Introduction

The objective of our organization, **T**eam **o**f **U**nited **R**acers (TOUR), is focused on one goal; to coordinate rules for carpet oval $1/10^{th}$ scale pan car racing. The rules and guidance package below, addresses the carpet oval season from September 1^{st} 2023 through May 1^{st} 2024.

TOUR's objectives in coordinating carpet oval pan car racing are primarily to standardize the classes featured in oval racing, concentrate the classes to try and increase class counts, and to favorably impact the cost of pan car racing.

It is **NOT** the charter of TOUR to force racetracks or events to adopt these rules. TOUR recognizes that individual racetracks must adopt rules satisfying their local racers in order to survive financially; just as many tracks adjust ROAR and other rules to suit their local situation. By defining classes and rules, used for a TOUR series, we provide guidelines for local tracks while making it clear for the traveling racer what rules will be used at our events. Our hope is that racers enjoy the consistency and stability provided by these rules and choose to compete locally using the same rules, also in effect for our major events, leading to a natural adoption of these rules across the country.

Committee

☐ Director: Allan Arrington

Class Guidelines

The class structure provided in these guidelines are the TOUR Championship Series classes used at major events and local tracks around the country. The tables below provide a quick synopsis of the class structure for 2023/2024 season followed by a brief description of the classes.

"SPORTSMAN Class"

Class	<u>Motor</u>	<u>Battery</u>	<u>Tires</u>	<u>Body</u>	ESC
Sportsman RTT	Motiv Tour 21.5	ROAR	CRC Rubber Tires (Smooth Rule)	Truck Body	Blinky

"Foam Tire Classes"

Class	<u>Motor</u>	<u>Battery</u>	<u>Tires</u>	Body	<u>ESC</u>
Truck	Motiv Tour 21.5	ROAR	World GT	Truck Body	Blinky
Stock	Tekin Tour 17.5	ROAR	World GT	Gen 3 / Nationwide / Spoiler	Blinky
13.5 Super Stock	ROAR / TOUR 13.5	ROAR	OPEN	Cup style / Wing	Blinky
13.5 Open	ROAR / TOUR 13.5	ROAR	OPEN	Cup style / Wing	OPEN
Open Modified	Modified	ROAR	OPEN	Cup style / Wing	OPEN

"Rubber Tire Classes"

Class	<u>Motor</u>	<u>Battery</u>	<u>Tires</u>	Body	<u>ESC</u>
Stock RTT	ROAR / TOUR 13.5	ROAR 1- cell	CRC Rubber Tires (Smooth Rule)	NASCAR Truck	Blinky
"EXPO CLASS 23-24" PRO RTC	Modified	ROAR 1- cell	CRC Rubber Tires (Smooth Rule)	RTC/Wing	Blinky

"12th Scale Classes"

Class	<u>Motor</u>	<u>Battery</u>	<u>Tires</u>	Body	<u>ESC</u>
12 th Truck	Tekin Tour 17.5	ROAR	World GT	Truck Body	Blinky
12 th Modified	Modified	ROAR	OPEN	Cup style / Wing	Blinky

"ALL CLASSES - Short Track Suggestions"

Many tracks throughout the country cannot support the speeds of some of the National classes. In the spirit of consistency between tracks, TOUR suggests smaller tracks simply reduce the motor size while leaving the remaining rules intact for each class.

SPORTSMAN RTT (21.5)

This class features a NAS-Truck style body, CRC Rubber Tires, any 1/10th pan car chassis, MOTIV TOUR 21.5 motor (Part #GRC2010), and Electronic Speed Controls (ESC) approved under the "ROAR Sportsman Class ESC rule" set to the Sportsman profile at all times. ROAR approved 1-cell battery. NO SPOOLS, diffs only. Driver eligibility for this class is limited to "Sportsman" level racers as defined by TOUR/Event Promoter.

TOUR Sportsman Truck (21.5)

This class features a NAS-Truck style body, World GT spec tires, any 1/10th pan car chassis, MOTIV TOUR 21.5 motor (Part #GRC2010), and Electronic Speed Controls (ESC) approved under the "ROAR Sportsman Class ESC rule" set to the Sportsman profile at all times. ROAR approved 1-cell battery.

Stock (17.5)

This class features NASCAR Nationwide Cup style bodies, World GT spec tires, any 1/10th pan car chassis, TEKIN TOUR 17.5 motor, and Electronic Speed Controls (ESC) approved under the "ROAR Sportsman Class ESC rule" set to the Sportsman profile at all times. ROAR approved 1-cell battery. New TOUR 17.5 motor will be the Tekin TT2762 - 17.5T SPEC-R GEN4 Motor as offered with the standard TT2776 - 12.5mm SPEC-R Rotor – BLUE

13.5 Super Stock (13.5)

This class uses NASCAR Nationwide or Sprint Cup style bodies and ROAR/TOUR approved 13.5 motors along with ROAR approved batteries. Electronic Speed Controls (ESC) must be approved under the "ROAR

Sportsman Class ESC rule" and set to the Sportsman profile at all times. Racers have the option of using a rear wing and/or a spoiler. Removal of material from the back of the body is allowed. Racers may use any foam tires intended for use on $1/10^{\rm th}$ scale pan cars, except for BSR yellow ring tires or equivalent compound ROAR approved 1-cell battery.

