



## 2024 SPEARS Manufacturing Modified Rules presented by MAVTV

- **We reserve the right to alter or amend the rules and regulations in the interest of safety, cost control, and/ or fair competition. ADDING WEIGHT, REQUIRING THE LOSS OF LEFT SIDE PERCENTAGE OR REQUIRING A CARBURETOR RESTRICTION PLATE ON A VEHICLE, WILL BE TOOLS USED BY SERIES OFFICIALS TO MAINTAIN FAIR COMPETITION. It is the responsibility of each competitor to read and understand the contents of these rules. If there is a disagreement or dispute regarding the meaning or application of these rules, the decision of the Race Director shall prevail.**
- No expressed or implied warranty of safety shall result from publications of or compliance with these rules and/ or regulations. The rules and/or regulations set forth herein are designed to provide for the orderly conduct of the SERIES racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all events, and by participating in these events, all participants are deemed to have complied with these rules.
- No pretense is made for having designed a foolproof set of rules and regulations. The spirit and intent of the rules is the standard by which SERIES events will be governed. The Race Director is authorized to decide if an equipment change, or modification is an attempt to circumvent these rules. The Race Director can and will disqualify a race car in violation of the spirit and intent of these rules. If this rulebook does not specifically state that you can alter, change, or otherwise modify something on your car, you should consider it a violation of these rules. No part is deemed to have been approved by the Race Director by passing through prior technical inspections.
- The Race Director shall be empowered to permit reasonable and appropriate deviation from any of the specifications herein or impose any further restrictions that in his opinion do not alter the minimum acceptable requirements. No expressed or implied warranty of safety shall result from such alteration of specifications. Any interpretation or deviation of these rules is left to the discretion of the Race Director. His/her decision is final.
- These rules are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator or official. All participants, guest and crew members fully understand that racing is inherently dangerous and that they are exposed to risks of death or serious bodily injury. The participants, guest and crew members voluntarily assume these risks.
- Advertising and Promotion Release: Spears Manufacturing Modified, their duly authorized agent and assigns, is hereby granted the right of uses of the applicant's name, likeness and photographs of the applicant or the applicant's car(s), taken during the event, in any medium or material, for promoting, advertising, recording, or reporting any Spears Manufacturing Modified, sanctioned event(s), including but not limited to television and radio broadcasts, computer online and internet distribution, film production, video tape productions, and do hereby relinquish all rights thereto for these purposes.

### FRAMES / WEIGHT:

A. American passenger car frames only or Unaltered impala copied aftermarket front clips allowed from Howe Racing PN# 35809, Phil's Phabrication PN# PH001, Thompson Motorsports PN# TMSMOD, Race Car Factory PN# 5520, STR PN# 1128F and must add 25 pounds of existing weight centered on the front crossmember. NOTE: *Any front clip not identical to an OEM Impala clip will be deemed illegal and that builder will be banned from building clips.* Maximum 2-inch wide by 4-inch-tall frame stiffener may be welded directly to outside of frame rail.

B. Front crossmember must remain full and intact to the firewall on the left side; center of crossmember may be notched and boxed for radiator and/or steering clearance only.

C. Minimum wheelbase, 108 inches, both sides. Maximum track width (front or rear) shall not exceed 65" inches measured with the Series referee (67" inches center tread to center tread).

D. Ground height must be high enough for the car to roll on and off scales without dragging with the driver in the car.

### E. Minimum Weight:

1.) Open Engines: 2500 pound and 58.0% maximum Left Side with Driver.

2.) Box Stock 602 Crate or Yellow Book Rebuilt 602 Crate by Series authorized rebuilder: 2400 pounds at tracks over 1/3 mile - 2450 pounds at tracks 1/3 mile or less. 59% maximum Left Side with Driver.

3.) Left Side percentage must be correct AT ALL TIMES – before and after the race without refueling.

