



## LATE MODEL RULES

changes are marked in **RED**

u 2.1.2024

### BODIES

*Note: All Dimensions are ZERO TOLERANCE*

- a) Nosepiece and roof must match body style of car.
- b) All cars must have a minimum of one-inch (1") and a maximum of two and a half (2.5") inches of roll at top of fenders, doors, and quarter panels. A sharp edge will not be permitted. Body roll must go from sides over interior, not interior over sides.
- c) Floorboards and firewall must cover the driver's area and be constructed to provide maximum safety.
- d) Driver's seat must remain in the same general area as the general design of the car.
- e) Windshield screen or bars are mandatory.
- f) Legible numbers, at least eighteen inches (18") high are required on each side of the car and roof.
- g) No fins or raised lips of any kind are permitted anywhere along the entire length of the car.
- h) Bodyline must be a smooth even line from front to rear.
- i) No "slope noses" or "wedge cars" permitted. Noses must be stock appearing, subject to Series template.
- j) No "belly pans" or any type of enclosure on bottom of cars will be permitted. Skid plate to protect rack-n-pinion and oil pan is permitted.
- k) No wings or tunnels of any kind are permitted underneath the body or chassis of the car. A maximum of one (1) stone deflector, for rear mounted oil pumps, oil filters, and for the main oil tank will be permitted. The deflector may be made of steel, aluminum, or heavy gauge wire. The cover may only be mounted near the unit it is designed to protect and mounted only from the upper right frame rail to the lower right frame rail, and may not extend forward beyond the motor plate, or rearward beyond the 4- bar plates.
- l) All non-approved bodies will be assessed a fifty pound (50#) minimum weight penalty. Penalty may be more, TBD by tech official based on severity of infraction

- m) No panels of any kind under the rear deck running from the front to the rear of the car. Bracing from fuel cell top from front to rear is legal.
- n) Any air cleaner scoops used must be positioned in front of or around the air cleaner and cannot exceed one (1") inch in height above any part of the air cleaner. The scoop cannot be designed with fins or raised edges to direct airflow. The scoop cannot extend behind the rear of the air cleaner and must have a maximum width of seventeen inches (17") at the rear, with a maximum of ten inches (10") width at the front and cannot have more than one inch (1") opening in height at the front.
- o) No cockpit or driver adjustable shocks, hydraulic or pneumatic weight jacks, trackers, MSD boxes or similar adjustable components of any kind are permitted inside the cockpit of the car. Taping over of any adjuster is not permitted. The offending component must be removed from the cockpit.

## **STOCK NOSEPIECES**

- a) The Track Technical Inspector must approve all stock nosepieces.
- b) Nosepieces must be made of molded type material.
- c) Two (2) piece noses must be fastened together in the center. No spacers to gain width are permitted.
- d) The nosepiece must be mounted so as not to alter its original shape.
- e) No material can be removed from the nosepiece. No cutting from bottom, top or sides is permitted.
- f) Adding to the bottom of the nosepiece in the front achieving lower ground clearance is permitted.
- g) A stock nosepiece can extend a maximum of fifty-two inches (54") from the center of the front hub to the farthest point extending forward.
- h) Fender flares to be no more than 95" in width at any point.

## **ROOF AND ROOF SUPPORTS**

- a) The roof length size must be a minimum of forty-four inches (44") to a maximum of fifty-four inches (54").
- b) The roof width size must be a minimum of forty-eight inches (48") to a maximum of fifty-two inches (52").
- c) Roof must be stock appearing and mounted level.
- d) Roof height must be between forty-five inches (45") and forty-eight inches (48") from the ground.
- e) The roof must be mounted parallel to body and near center of the car.
- f) A maximum one- and one-half inch (1.5") roll, turned downward, is permitted along the front edge of the roof. A maximum one inch (1") roll is permitted along the rear edge of the roof. (Roll permitted to help strengthen roof).
- g) No Flat, Odd Shaped or Bellied Roofs allowed.

- h) All roof side panels must extend to the edge of the body. Maximum Roof side panel window size – seventeen inches (17”) at the top, forty-three inches (43”) maximum at the bottom. The window area may be covered with clear Lexan or transparent material. Decals will be permitted but must meet the dimensions in the drawing. Maximum two-inch (2”) bow in either direction in rear roof side panels is permitted.
- i) Front posts must be flat and in uniform width from top to bottom – four inch (4”) maximum width.
- j) Any sun shields, four inch (4”) maximum, must be able to hinge for easy exiting of car

## **FRONT FENDERS AND HOOD**

- a) Fenders are not permitted to gain height from rear to front of car.
- b) No part of fender or hood can be outside of the bodyline.
- c) The front fender can be a maximum of Forty inches (40”) in height. Height is measured vertically from the ground to the top of the fender behind the front tires.