13.5 Open (13.5)

This class uses NASCAR Nationwide or Sprint Cup style bodies and ROAR/TOUR approved 13.5 motors along with ROAR approved batteries. Any ESC may be used. Racers have the option of using a rear wing and/or a spoiler. Removal of material from the back of the body is allowed. Racers may use any foam tires intended for use on $1/10^{\rm th}$ scale pan cars, except for BSR yellow ring tires or equivalent compound ROAR approved 1-cell battery.

Stock RTT (13.5)

This class features the a NASCAR Truck body, any ROAR/TOUR legal 13.5 motor, any ROAR approved 1-cell battery, CRC Rubber Tires, 5mm ride height, a 39 oz. weight minimum and Electronic Speed Controls (ESC) approved under the "ROAR Sportsman Class ESC rule" set to the Sportsman profile at all times.

CRC Tire and Wheel Rules – Team CRC GTR rims will be the only rims allowed (Part #2310). The only front tires that will be allowed are Team CRC RT-1 (Part#2311) or Team CRC Mounted RT-1 (Part#2314). The only rear tires that will be allowed are Team CRC RT-1 (Part#2312) or Team CRC Mounted RT-1 (Part#2316). Tires must be mounted "F1/NASCAR" style with the larger sidewall visible from the outside profile of the car. Sidewalls may be glued. Tires must display the molded letters (CRC). Stock inserts only. No Modifying inserts or "double stuffing" of inserts will be allowed. Tire surface must be smooth. (See "Smooth Rule" on page 10 under "Tires".) Cutting, Grinding, and Ruffling of tires WILL NOT BE ALLOWED in this class.

PRO RTC (Modified)

This class features the any TOUR approved RTC body, any ROAR legal modified motor, ROAR approved 1-cell battery, CRC Rubber Tires, 5mm ride height, a 39 oz. weight minimum and Electronic Speed Controls (ESC) approved under the "ROAR Sportsman Class ESC rule" set to the Sportsman profile at all times. Racers have the option of using a rear wing and/or a spoiler. Removal of material from the back of the body is allowed.

CRC Tire and Wheel Rules – Team CRC GTR rims will be the only rims allowed (Part #2310). The only front tires that will be allowed are Team CRC RT-1 (Part#2311) or Team CRC Mounted RT-1

(Part#2314). The only rear tires that will be allowed are Team CRC RT-1 (Part#2312) or Team CRC Mounted RT-1 (Part#2316). Tires must be mounted "F1/NASCAR" style with the larger sidewall visible from the outside profile of the car. Sidewalls may be glued. Tires must display the molded letters (CRC). Stock inserts only. No Modifying inserts or "double stuffing" of inserts will be allowed. Tire surface must be smooth (See "Smooth Rule" on page 10 under "Tires".) Cutting, Grinding, and Ruffling of tires WILL NOT BE ALLOWED in this class.

(EXPO CLASS: New for 23/24. This class will be "tested and tuned" this year before becoming a permanent part of the TOUR line-up. Rules subject to change.)

Open Mod (Modified)

This is the elite class of the TOUR featured at special events where the track is able to accommodate the speed of these vehicles. This class includes the best of the best drivers. It features NASCAR Nationwide or Sprint Cup style bodies with the option for a rear wing and allowing removal of material from the back of the body. ROAR approved batteries and any ESC may be used. Racers may use any foam tires intended for use on 1/10th scale pan cars, and ROAR legal modified motors. ROAR approved 1-cell battery.

1/12th Stock Truck (17.5)

This class features a NAS-Truck style body, World GT spec tires, any 1/12th pan car chassis, TEKIN TOUR 17.5 motor, and Electronic Speed Controls (ESC) approved under the "ROAR Sportsman Class ESC rule" set to the Sportsman profile at all times. ROAR approved 1-cell battery. TEKIN TOUR 17.5 motor will be the Tekin TT2762 - 17.5T SPEC-R GEN4 Motor as offered with the standard TT2776 - 12.5mm SPEC-R Rotor – BLUE

1/12th Mod (Modified)

This is the pro modified $1/12^{th}$ scale class of the TOUR. This is a Blinky ESC mod class. It features NASCAR Nationwide or Sprint Cup style bodies with the option for a rear wing and allowing removal of material from the back of the body. ROAR approved batteries and any ESC may be used. Racers may use any foam tires intended for use on $1/12^{th}$ scale pan cars, and ROAR legal modified motors. ROAR approved 1-cell battery. Minimum body weight = 90 grams with wing. Underweight bodies can be corrected only by adding weight to the roof.

