

Director:

Allan Arrington

Objective:

The objective of our organization is limited to one primary goal. That is to coordinate rules for <u>carpet oval 10th & 12th scale pan car</u> racing. This rules package addresses the carpet oval season from October 1st 2011 through May 1st 2012.

Our primary objectives in coordinating <u>carpet oval pan car</u> racing are:

- To standardize and limit the number of classes featured in oval racing in an attempt to concentrate the classes and increase class counts.
- To create and maintain a Sportsman Class intended to provide a place in this hobby for the long time sportsman and a point of entry for the new beginning racer.
- To favorably impact the cost of pan car racing

The TOUR does not have the power to force any racetrack or event to adopt these rules. We recognize that individual racetracks have to adopt rules which satisfy their local races in order to survive financially, just as many tracks adjust ROAR and other rules to suit their local situation. But by defining the classes and rules which will be 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. If racers like these rules and want to be able to compete locally on a weekly basis using the same rules which will be in place for our major events, then demand from the racers will cause local tracks to adopt these rules.

TOUR Championship Classes:

The following chart gives a snapshot of the class structure for the 2011-2012 carpet TOUR season:

<u>Class</u>	<u>Motor</u>	<u>Battery</u>	<u>Tires</u>	<u>Body</u>	<u>ESC</u>
1/10 Sportsman Truck	17.5	SMC Spec	World GT	NASCAR Truck	Limited
1/10 Stock	17.5	ROAR	OPEN	"Nationwide" / Spoiler	OPEN
1/10 Stock Spec	13.5	ROAR	BSR Spec	"Sprint Cup" COT Style	Limited
1/10 Super Stock	13.5	ROAR	OPEN	"Nationwide" / Wing	OPEN
1/10 10.5 Mod	10.5	ROAR	OPEN	"Nationwide" / Wing	OPEN
1/12 Super Stock	13.5	ROAR	OPEN	"Nationwide" / Wing	OPEN

• Sportsman Truck (17.5):

This is the entry level class for the TOUR. It is intended for sportsman and new racers. This class will feature a Truck body, World GT spec tires, 17.5 ROAR approved motors, and Electronic Speed Controls used in the class must be ROAR approved under the "ROAR Sportsman Class ESC rule" and must be set to the Sportsman profile at all times (i.e. no timing boost, cheat modes, etc). The only battery allowed in this class is the SMC 4000 mAh, 25C pack; PN 4025S.

• Stock (17.5):

Cars for this class will use NASCAR style bodies (as listed in the section on body rules) and spoilers (stock spoilers included by the manufacturer with the body) with a maximum height of 1.5". ROAR approved 17.5 motors and batteries will be used. Any ESC may be used. No wings are allowed and the back of the body must remain in place and be cut on the manufacturer's cut line. If a body does not have a bumper or manufacturer's cut line molded into the back, the rear of the body may not be cut out any higher than 1.75" from the top of the deck lid.

Racers may use any foam tire intended for use on 1/10th scale pan cars.

• **Stock Spec (13.5):**

This class uses ROAR approved 13.5 motors. Electronic Speed Controls used in the class must be ROAR approved under the "ROAR Sportsman Class ESC rule" and must be set to the Sportsman profile at all times (i.e. no

timing boost, cheat modes, etc). Bodies used in the class must be based on current or recent NASCAR Sprint Cup designs as detailed in the section on body rules.

Racers must use BSR spec tires with a yellow identifying stripe

• **Super Stock (13.5)**:

This class uses NASCAR Nationwide or Sprint Cup style bodies and ROAR 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 1/10th scale pan cars.

• 10.5 Mod:

This class will be the premier class at most events featuring some of the best drivers in the country. It will feature NASCAR Nationwide or Sprint Cup style bodies with the option for a rear wing and allow removal of material from the back of the body. ROAR approved 10.5 motors and batteries will be used. Any ESC may be used.