## **DOORS**

- a) Door to door cannot exceed seventy-eight inches (78”) in width at the top of the doors.
- b) Door to door cannot exceed Ninety-three inches (93”) in width at any point on the car (including side skirts).
- c) Doors cannot exceed forty inches (40”) in height measured from the ground.
- d) No more than 1” concave in any panel. A straight edge will be used to check if any portion of the doors or quarter panels are concaved. With a straight edge on the door or quarter panel at any length or angle, there cannot be any more than a 1” gap between two resting points of the straight edge.
- e) The minimum ground clearance permitted is three inches (3”).
- f) With a string pulled from the top of the right-side quarter panel at the spoiler support to the right front fender side over the front tire, no portion of the body shall be more than 2” from the string. This is vertically (up and down) and horizontally (left and right).

## **QUARTER PANELS**

- a) Left side quarter panel must be tapered gradually towards the center of the car.
- b) Tire clearance from body must be a minimum of two inches (2”). No wheel skirts permitted.
- c) At no point can quarter panel sides break in towards center of the car. With a straight edge on the door, no portion between two resting points of the straight edge shall have any gap.
- d) Overall width to be no more than 78” max at any point tapered to 74” max at rear of car at top.
- e) Max width at any point up and down the quarter panels to be no more than 87”
- f) Height of left side quarter panel (actual dimension of body panel) to be no less than right side quarter panel.

- g) Center of hub to top of quarter panel to be 55" max
- h) Center of hub to bottom of rear quarter panel to be 50" max.
- i) No more than 1" concave in any panel. A straight edge will be used to check if any portion of the doors or quarter panels are concaved. With a straight edge on the door or quarter panel at any length or angle, there cannot be any more than a 1" gap between two resting points of the straight edge.

## **FRAMES**

- a) No aluminum frames permitted in construction of car.
- b) Minimum 102" wheelbase.
- c) Rectangle or Square Tubing: The frame of all cars must be constructed of two inch (2") by two-inch (2") minimum rectangular or square tubing with a minimum of eight inch (8") circumference and a minimum of eighty-three thousandths of an inch (.083") wall thickness.
- d) Tube Frame: The frame of all cars must be constructed of a minimum of one and three-quarter inch (1¾") round tubing and must have a wall thickness of eighty-three thousandths of an inch (.083") wall thickness minimum.
- e) If rear bumper is stubbed, it may only extend a maximum of eight inches (8") beyond frame. Any stubbed rear bumpers that extend eight inches (8") or more beyond frame must be rounded and directed towards the front of the car.
- f) It is recommended that all cars be equipped with a tow hook or strap.
- g) All battery supports must be braced in two axis - two horizontal and one vertical.

## **ROLL CAGES**

- a) Cars must have a suitable steel roll cage in drivers' compartment including headrest.
- b) Side roll bars are mandatory and must extend into the door panels.
- c) A minimum of three (3) bars must be used on the left side of the car. Each bar must be a minimum of one and one-half inch (1½") in diameter with a minimum thickness of ninety-five thousandths of an inch (.095").
- d) Roll cage must be welded to the frame.
- e) Roll cage must be above the drivers' helmet.
- f) No "fin-shaped" or "foil-shaped" add-ons permitted on any part of the roll cage. The entire roll cage must be constructed of round tubing only.

## **INTERIORS**

- a) Interior is permitted to be dropped to the middle of the car a maximum of seven inches (7") below the top of doors and a minimum of twelve inches (12") below the roll cage.

- b) Interior must gradually taper up to the quarter panel height and not change angle within Thirty-two (32") from the spoiler.
- c) Interior must be fastened flush at the top of the door and quarter panels and may taper gradually towards the center of the car not creating a "lip effect".
- d) Interior must run in a straight line from behind the drivers' seat to the rear spoiler.
- e) If interior is flat through the car, it must maintain a twelve-inch (12") clearance from roll cage for easy exiting from either side of the car.
- f) All cars with interior panels must at NO point in the car be over three inches (3") in height. The portion of the panel running beside the driver must taper to zero or end in line with the steering wheel.
- g) If interior is dropped at firewall, that portion of the firewall must be filled for safety reasons.
- h) Rear deck height at the spoiler to be maximum forty (40") with zero tolerance.