General Rules

Batteries

Only 1-cell LiPo batteries (nominal voltage; 3.7V or 3.8V) having received ROAR approval are to be used. Label must be clearly visible.

Single Power Source

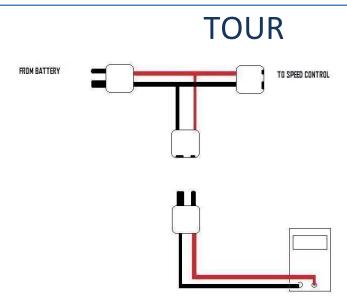
In all TOUR classes the 1-cell LiPo main battery is the only power source permitted for **any** electronics in the car (i.e. receiver packs are no longer permitted). The only exception to this is the Open Modified class, where receiver packs are permitted.

Voltage Limits

1s LiPo batteries may be charged to a maximum of 4.22v per cell, regardless of their nominal rating. Batteries presented to Tech over the 4.22v max voltage per cell must be drawn down to 4.20v per cell before they will be permitted to race. This should prevent the problem with voltage creep back up over the legal limit.

Voltage verification to be done as part of standard pre-tech race procedure

- 4.22V per cell is not only the maximum voltage per cell that LiPo batteries may be charged to.....it is the maximum voltage per cell allowed to be presented to the motor drive circuitry for the purpose of powering your car.....period.
- Any attempt to use a secondary source of power (receiver pack battery or booster) to drive the motor at a higher voltage than 4.22V per cell is prohibited. No sneak circuits, no gray areas. This is blatant cheating.
- If any violation of this rule is suspected, the race director has the right to perform an "in-line test" of the car's <u>operating voltage</u> on the starting grid. A connector wired in the configuration below will detect all voltage influences on the motor drive circuitry.



- Voltage manipulation of any sort is a serious issue affecting our mutual safety. In an attempt to verify any tampering, the following measures will be taken:
 - o Random voltage measures on the racing "grid"
 - ○ Random post-race voltage measurements to detect irregular high "end-point" voltage after a run
 - o If either of these tests point to an irregularity, the race director reserves the right to impound the car for further inspection. (i.e. disassembly of the battery and/or motor) It is further recommended that the results of these measurements/inspections be made public to ensure the comfort and credibility of all involved.
- All battery mfg. labels must be clearly visible. Any battery presented without label will not be allowed.

Motors

ROAR motor rules apply. Any ROAR legal spec motor with the class appropriate wind are to be used. Every motor must have completed the ROAR approval process and be listed on the ROAR site as "approved" on or before August 31st, 2023. Summer season approval date is on or before May 1st, 2024. Motors used in major TOUR events must have both a ROAR approval meeting the requirements above **and** be available to the racing

public (as determined by the judgement of the event promoter) through normal distribution channels at least 30 days prior to the date of the event.

Motors used in the (3) 13.5 classes [RTT, 13.5 Super Stock, & 13.5 Open], must adhere to ROAR Rule 11.3.2.1 which states:

• "All motors used in ROAR competition must be on the list of approved brushless motors posted on the ROAR website. Instructions and requirements for submitting motors for approval can be found on the ROAR website. Motor approvals shall be valid for 4 years from date of approval. Manufacturers can renew an approval for motors still in production for no additional fee or inspection for an additional 4 years."

A list of motors that are eligible for use during the 2023-2024 season has been compiled for your convenience at the end of this document. Any ROAR legal tuning rotor approved for a given brand of motor, can be used as long as it can be installed with no modification.

Any motor presented to tech that shows signs of tampering or are below spec may not be returned. It is totally up to the Race Directors discretion.

Most Mfg. have agreed to replace a stator that is a factory mistake. Tampered motors will not be replaced.

TOUR reserves the right to modify the list of allowed motors to preserve a sportsman-like competitive atmosphere.

Rotors

All motors may only use rotors approved by ROAR for the specific motor may be used. Any ROAR legal tuning rotor approved for a given brand of motor, can be used as long as it can be installed with no modification.

Max rotor diameter is 12.51 mm. No mod rotors, except in the Modified class.

Heat Sinks

No cooling apparatus may be used, other than a single 30mm fan. Motor heat sink devices directly contacting/attached to the motor must be made of aluminum only, no other materials are allowed.

Vented Endbells

Vented or upgraded motor end bells produced and sold through regular distribution channels by the original motor manufacturer and approved by TOUR will be legal in all TOUR classes. No Hybrid motors.

