and the car alone for simple addition or as a combined measured weight. If Measured Separately the driver shall be weighed with all safety gear which will not be present when weighing the car separately.
- 2.2.0** The minimum contested weight of the car and driver as exiting the track, with the Nankang AR-1 tires shall be equal to or above 1325 lbs. as shown on the scales utilized by the Technical Stewards. In the event of a wet race where the Race or Series Director has called a wet race and the Hoosier W3 tires are permitted the minimum weight while fitted with the Hoosier W3 tires shall be reduced to 1305 lbs to account for the weight difference between the tires.
- 2.3.0** Competitor shall be responsible for ensuring that any discrepancy between their own scales and the Technical Stewards are known BEFORE commencing the competition session.
- 2.4.0** Driver shall be afforded the opportunity to consume a 12 oz bottle of water, after exiting the track and before scaling for hydration purposes. Any attempt to add weight to the driver by dousing the driver with water shall be grounds for disqualification.
- 2.5.0** Competitor is permitted to attach ballast to the chassis on the 1-1/2" Flat bar rails in front and behind the driver's seat, for the purpose of adding weight or adjusting balance of the car. Any weight added shall be secured by a minimum of two, 8mm bolts, with Ny lock nuts. Any bolts shall be at least SAE grade 5 or metric grade 8.8 or stronger.
- 2.6.0** Failing to meet the minimum contested weight of the car and driver as exiting the track, as deemed by the Technical Stewards, shall be basis for disqualification from the competition session.

## **3.0.0 Modifications – Bodywork & aerodynamic devices.**

- 3.1.0** Only body work and aerodynamic devices, body panels, wings, splitters, diffusers as originally manufactured and purchased from RAW, shall be permitted.
- 3.1.1** No bodywork component or aerodynamic device shall be substituted with any item not manufactured by RAW and in original configuration as supplied by RAW.
- 3.1.2** It shall be allowed to finish the RAW supplied body panels by sanding, surface preparation painting or wrapping.
- 3.1.3** Body panel fitment may be adjusted.
- 3.1.4** The front splitter angle may be adjusted using the front splitter stays.

- 3.1.5** The rear wing may be adjusted only using one of the six adjustment holes as provided on the RAW wing adjuster plates. No modification to the wing element, end plates or wing mounting brackets including their mount to the body work shall be permitted. Splitter mounts must remain unmodified in their original mounting positions.
- 3.1.6** The three slots in the front fender upper surfaces may have the forward faces removed to allow air to escape the front wheel area.
- 3.1.7** No other bodywork or aerodynamic device modifications shall be permitted.
- 3.2.0 Modifications - Chassis and Suspension**
- 3.2.1** No chassis modifications shall be permitted under any circumstance. All members and components of the front crash box, welded chassis frame and rear crash structure must remain in original configuration as supplied by RAW.
- 3.2.2** No Modification to the floor, undertray or rear diffuser is permitted.
- 3.2.3** Only suspension, wheel hub, brake disc and calipers, shocks, steering rack and column, pedal box, Differential assembly, shock absorbers, springs and anti-roll bars as originally manufactured and purchased from RAW shall be permitted.
- 3.2.4** No component mentioned in section 3.2 shall be substituted with any item not manufactured by RAW and in original configuration as supplied by RAW.
- 3.2.5** Wheel bearings must remain stock, no modification of the bearing or seal is permitted, any wheel bearing deemed by the technical stewards to have been modified to reduce rolling friction shall result in a disqualification from the competition session.
- 3.3.0 Modifications – Engine, Transmission & Driveline**
- 3.3.1** Only engine, transmission and driveline components as originally manufactured and or purchased from RAW shall be permitted.
- 3.3.2** Only RAW factory or Denso OEM starters are permitted inside of the Rush Spec Series. Participants in violation of this section will be disqualified until the violation has been replaced or fixed.
- 3.3.3** No engine system, transmission and driveline component shall be substituted with any item not manufactured or supplied by RAW and in original configuration as supplied by RAW.
- 3.3.4** The engine ECU may at no time be tampered with or re flashed other than by RAW. ECUs shall be inspected for Flash updates by Technical Stewards. ECUS which have been flashed shall be confiscated and the competitor disqualified from the event.
- 3.3.5** The RAW engine unit is sealed. Tampering with or removal of the engine seal, by competitor or anyone other than RAW, shall eliminate engine eligibility to the series.