## **SPOILER**

- a) Rear spoiler must be manufactured of material of adequate strength such as Lexan or Aluminum.
- b) Rear spoiler material maximum eight-inch (8") height measured from deck to tip of material with tape laid flat to follow along material. (Any more than 8" will be subject to DQ.) Maximum seventy-two-inch (72") width. (1" tolerance is allowed to accommodate spoiler support panels and brackets. Any more than 73" will be subject to DQ.) If a horizontal brace is added to stiffen the spoiler, it must not add height. It will need to be below the 8" measurement when checked with a level or angle finder at 0 degrees (no exceptions).
- c) Rear spoiler is not permitted to be suspended above the deck to create a "wing effect."
- d) Rear spoiler must begin where quarter panels end. No extended decks permitted.
- e) Maximum of three (3) rear spoiler supports. Option of two (2) additional one inch (1") aluminum braces.
- f) Spoiler supports cannot be mounted wider than the top of the quarter panel.

## **HEADERS/MUFFLERS**

- a) Collector type headers required.
- b) Mufflers shall be optional unless required by local track rules. All drivers will be responsible for meeting decibel requirements at tracks that require mufflers.
- c) If mufflers are required, then all mufflers must be securely attached to all cars. Pop riveting of mufflers will not be permitted. It would be strongly recommended that mufflers be welded to headers.

## WEIGHT/ENGINES

- a) Open Engine – 2400 lbs. min. always. Open means “not a crate” steel block only, no dry sump permitted. External single stage wet sump pump is permitted. 7600 chip maximum.
- b) GM 604 Crate Engine – 2300 lbs. min. always. Must be sealed in accordance with Crate Racin’ USA or IMCA rules. Any engine not sealed properly will fall into engine category 1. 6800 chip maximum.
- c) GM 602 crate engine – 2200 lbs. min. always. Must be sealed in accordance with Crate Racin’ USA or IMCA rules. Any engine not sealed properly will fall into engine category 1. 6400 Chip Maximum
- d) Maximum engine setback will be six inches for all cars. Measured from center of ball joint to the number 1 (one) front spark plug hole. WISSOTA CARS CAN RUN 8" SETBACK BUT WILL HAVE 100LB penalty with 50 Lbs. forward of motor plate. Any WISSOTA car running at 8" will need to have motor plate bolted directly to mounts. Spacing the plate forward is acceptable, but not backward. No 6" setback car can space the plate back to run 8", even with weight penalty.
- e) All engines are limited to one (1) spark plug and two (2) valves per cylinder.
- f) Magnetos are permitted, but all cars must have an operating self-starter.
- g) ANY ATTACHED WEIGHTS MUST BE SECURELY BOLTED TO FRAME, AND MUST BE PAINTED WHITE AND HAVE CAR NUMBER CLEARLY PAINTED ON THEM. Due to the high-risk factor involved, any car that loses a lead weight during any event may be banned from series events for the rest of the season or fined. Two attaching mounts are required for any weight over ten pounds.
- h) No weights may be attached to rear bumper, or above the deck level.
- i) No lead pellets—No liquid weights.
- j) Any ballasts attached to rear end or suspension must be thru bolted with a nylock nut type fastener on the back side. This includes the mount it is attached to (cap screws into an aluminum mount without a backup nut will not be allowed).
- k) The use of Titanium, Tungsten, Mallory, or other exotic metals are prohibited.

## TIRES

- RR Open Motor: Any Hoosier shoulder plated D-55 MUST PUNCH 60 (actual number to be determined at track due to temperature change). **NLM 40**. If you choose to use tire warmers, and punch numbers are low, you will be given the choice to change tires or not be scored.
- RR Crate Motor (Engine Package 2 and 3): Hoosier M20, Hoosier M30, Hoosier D21, Hoosier Crate 21, Hoosier 1350, or Any Hoosier D55. Crate 21 & NLM 20. Punch numbers to match recommendation from Hoosier and will be verified night of event according to temperature.
- LR, LF, RF: Hoosier M20, Hoosier M30, Hoosier D21, Hoosier Crate 21, Hoosier 1350, or Any Hoosier D55, NLM 20, NLM 30 and NLM 40 are allowed in any combination across the 3 corners. Punch numbers to match recommendation from Hoosier and will be verified night of event according to temperature.