21.5 Motor rules

Motor for this class will be the MOTIV TOUR 21.5 motor (Part #GRC2010). No modifications can be made to this motor at all. Any signs of tampering will be result in disqualification and the motor will be confiscated. Minimum Stator Resistance for this motor is a 29.7 milliohm single pole resistance "average" of the A, B, and C poles when measured 75 degrees Fahrenheit. This is a "hard" measurement, not subject to the 99% testing rule.

17.5 Stock Motor rules

TOUR 17.5 motor will be the Tekin TT2762 - 17.5T SPEC-R GEN4 Motor as offered with the standard TT2776 - 12.5mm SPEC-R Rotor – BLUE. No replacing of hardware (screws, etc.) other than OEM original equipment. (Teflon shims are OK.) No modifications to motor or rotor from way it was designed and sold. Standard hybrid ceramic bearings (steel/ceramic) may be added. "Full Ceramic" bearings (commonly white or gray in color) cannot be used.

Minimum Stator Resistance per ROAR is 35.56 milliohms between any 2 phases of the motor (AB, AC, BC). Motors will not be allowed in competition which have a measured resistance less than 99% of this resistance when measured at 25 degrees Centigrade (77 degrees Fahrenheit) using an Instek GOM 802 milliohm meter. (Per TOUR Rules Appendix E.)

13.5 Motor rules

Any ROAR legal 13.5 spec motor may be used provided that the motor has completed the ROAR approval process and is listed on the ROAR site as "approved" on or before August 31st, 2023. Summer season approval date is on or before May 1st, 2024. Motors used in major TOUR events must have both a ROAR approval meeting the requirements above **and** be available to the racing public (as determined by the judgement of the event promoter) through normal distribution channels.

Motors used in the (3) 13.5 classes [RTT, 13.5 Super Stock, & 13.5 Open], must adhere to ROAR Rule 11.3.2.1 which states:

• "All motors used in ROAR competition must be on the list of approved brushless motors posted on the ROAR website. Instructions and requirements for submitting motors for approval can be found on the ROAR website. Motor approvals shall be valid for 4 years from date of approval. Manufacturers can renew an approval for motors still in production for no additional fee or inspection for an additional 4 years."

A list of motors that are eligible for use during the 2023-2024 season has been compiled for your convenience at the end of this document. Any ROAR legal tuning rotor approved for a given brand of motor, can be used as long as it can be installed with no modification.

Minimum Stator Resistance established by the ROAR listed minimum resistance level per (see Appendix A.) Motors will not be allowed in competition which have a measured resistance less than 99% of this resistance when measured at 25 degrees Centigrade (77 degrees Fahrenheit) using an Instek GOM 802 milliohm meter. (Per TOUR Rules Appendix E.)

Heating & Cooling (Batteries and Motors)

Batteries max temp will be 90 degrees; motors must be no less than 5 degrees below the ambient temperature of the track area when the vehicle is presented for tech inspection. Racers will not be able to race if battery temp is too high or motor temp is too low. Fans will be allowed (ambient air), No forced cooling of batteries allowed (freeze spray, etc.) or any other product used to cool the battery.

Lipo sacks will be required at all TOUR events!

Tires

- RTC & RTT Classes to use CRC Rubber Tires with stock inserts:
- Team CRC GTR rims will be the only rims allowed (Part #2310). The only front tires that will be allowed are Team CRC RT-1 (Part#2311) or Team CRC Mounted RT-1 (Part#2314). The only rear tires that will be allowed are Team CRC RT-1 (Part#2312) or Team CRC Mounted RT-1 (Part#2316). Tires must be mounted "F1/NASCAR" style with the larger sidewall visible from the outside profile of the car. Sidewalls may be glued. Tires must display the molded letters (CRC). Stock inserts only, with the front inserts in the front tires, and the rear inserts (the grey ones) in the rear tires. No Modifying inserts or "double stuffing" of inserts will be allowed. You are not allowed to add anything to the inside of the tire, no duct tape, no glue (to the inside), or anything else that did not come from the factory. You are not allowed to modify the air holes of the rim. This means that you cannot plug them, make them smaller, or make

them bigger. The intent here, is to run these tires as provided by CRC with no tweaks or modifications AT ALL. PERIOD.

• "<u>Smooth" Rule</u>: In an effort to keep rubber tire racing easy, convenient, more affordable and fun, we are instituting a "Smooth Tire Rule" for rubber tires. The goal here is to eliminate the need for tire prep work that includes truing, sanding, paddling, grinding or ruffling the tires. We hope to return rubber tire racing to its intent, which was more of a "plug and play" approach.