**3.3.6** It shall be permitted to remove the restrictor plate in the air box. A factory or K&N filter must be in place at all times.

**4.0.0 Allowed Modifications and Adjustments - What you Can Do!**

**4.1.0** The front and rear toe alignment may be adjusted via the stock track rods. The Front and rear camber may be adjusted by addition or removal of 0.5, 1.0 and 2.0 mm camber shims as supplied by RAW.

**4.1.1** The front and rear anti-roll bars may be adjusted by position of the ARB anchor position on the ARB. The ARB may be disconnected.

**4.1.2** The front and rear ride heights may be adjusted.

**4.1.3** Tire pressures may be adjusted.

**4.1.4** The corner weights may be adjusted through permitted means as contained here-in.

**4.2.0** The front sprocket may be adjusted from 14 tooth to a 15 tooth, or 16 tooth sprockets. The rear sprocket must remain a 44 tooth sprocket.

**4.2.1** The differential may be adjusted to have 1,3, or 5 clutch contact faces per side, ie 20, 60 or 100%

**4.2.2** The differential may be used in the 1.5 or 2.0 differential ramp position.

**4.3.0** The 700lb ( Red ) or 800lb ( Blue ) springs may be used in any combination in any location on the car. E.g. It is permissible to run all reds, or all blues or reds on the left blues on the right etc.

**4.4.0** The shock absorber must remain stock using only components supplied by RAW.

**4.4.1** The length of the shock absorber may be adjusted using the body lock nut on the shaft.

**4.4.2** The perch height for the spring may have its position adjusted.

**4.4.3** The compression and rebound valve settings may be adjusted.

**4.4.4** The N2 recharge may be adjusted in the range of 250-350psi.

**4.4.5** The shock absorber can use any viscosity shock oil.

**4.4.6** The internal valve discs can be adjusted in quantity using RAW supplied discs only.

**4.5.0** Only Aim MXM, MXL or MXS data systems are permitted, It is permitted to add Steering angle, and shock position sensors only.

**4.5.1** It is permitted to utilize a Garmin Catalyst Driving Performance Optimizer in addition to the Aim Data Logger.

**4.5.2** The series Technical Stewards reserve the right to download and disseminate Aim data from any competitor at will.

**4.6.0** Only 91 to 93 Pump gas is permitted. E85, Methanol and Octane boosters are prohibited. Care should be taken to ensure compatible engine oils are being used else you want to burn up a clutch. The series reserves the right to spec fuels at events such as track pump gas. This can be 91-93 or even recreational 94 ethanol free.

# RAW SR Race Series Technical Regulations

- 4.7.0** Brake pads are open. The car utilizes Lotus Elise front pads at all 4 corners. There is a huge selection of pads available ranging from \$20 per axle to \$600 per axle set.
- 4.8.0** It is permissible to add camera systems of the owners choice to the car. Cameras should be mounted securely with fasteners. Adhesive or suction mounts are prohibited. Camera systems providing telemetry to the drivers crew are prohibited.
- 4.8.1** It is permissible to add a 2-way radio for vocal communication between the driver and their crew. Use of cellular devices solely for the purpose of driver to crew audio communication is permitted but all components must be securely attached to the vehicle. The use of loose devices such as a cell phone in a drivers pocket is prohibited.
- 4.8.2** It is permissible to add a chain guard to protect the engine bay from lubricant splatter.
- 4.8.3** The optional RAW manufactured, wind deflector, High downforce front splitter, Billet Splitter Mounts and optional shock N2 Chamber systems are permissible for all competition.
- 4.8.4** It is permissible to add a clutch switch system to allow the car to be started while in gear with the clutch pedal depressed. It should be such that a minimum of 2 actions are taken to cause the car to start to ensure that a car cannot accidentally be starter without the driver in place.
- 4.8.5** The use of a Garmin catalyst stem is permitted.
- 4.8.6** The use of alternative mirrors is permitted.
- 4.9.0** The use of an AMD Transponder is mandatory during all timed RUSH Series events.
- 4.9.1** The transponder must be located in the position shown below.