Racers may use any foam tires intended for use on 1/10th scale pan cars.

• <u>1/12 Scale Super Stock 13.5</u>

This class features ROAR approved 13.5 motors, any ESC, and any NASCAR Nationwide or Sprint Cup style body. It allows the option of a rear wing and / or spoiler and material may be removed from the back of the body (i.e. the back may be cut out).

Racers may use any foam tires intended for use on 1/12th scale pan cars.

General Rules

Batteries:

For classes other than the Sportsman Truck class, 1-cell Lipo batteries (nominal voltage; 3.7v) which have received ROAR approval and are available (as defined by ROAR) to the public on or before October 1st, 2011 are to be used.

The only battery permitted for the Sportsman Truck class is the SMC 4000 mAh, 25c pack, PN4025S

Motors:

ROAR motor rules apply. Any ROAR legal motor with the class appropriate wind, may be used in each class, (17.5, 13.5, and 10.5 respectively). Motors used in a TOUR Championship event must have a ROAR approval date and be available to the racing public through normal distribution channels at least 30 days prior to the date of the event. Only rotors approved by ROAR for the specific motor may be used.

Tires:

- Any foam tires intended for $1/10^{th}$ scale pan cars may be used in $1/10^{th}$ scale classes other than the Sportsman Truck and 13.5 Stock Spec class. Any foam tires intended for $1/12^{th}$ scale pan cars may be used in $1/12^{th}$ scale classes.
- World GT Tires are the only tires allowed for use in the TOUR Sportsman Truck Class and must meet the following specifications:
 - Tire and wheel must meet 10th scale specifications
 - Tire compound to be Japanese R4 compound, 38 shore
 - Tire must have an identifier ring of purple colored foam visible around the circumference of the tire
 - There is no "approval process" for World GT tires. Any tire meeting the above criteria will be considered legal.
- Yellow Stripe Spec Tires from John's BSR Tires are the only tires permitted in the 13.5 Stock Spec class.
 - The following tires may be used for all wheel positions other than the RF
 - F1006-SPEC white rear
 - F1004-SPEC green rear
 - F1008-SPEC grey rear
 - F1003-SPEC green front
 - F1005-SPEC white front
 - One of the following tires must be used on the RF
 - F1001-SPEC blue front

Electronic Speed Controls

Any speed control may be used in all classes except Sportsman Truck and 13.5 Stock Spec. Sportsman Truck and 13.5 Stock Spec competitors must use an ESC approved by ROAR for Sportsman use. The ESC must be set to the Sportsman mode (if applicable) at all times when used in these classes. ESC's and software versions used in a TOUR Championship event in other classes must be available to the racing public through normal distribution channels at least 30 days prior to the date of the event.

Receiver Packs

Receiver packs are limited to a maximum capacity of 500 mAh with a maximum nominal voltage of 7.4v. Receiver packs must be connected to the receiver or ESC using wiring of 20 ga or smaller.

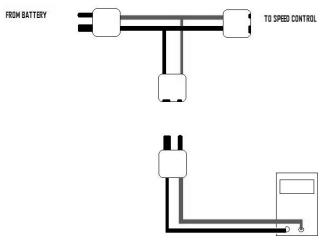
Heating & Cooling (Batteries and Motors):

Batteries and motors must be within 5 degrees of the ambient temperature of the track area when the vehicle is presented for tech inspection.

Voltage Limits:

- 1s Li-Po batteries may be charged to a maximum of 4.22v.
- Voltage verification do be done as part of standard pre-tech race procedure
- 4.22V per cell is not only the maximum voltage per cell that Li-Po 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 operating voltage on the starting grid.

A connector wired in the configuration below will detect all voltage influences on the motor drive circuitry.



Body Rules:

Sportsman (17.5) – NASTRUCK bodies only

- 2" spoiler max (no side dams attached)
- Tailgate/rear bumper needs to be left in
- Holes may be drilled in the body for the purpose of mounting the body or transponder. Holes or material removal from the main body surface area for any other reason is prohibited.