Tires must show no other signs of wear, other than <u>"normal use"</u>. (After 5 seasons of racing these tires, we have gathered plenty of data on the long term use and wear "pattern" of a tire that have experienced "<u>normal use".</u>)

The normal pattern of wear on a CRC tire is a slow-forming "wear ring". This ring is parallel to the direction of travel or rotation and slowly gets deeper as the tire wears. This ring appears after many runs. Other than that wear ring, the CRC tires do not show any signs of surface deformation under normal use, and there are **NO** perpendicular lines or waves of surface imperfection. Under normal use, the tire surface stays flat and the race surface of the tire stays smooth race after race and will not show any ridges, ruffles, graininess or any "waves" of wear. Thus, if a tire shows signs of anything but a smooth surface, it has experienced some other outside factor other than racing the tire on a carpet surface.

• Therefore, all rubber tires presented at tech must comply to these guidelines:

- The tire surface must be smooth and free from texturing or waves.
- The tire cannot be trued, ground, filed, touched or manipulatedin any way with a tool or object.
- No drills, dremel, truing, sanding, paddling or grinding the tires. The only thing that should touch the tire is the carpet you will race on.
- The tire surface cannot show ANY sign of waves, ruffles, texture or lines. No past "shadow" texturing, or faint ghosting patterns. Smooth surface ONLY.

- No grinding the "bead" or mold line. If you feel the tire needs to be "broken in", do it on the carpet track. Run it in advance, let the carpet race track do the work.
- If you raced in the past on some kind of surface that left anything but a smooth surface, those tires will not be legal for use. Smooth surface only.
- Any foam tires intended for 1/10th scale pan cars may be used in 1/10th scale classes other than the TOUR Sportsman Truck, 17.5 Stock, and 13.5 Pro Stock.
- World GT Tires are the **only** tires allowed for use in the TOUR Sportsman Truck and 17.5 Stock. World GT Tires must meet the following specifications:
 - Tire and wheel must meet 10th scale specifications
 - Tire compound to be Japanese R4 compound, 38 shore Tires must have an identifier ring of purple or blue colored foam visible around the circumference of the tire
 - Tires meeting the above criteria will be considered legal for use after samples are submitted and approved by TOUR.

Current Approved WGT List

- John's BSR Tires
- T.M. Racing
- CRC
- RC 4 Less
- GQ Racing Products
- Jaco Tires (white rim with purple or blue stripe)

^{**} Tampering with or deviating from the original foam (Japanese R4 compound) in any way could result in disqualification from an event and suspension from any

TOUR event for up to one year (including the Snowbirds, Ovalmasters, and TOUR Nationals).

Electronic Speed Controls (ESC)

TOUR Sportsman RTT, 21.5 Truck, 17.5 Stock, 13.5 Super Stock, 13.5 RTT, 12th Mod, and Pro RTC Mod competitors must use an ESC approved by ROAR for Spec use. The ESC must be set to the Sportsman mode (i.e. no timing boost, cheat modes, etc.) **at all times** when used in these classes. No wirelessly configurable ESCs are permitted in these Spec classes. No Delayed Turbo.

Any speed control may be used in all other classes. ESC's hardware and software version used in a TOUR Championship event must be available to the racing public through normal distribution channels at least 30 days prior to the date of the event.

No modifications to the ESC circuitry are permitted. This includes and is not limited to jump circuits, extra non-factory wiring configurations that include extra components such as buck boost circuits and/or capacitors. Normal Factory supplied components that are available to the general public are allowed in the configuration suggested by the manufacturer of the ESC.

Factory supplied capacitors, if wrapped in heat shrink, must be identifiable. Therefore, only clear transparent heat shrink is allowed.

Any questionable ESC is subject to further analysis and may be removed and held during an event at the race director's discretion.

ESC's must be configured so that they cannot be wirelessly updated when presented for technical inspection and as used in all competition (qualifying and mains). Some examples include removal from the car of any separate, external wireless modules; removal of any specific receiver used to enable wireless programming; and / or a locked software mode in the ESC which prevents wireless updating (locked mode must be indicated by a specific distinctive blink code or LED color).

Also no driving enhancement radio or gyros (AVC) may be used.

Weight Minimums

- All 1/10th scale Foam Tire classes 36 oz.
- All 1/12th scale Foam Tire classes 30 oz.
- RTC and stock RTT (1/10th scale Rubber Tire classes) 39 oz.

Body Rules

Bodies may be submitted for approval to TOUR. Once approved and available for purchase they will be added to the list of approved bodies for the appropriate classes.

Bodies must be approved and available to the public through normal distribution channels. No scraping of bodies will be allowed in the TOUR Sportsman RTT or 21.5 Truck class. Truck bodies are to be at a minimum weight of 105 grams, painted. All underweight bodies can be brought to legal weight by adding weight to the center of the roof.