## **TIRE ALTERATIONS**

- a) Chemical alterations of any tires are strictly prohibited. No tire softeners or conditioners which alter the chemical compound of the tire will be permitted. This includes, but is not limited to, tire soaking, tire conditioners, rolled on tire prep, internal applications, or the use of tread softeners. This will be strictly enforced.
- b) Tires may be tested at random. All cars that come through tech may automatically have samples pulled. Techman has discretion to choose other cars for sampling. Samples may be sent off via random draw to Blue Ridge Labs for benchmark testing compared to chemical benchmark per batch from Hoosier Racing Tire.

## **RACECEIVERS**

Raceceivers are MANDATORY to be worn by all racers in hot laps, qualifying, heat races, and features. Any driver not responding to instructions may be moved to the rear, black flagged, or disqualified from the remainder of the event. It is your responsibility to make sure your equipment functions properly.

## **TRACTION CONTROL DEVICES**

- a) All traction control devices utilizing wheel sensors, GPS, or any other means of measuring ground speed to control wheel spin are strictly prohibited.
- b) Adjustable ping control devices, dial a chip control, timing controls, or automated throttle controls are NOT permitted in the cockpit or any other position accessible to the driver.
- c) Any remote-controlled components inside or outside the cockpit of any competitor's race car are NOT permitted.
- d) No data acquisition systems are permitted. This includes the use of a video camera mounted to view any suspension components during any form of competition on the track. (GoPro type cameras mounted above the deck looking any direction, or behind the fuel cell look out the rear of the car are permitted.
- e) Any competitor found with any of the above could be disqualified and suspended for up to a year.

## **SUSPENSION**

### *Axle Housing, Rear Differential*

- a) The axle housing must be of the "closed tube" design utilizing "full floating" magnetic steel axle shafts.
- b) The center section of the axle housing must be manufactured of either aluminum or magnesium.
- c) Axle tubes must be one (1) piece. Axle tubes must be manufactured of aluminum or magnetic mild steel. Axle tubes manufactured of exotic heavy materials will not be permitted.

- d) The outside diameter of the axle tubes must not exceed three (3) inches.
- e) Axle tube internal inserts or external sleeves will not be permitted.
- f) Any ballasts attached to rear end or suspension must be thru bolted with a lock nut type fastener on the back side. This includes the mount it is attached to (cap screws into an aluminum or steel mount without a backup nut will not be allowed).

#### *Axle Housing Mounts*

- a) The only materials used to fabricate axle housing mounts (birdcages) that will be permitted is aluminum or magnetic mild steel.
- b) Axle housing mounts fabricated of exotic heavy materials will not be permitted.
- c) When fabricating axle housing mounts detail must be paid to functionality.
- d) The completed axle housing mounts, when comparing the right and the left side, must be as similar in design as possible.

#### *Rear Suspension Attaching (Radius) Rods*

- a) The only materials used to fabricate attaching (radius) rods that will be permitted are magnetic steel or aluminum
- b) Aluminum attaching (radius) rods may be solid or tubular material. Magnetic steel attaching (radius rods) must be tubular with a maximum wall thickness of 3/16 inch.
- c) Rods must be fixed. No spring rods, shock absorber type rod, or rod with any type of movement will be allowed.

#### *Brakes, Brake Components, Wheel Hub*

- a) Brake calipers must be manufactured of aluminum.
- b) The brake caliper including brake caliper pistons must be used as produced by the brake caliper manufacturer.
- c) Brake rotors must be manufactured of magnetic or stainless steel.
- d) Brake rotors must be used as produced by the brake rotor manufacturer.
- e) Wheel hubs must be manufactured of aluminum or magnesium.
- f) Wheel hubs must be used as produced by the wheel hub manufacturer.
- g) The combined weight of the wheel hub, wheel bearings and seal, spindle nut and washers, brake rotor and attaching hardware, the axle cap, and the wheel spacer must not exceed 27 pounds.

#### *Wheel, Wheel Discs, Wheel Spacers*

- a) Only aluminum wheels will be permitted.
- b) Only approved wheel discs will be permitted. Approved wheel discs are wheel discs that are fastened to the wheel using a minimum of three (3), 1/4- or 5/16-inch diameter magnetic steel bolts. No Dzus fasteners allowed
- c) Only aluminum wheel spacers will be permitted. Wheel spacers must not be fastened to the wheel.

- d) The combined weight of the wheel, wheel hardware, wheel disc and fasteners, and tire must not exceed 40 pounds\*. \*The maximum combined weight in this rule is based upon current tire rules and may need to be adjusted in the event of an alternate tire.