Stock (17.5)

- "Nationwide" style bodies (THD, Charger, Monte Carlo, C-HD, etc.)
- Back of car bodies must be left intact above the mold line. If a body does not have a bumper or manufactures cut line molded into the back the rear of the body may not be cut out any higher than 1.75" from the top of the deck lid.
- 1.5" spoiler max (no side dams attached) measured from the deck lid surface. Material may be added to the manufacturer's supplied spoiler or a new spoiler fabricated from Lexan may be used to meet this requirement.
- Holes may be drilled in the body for the purpose of mounting the body or transponder. Holes or material removal from the main body surface area for any other reason is prohibited.
- Minimum height: 4.25"
- The following bodies are currently approved for competition:

Mc Allister Bodies: 224, 225, 226, 238, 277

Protoform: 122421, 122521, 122621, 122821, 122930, 123121 Windtunnel: 2210, 2212, 2214, 2222, 2235, 2241, 2242, 2243.

<u>Stock Spec (13.5)</u> – Bodies must resemble current or recent NASCAR Sprint Cup cars and be approved by the TOUR. The TOUR will approve bodies at it's discretion after submission by manufacturer.

- Currently approved bodies are as follows:
 - Protoform TCC (part # 1230-30)
 - Protoform Gen 2 (part# 1232-30)
 - McAllister Charger COT (part #261)
 - McAllister Fusion COT (part #254)
 - McAllister Impala COT (part #249)
 - McAllister 190 COT (part #265)
 - Windtunnel KSM FSC (part #2213)
- Minimum roof height of 4 3/8th inches
- Minimum height at the center of hood @ the centerline of the front axle -2 $\frac{1}{2}$ 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. Holes or material removal from the main body surface area for any other reason is 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 1/8" if a cut line is not provided.
- (<u>INTENT of the Rules</u>: Cut the body on the body line and don't rake or slam the body.)
- For all approved bodies except Protoform TCC 1230-30, a spoiler with a maximum height of 1.5" from the deck lid may be used. Wings of any type may not be used.
- Wing Rules for Protoform TCC PN 1230-30
 - The wing must be screwed to the body's 2 molded-in wing struts. No raising or lowering of wing. No additional wings or spoilers are allowed.
 - Wing dimensions (tolerance: plus or minus 1/8"):
 - Width: 6-1/2" including the outer spill plates
 - Spill plates molded into wing must be cut to the mold lines and are all that is required (stick-on/bolt-on spill plates are not required)

- Spill plate max height: 1"; Spill plate max length: 1.5"
- Kick-up can be cut or bent no lower than the bottom of the lowest mold line. Minimum of ½" of kick-up.
- Chord max: 1-3/8" (measured from leading edge of the wing to the trailing edge)

Super Stock (13.5) and Pro Stock (10.5)

- Nationwide or Sprint Cup style bodies
- 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. Holes or material removal from the main body surface area for any other reason is prohibited.
- All bodies must be available to public
- Wings may be used subject to the following dimensions:
 - Max width: 8"
 - Side-dam max height: 2"
 - Side-dam max length: 3.75"
 - Chord max: 3"

1/12 Super Stock 13.5

- Nationwide or Sprint Cup style bodies
- 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. Holes or material removal from the main body surface area for any other reason is prohibited.
- All bodies must be available to public
- Wings may be used subject to the following dimensions:
 - Max width: 7.0"
 - Side-dam max height: 2.0"
 - Side-dam max length: 3.75"
 - Chord max: 3"

Weight Limits:

- All 1/10th scale classes 36 oz
- All 1/12th scale classes 30 oz

Race Director's Discretion:

We have done our best in defining rules to encourage fair and competitive racing. We have also focused on defining simple, clear, and understandable rules. We do realize that 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.