Bodies used in competition are required to have the minimum details of numbers, headlights, and grills. Numbers must be displayed on the doors and roof with minimum sizes of 1 $^{3}4$ " and 2.5" tall, respectively. All details may be painted or stickered and must be scaled appropriately.

Pre and Post Race Tech:

All Cars will be presented to pre-race tech and pass all rules required to race. They must also pass post-race inspection or be DQ'd. It is the racers responsibility to know the rules of the class they have entered. It is the racers responsibility to mount all accessories to the chassis in a way they cannot come off during completion. It is also the racers responsibility to insure all electronic of their car are operating correctly so there is no issues during the race. (battery, ESC, transponder etc.)

TOUR 21.5 RTT, 21.5 Truck & RTT

- 2" spoiler max (no side dams attached)
- Tailgate/rear bumper must be left in

- We will be using a 1.7" measurement from the top of the tailgate to the point where the truck body cut line needs to be, as a standard measurement for all 10th scale trucks, regardless of where the mold line is. This will provide a constant cut for all brands.
- Holes may be drilled in the body for the purpose of mounting the body or transponder. Any other holes in the main body surface area, for any other reason are prohibited.
- Minimum roof height: 4 3/8".

Stock – (NASCAR Nationwide)

Bodies must resemble current NASCAR Nationwide cars and be approved by TOUR. TOUR will approve bodies at its discretion after submission by manufacturer.

- Minimum roof height of 4 1/4"
- Minimum height at the center of hood @ the centerline of the front axle - 2 ½ inches
- Rear of body only trimmed as high as the trim line. No air relief holes above the trim lines in the rear. (i.e. leave rear of body in)
- Body must be centered (front to back) in alignment with the mold lines for the front wheel wells.
- Holes may be drilled in the body for the purpose of mounting the body, wing, or transponder. Any other holes in the main body surface area, for any other reason are prohibited.
- Front of body (ahead of front wheel wells must be trimmed on the manufacturer's molded in cut line or to provide a minimum splitter height of 2mm if a cut line is not provided.
- INTENT of the Rules: Cut the body on the body line and don't rake or slam the body.

• For all approved bodies a spoiler with a maximum height of 1.5" from the deck lid may be used. Wings of any type may not be used.

13.5 Super Stock, 13.5, & Pro Modified

- Back of car bodies may be cut out
- 1.5" spoiler max (no side dams attached)
- Holes may be drilled in the body for the purpose of mounting the body, wing, or transponder. Any other holes in the main body surface area, for any other reason are prohibited.

PRO RTC

- No Minimum roof height or hood height.
- Back of car bodies may be cut out
- Holes may be drilled in the body for the purpose of mounting the body, wing, or transponder. Any other holes in the main body surface area, for any other reason are prohibited.

1/12th Truck -2" spoiler max (no side dams attached)

- 2" spoiler max (no side dams attached)
- Tailgate/rear bumper must be left in
- Holes may be drilled in the body for the purpose of mounting the body or transponder. Any other holes in the main body surface area, for any other reason are prohibited.

1/12th Mod -2" spoiler max (no side dams attached)

- No Minimum roof height or hood height.
- Back of car bodies may be cut out
- Minimum Body weight with Wing = 90 grams
- Holes may be drilled in the body for the purpose of mounting the body or transponder. Any other holes in the main body surface area, for any other reason are prohibited.

Race Director's Discretion:

TOUR has done its best to define rules encouraging fair and competitive racing. We have focused on defining simple, clear, and understandable rules.

We realize it is the nature of every racer to push the limits, but the time and energy required to write an "air tight" rules package is not available to us. (And we don't have the money to pay an attorney to write R/C rules.) Therefore, we ask that each of you adhere to the rules listed and follow the common sense guideline that we have all observed for over 20 years. These are the "generally accepted guidelines" that usually go without saying and simply follow ROAR's most basic oval guidelines (i.e. wheelbase, width, tire [type, diameter, & width], single speed, one-piece drive axle only, etc....)

However, in the event that there is a question or discrepancy, the Race Director has the FULL AND EXCLUSIVE AUTHORITY to interpret the rules. His or Her decision is final for the purposes of that event.

The TOUR reserves the right to edit and/or "repair" the rules listed above to account for oversight, unforeseen circumstances and /or in the interest of promoting fair competition.