### *Springs*

- a) Coil springs or leaf springs will be permitted.
- b) Coil springs must be manufactured from magnetic steel.
- c) Leaf springs must be manufactured from either magnetic steel or approved composite material.
- d) Spring preload adjustments for coil springs must be made using mechanical adjusting nuts on the shock body.
- e) Spring preload adjustments for leaf springs must be made using a mechanical adjusting device such as an adjustable shackle or threaded rod type mount.
- f) Other than spring dampening by the shock absorber, hydraulic, pneumatic, or electrically controlled adjusting devices, (static or dynamic) that affect spring preload or race car heights will not be permitted,

## **SAFETY**

(ITEMS IN RED ARE RECOMMENDATIONS ONLY AT THIS POINT. COULD BECOME MANDATORY IN THE FUTURE)

### *Fuel, Fuel Cells, Fuel Systems:*

- An approved fuel cell must be always used.
- The only fuel cells that are approved are those that meet and/or exceed the FIA / FT3 specifications.
- Fuel cells must be used in accordance with the FT3 specifications. Alterations of anykind will not be permitted. (Example: alterations to top plate, alterations, or removal of foam, etc.)
- Fuel valve plate, fuel pickup and fuel return fittings must be on the top of the fuel cell.
- Fuel cells that are not contained within a welded steel tubing “rack” must have two (2) equally spaced steel straps that measure two (2) inches wide by 1/8 inch in thickness that surround the fuel cell. The straps must be bolted to the frame. Longitudinal (front to rear) orientation is recommended for strap mounting.
- Willy’s Carburetor roll over plate part #WCD4000 is approved for competition.

### *Electrical Systems, Batteries, Electrical Accessories:*

- The battery must be securely mounted with positive fasteners and brackets.
- The battery terminals must be insulated or enclosed with a non-conductive material that will prevent contact with any part of the race car should the battery become dislodged from the battery mount.

### *Personal Safety Equipment:*

- Drivers must always wear gloves while they are on the track, during practice

and competition.

- Driver's gloves must meet or exceed the SFI 3.3 specification and have a legible and valid SFI 3.3 label.
- Drivers, while they are on the track, must have their helmets on correctly (following manufacturer's installation and use instructions) and connected to an approved head and neck restraint. The head and neck restraint must be SFI 38.1 approved and display a legible and valid SFI 38.1 label.

*Race Car Installed Safety Equipment:*

a) Seats

- i. All racecars must be equipped with a complete driver full containment type seat with head rest and head surround. All seats must meet or exceed the SFI 39.2 specification and display a legible and valid SFI 39.2 label.
- ii. Seats must be used as supplied and instructed by the seat manufacturer except for trimming the length of the left side head surround for the purpose of egress only. If the left side head surround is trimmed to a distance that is less than the most forward surface of the driver's helmet (usually the area crossing the chin) then a left side head net meeting the SFI 37.1 must be installed with a quick release latch.
- iii. Seats must be mounted to a seat frame that is welded to the racecar frame/roll cage structure. Attaching points, angles, and materials for the seat frame and mounting of the seat to the seat frame must be in accordance to the seat manufacturer instructions.

b) Fire Suppression

- i. All racecars must be equipped with a thermally deployed automatic fire suppression system. The fire suppression system will consist of a DOT approved cylinder manufactured from aluminum or steel with a capacity of ten (10) lbs. of fire extinguishing agent, steel, or steel reinforced lines, and two (2) thermally activated discharge nozzles.
- ii. All systems must meet or exceed SFI 17.1 specifications.
- iii. Systems must be fully charged with ten (10) lbs. of DuPont FE-36, 3M NOVEC 1230, or Fire Aide and display a legible and valid SFI and manufacturer label depicting fire extinguishing agent, capacity, and certification date. Cylinders that are beyond useful certification date must be inspected, serviced, and re-labeled by the manufacturer.
- iv. Cylinders must be mounted forward of the fuel cell. Cylinders must be securely mounted to the frame/roll cage assembly. The certification label must be unobstructed and easily accessible for inspection when the mounting is complete.
- v. The cylinder must be connected to the nozzles with steel or steel reinforced lines.
- vi. Two (2) thermally activated nozzles must be used. One (1) nozzle must be located directly above the fuel cell in the fuel cell area and the second nozzle must be located in the driver cockpit area.
- vii. An optional manual override cable may be added to the system.