## **5.0.0 Tires**

- 5.1.0** For the RAW SR Spec Series shall run exclusively the Nankang AR-1 185/60/R13 Front and the 205/60/R13 Rear tires.
- 5.2.0** The use of only ONE set of Nankang AR-1s shall be permitted per race weekend. Where

there are two rounds of a championship contested on consecutive days the same tires must be used for both rounds. This rule shall apply from the first qualifying session of an event weekend. Drivers may use new or scrub tires during practice. Tires shall be marked following the first qualifying session of the event weekend and shall be used for all sessions of the event thereafter.

- 5.3.0** In the event that a driver damages a tire following the first qualifying session of an event the Race Director or Series Director is permitted to inspect the damaged tire and if deemed damaged can authorize the use of a replacement tire for the remaining sessions of the event.
- 5.4.0** In the event of wet weather and ONLY after the Race Director or Series Director has declared a wet weather race then the use of Hoosier 44421W3 Front and 44426W3 Wet Racing radials shall be permitted. It should be noted that a different minimum weight applies while using these tires.
- 5.5.0** No tire compound modifiers of any kind are allowed. The Nankang AR-1 has a Shore A hardness natural range limit of 42-54 A Hardness when measured at ambient temperatures. Tires tested outside of these limits shall result in a session disqualification. From that point on the Race or Series Director shall call each session wet or dry. If called Dry the Nankang AR-1 MUST be used.

## **6.0.0 Series Logos**

- 6.1.0** For The RAW SR Spec Series, the following series Logo placements shall be mandatory.
- 6.2.0** RUSH SPEC SERIES Logos shall be located on both the front lower fenders and on each side of the rear wing upper face.
- 6.3.0** Aim Decal shall be located on either side of the car on the floor side immediately behind the front wheel.
- 6.4.0** The Nankang decal shall be located on either side of the car on the floor side in the scallop behind the AIM Logo and on each side of the front bumper
- 6.5.0** The USE of the RAW Number plate and RAW issued 2 digit number is mandatory during National Events.
- 6.6.0** Event Sanction Body / Event Promotor may have specific sporting regulations that mandate additional decal, race number and class identification decal placement that must be observed.

## **7.0.0 MISCELLANEOUS**

- 7.1.0** The consumption of alcoholic beverages is absolutely prohibited during all Rush Events. After the Event is declared finished for the day, local laws and track rules will be applied for the use of alcoholic beverages.



**7.2.0** Use of social media: Any issues that may arise regarding Rush Spec Series rules and regulations, decisions by Officials, policies, results, points standings, or situations between the competitors or crew, are to be handled privately and directly between the parties involved and Rush Auto Works INC. Attacking Rush Auto Works, or other parties via social media sites, including but not limited to: Facebook, Twitter, or Instagram, is unacceptable and may result in disciplinary action if the Series Promoter determines that the communication is derogatory, libelous, or not in the best interest of the Rush Spec Series. The resulting penalties for such an infraction include but are not limited to: disqualification from an Event, ejection from an Event and possibly from all future Rush Spec Events until further notice.

### **General closing comments**

The success of the SR itself, our investment in developing the car and our company with all its employees will depend on having a fair and competitive spec series with a rule book that is followed. It is impossible to write a rule that covers every angle that a person may choose to find a loophole, to circumvent the nature or intent of our rule book. Know that if that is your intent, you are jeopardizing our very future and you will not be welcomed in our series. We will catch that, you will force us to spend time and money adding new rules, you will be disqualified, and blatant repeat infractions will result in your being asked not to enter future events. Let's keep this honest, the RUSH SR is a great platform for you to develop your skills, put in the seat time and earn your position on the podium!

**Respectfully**

**David Hosie**

President and CEO RUSH Auto Works Inc.