APPENDIX A

Approved 13.5 motor list for 2023/2024 season:

Manufacturer	Minimum Resistance	Details	
Hobbywing	22.02	Hobbywing V10 G3R Part Number(s): 30401130 Uses 30820411 rotor, may also use 30820406, 30820410 or 30820416 rotors.	
Tekin	21.79	Tekin Gen4 Part Number(s): TT2763 Uses TT2776 rotor.	
Shenzhen Surpass / Rocket	21.37	Surpass Rocket V5R Part Number(s): SUR51135 Uses C75125 rotor.	
LRP	22.75	LRP XTEC x22 Part Number(s): 520201 Uses 520522 rotor; may also use 520521 rotor.	
Fantom	20.75	FANTOM Icon Torque V2 Part Number(s): FAN19113S, FAN19113T, FAN19113W Uses FAN19576 rotor. May use: FAN19586, FAN19590, FAN19591, FAN19594, FAN19575,FAN19597 rotors.	
REDS RACING	22.36	Reds VX3 540 Part Number(s): MTTE0036, MTTE0036C, MTTE0036T Uses MSTE0030, OR MSTE0031 rotor.	
Maclan	21.99	Maclan MRR v3 Part Number(s): MCL1050	
Team Powers	21.58	Team Powers Actinium V4 Part Number(s): TP-BLM-135100ACT-V4	
Shenzhen Surpass / Whitz Racing	22.21	Whitz Racing HyperSpec Part Number(s): WRP-HS-135 Uses "HT001" rotor.	
MOTIV	21.14	MOTIV RC MC4 Part Number(s): MOV40135 Uses: MOV40011 rotor	
R1 Brushless Motor Lab	21.18	R1 WURKS- V21-S Part Number(s): 020076 w/ 125704 rotor	
Fantom	21.83	Fantom Icon V2 FXT Part Number(s): FAN19123S, FAN19123T, FAN19123W Uses : FAN19565 ROTOR. Can use previous approved Fantom spec rotors	
Hobbywing	21.27	Hobbywing XERUN V10 G4 Part Number(s): 30401140 Uses: 30820444 ROTOR.	
REDS RACING	22.20	Reds VX3 Pro Stock OEM w/ MSTE0031 rotor	
Trinity	21.43	Trinity Slot Machine OEM w/ TEP 1119 rotor	

Fantom	21.05	Fantom Helix RS Part Number(s): FAN19013S, FAN19013T, FAN19013W Rotor: FAN19565
R1 Brushless Motor Lab	21.19	SUPERSHORT V21 PN# 020111 OEM w/125755 rotor
R1 Brushless Motor Lab	21.47	VOLTA 13.5 PN#88001 OEM w/ 8125726 rotor
TEAM POWERS	21.77	Actinium V5 13.5 PN# TP-BLM-135100ACT- V5 OEM w/ TP125g-R50 rotor
Associated / Reedy	22.15	Sonic SP5 PN:27481 w/ OEM Rotor PN: 27483
R1 Motor Lab	21.09	V21-HD PN: 020173 w/ OEM Rotor PN: 125726
Shenzhen Surpass / Rocket	21.90	V6M Lightweight Stock Spec 13.5T (PN: SUR6513 w/ C75125 rotor)
Shenzhen Surpass / Rocket	20.77	V6 Spec 13.5T (PN: SUR6613 w/ C78125 rotor)

^{*}Motors used in the (3) 13.5 classes [RTT, 13.5 Super Stock, & 13.5 Open], must adhere to ROAR Rule 11.3.2.1 which states:

• "All motors used in ROAR competition must be on the list of approved brushless motors posted on the ROAR website. Instructions and requirements for submitting motors for approval can be found on the ROAR website. Motor approvals shall be valid for 4 years from date of approval. Manufacturers can renew an approval for motors still in production for no additional fee or inspection for an additional 4 years."

Any ROAR legal tuning rotor approved for a given brand of motor, can be used as long as it can be installed with no modification.

APPENDIX B

Approved Body and Wing Guidelines:

- Approved Bodies for 10th Scale Truck Classes
 - Protoform 1227-21
 - McAllister 218/300/301/302

- RJ speed 1050
- Next Oval Body (NOB) "Rockwell" #01103
- Next Oval Body (NOB) "FRT" #01260
- Next Oval Body (NOB) "RG Speed"
- Next Oval Body (NOB) "CRT"
- Mon-Tech Racing Part #MB-022-012

• Approved Bodies for 10th Scale Stock:

- Protoform Gen 3 (part # 123221, 1237-25, 1233-25)
- McAllister Part # 277 / 298 / 299
- Mon-Tech Racing Part #MB-022-011
- Next Oval Body (NOB) "GEN-S"

Approved Bodies for 13.5 Super Stock, 13.5 Open, & Pro Modified

- Protoform C-HD, D-HD, and T-HD
- McAllister 293 / 294 / 317
- Salvas CarpetBoss
- Next Oval Body (NOB) "MGC"
- Mon-Tech Racing Dega Part #MB-022-010
- Mon-Tech Racing Dega 2.0 Part #MB-022-010.1
- Aero1 G7

Approved Bodies for Pro RTC

- Protoform RT-C Body (Part #1239-25)
- Next Oval Body (NOB) "GEN-S"

• Approved Bodies for 12th Truck:

- Next Oval Body (NOB) "Lil Rock"
- Next Oval Body (NOB) "JCT"
- McAllister #281 Mini Nastruck Car Body
- Super Rad SR-20 SuperTRK

• Approved Bodies for 12th Mod:

- PRW LightSpeed
- Aero-1 1/12 Charger
- Next Oval Body (NOB) Supar 12
- Next Oval Body (NOB) SuparX

Wing/Mount Guidelines:

- Wings can be used in the following classes (13.5 SuperStock, 13.5 Open. Pro Modified, 12th Modified, and Pro RTC). Wings & mounts may be used subject to the following specifications:
 - Max width: 8"
 - Side-dam max height: 2"
 - Side-dam max length: 3.75"
 - Chord max: 3"

- Wing side dams may touch the body, but cannot be hard mounted to the body
- Maximum of 3 wing mounts
- Wing & mount must be separate pieces. (i.e. Side dam or chord cannot mount directly to body. Mount and side panels cannot be one piece.)
- Wing mounts cannot be higher than the roof line of the car.

APPENDIX C

TOUR's Position on Tire Traction:

Over the last 15 years, there has been an increase in major racing events held on temporary race tracks assembled in public venues. The need to limit offensive odors in these venues, has given rise to the use of several lines of tire tractions commonly referred to as "odorless" or "low odor", as an alternative to the high wintergreen and toluene order of older traction compounds. Though a solid definition of the term "low odor" is difficult, there seems to be a general understanding that has been observed over time. The recent rise in popularity of rubber tire racing has resulted in a number of new tire traction compounds, which do not conform to this 15 yearlong general understanding. The goal is to minimize odor, protect the racing surface, and provide a common traction platform that adds to the overall "grip" of the racing surface rather than creating a slippery surface from the use of dissimilar solvents. Therefore the TOUR offers the following guidelines:

- Tire traction is ALWAYS a local decision. Race promotors/building owner's rules overrule everything.
- Tire traction rules are the same for both foam and rubber tires.
- There is no distinction between additive applied at the track, pre-race soaking/ conditioning, or tire cleaning. Same odor guidelines in effect.

- The only method of "teching" tire traction is <u>smell</u>, which is subjective. Therefore all authority for determining legality is in the hands of the race director and his tech team.
- As a guideline, the following tire tractions have been, and will continue to be examples of legal, low odor tire traction:
 - Sticky Fingers
 - o Jack the Gripper
 - Paragon Traction Action
 - o SXT (all formulas)
 - o o J-Dubs Tire Rub
- As a guideline, the following tire tractions have been, and will continue to be examples of high odor tire traction, and thus not legal for use in a "odorless" or "low odor" race environment:
 - o Paragon Ground Effects, FX, FX2
 - CRC Downforce
 - Niftech
 - o Stick it
 - \circ TQ
 - o Trinity Buggy Grip, Red Dot, White Dot, Yellow Dot, etc.
 - o Any Xylene or Tolulene Based Solvents
 - Any "Go-Kart" Tire Additives (Goat Pee, Formula V, Hot Lap, Track Tac, Acrysol, Creosote, etc.)
- Any traction compounds outside this list to be used as trackside additives, pre-race conditioners, or cleaners, need to be approved by track owner or event promoter
- "Smell test" of tech official is final.

APPENDIX D

TOUR's Guidelines Rolling Starts:

For tracks/events choosing to use "Rolling Starts", the TOUR has provided the following guidelines:

- Cars line up on back straightaway, single file, using the length of the entire straight.
- Race director opens the track to begin rolling pace lap. Pace lap begins with the leader entering turn 3, will be one full lap in length.
- Pace lap should be slow (approx. between 1/4 and 1/3 trigger pull for spec racing, mod classes adjust as needed) with cars remaining single file, approx. 3-4 feet separation between each car.
- Leader is entitled to initiate the start anywhere between suggested "start zone" racetrack/event promoter's discretion suggested zone is center of 3/4 to beginning of front straightaway.
- Cars are to stay in line firing off the start until start/finish line is crossed
- Field fires off the leader's initial move, not the scoring start tone.
- Restarts are at the race director's discretion.

APPENDIX E

TOUR's Guidelines for Motor Tech:

TOUR recommendation for Motor Tech will be to follow ROAR Rule 11.2.3.5 which states:

"Resistance measurements will be made during the approval process on all spec wind motors. The approval listing for each spec wind motor will specify the minimum resistance obtained during the approval process for each motor part number submitted for approval. At event inspections, spec wind motors will not be allowed in competition which have a measured resistance less than 99% of the resistance listed in the approval data for that motor when measured at 25 degrees Centigrade (77 degrees Fahrenheit) using an Instek GOM 802 milliohm meter."