F. All lead must be painted white, have car number on it and securely mounted with (2) two 1/2" bolts. Lead inspection will be part of post-race tech and if a piece of lead is not properly painted white with car number in red or black marked on all sides the driver will receive a \$500.00 fine on 1st offense and will be an automatic disqualification on the 2nd offense. Any lost weight will result in a \$25 per pound fine to the Driver. No Tungsten or similar weight allowed! Lead tray and lead boxes (4"x4") weld to frame. No aluminum brackets. (All lead must be incased in steel.)

G. Method of determining post-race total weight will be at the discretion of Officials. Officials may either utilize "1 lb. per lap" burn-off or allow teams to refuel for post-race total weight rules.

H. No titanium or carbon fiber products, parts or components allowed anywhere on racecar.

I. No gun-drilled, tubular, or hollow bolts or studs.

J. Aluminum cylinder heads allowed with 25 pounds mounted to each frame rail at the dogleg (both sides).

**ENGINE / CARBURETOR:** Any American-make engine may be used as long as rear of engine (bellhousing flange) is mounted at least 72 inches forward from the center line of rear axle. Engine offset must be kept within 2 inches of centerline of front crossmember with engine level. 10 1/2-inch engine height minimum from ground to front center of crankshaft with driver in the car.

A. No aluminum blocks or oil pans. No magnetos. Motor C.I./410 Max.

B. Aluminum cylinder heads allowed with 25 pounds of existing weight added to each frame rail at the dogleg (BOTH SIDES).

C. Stock valve angle only for engine used (SBC 23 degree & LS3 15 degree +/- 2 degrees). **SBC 18-degree (no tolerance) will be permitted**

**with a 25-pound penalty.**

- D. 'Wet' oiling system only. Oil coolers must not protrude above interior. Accumulators cannot be mounted between the driver and left-side door. External one stage oil pump allowed.
- E. Any overflow tubes must be directed to the ground, between frame rails. Radiators to be mounted in front of engine only.
- F. Conventional air cleaner housings only. No top flow air cleaner housings allowed.
- G. One carburetor must be naturally aspirated.
- H. The FAST EFI configured package may be APPROVED if the engine has already competed in the series. Must be approved on a case-by-case basis.

**ELECTRICAL SYSTEM / IGNITION:**

- A. One 12-volt battery only, must be securely mounted, shielded, and must have the capability of starting on their own power.
- B. One 12-volt non-adjustable ignition box – must be out of the driver's reach and in a location that tech can get to. No additional ignition accessories allowed. It is highly recommended that the FAST/Crane Ignition System part # 6000-6701 or 'JMS – Daytona Sensors' part # 6000-6701K be used.
- C. No electronic monitoring computer devices capable of storing or transmitting information except tachometers.
- D. NO Traction Control Devices of any kind - *If any 'traction control' device is found, the driver and owner will be disqualified from the event, the car will be confiscated until a \$15,000 fine is paid. Additionally, the driver and owner will receive a lifetime ban from all SRL events.*
- E. Kill switch required within easy reach of driver and safety crew clearly marked 'OFF' and 'ON'.
- F. No digital dashes will be allowed.
- G. Cellphones, smart watches, or Bluetooth devices will not be allowed in racecar at any time during qualifying or race, there will be a penalty.

**CHASSIS / ROLL CAGES:**

- A. Must consist of continuous hoops not less than 1.666-inch outside diameter with a minimum wall thickness of at least 0.095-inch. Low carbon, mild steel tubing is recommended.
- B. Seats must be frame-mounted in at least six places, with 3/8 minimum bolt.
- C. Must consist of a configuration of front and rear hoops connected by tubing on the sides or side hoops. The driver's head must not protrude outside cage with helmet on and strapped in driver's seat. Must have minimum of one cross bar in top halo of roll cage.
- D. Protection of feet is mandatory. Bar across back of engine with vertical bars and rub rails, or similar protection. No brace bars forward of cage may be higher than hood height. Main cage no further forward than engine plate.
- E. A minimum of three driver side door bars, at least 1 1/2-inch O.D. with a minimum wall thickness of at least 0.095-inch, must be as parallel with the ground as possible and located perpendicular to the driver to provide maximum protection for driver, but without causing undue difficulty in getting into or out of vehicle.
- F. The side bars must be welded to the front and rear of the roll cage members. Must have at least one cross door bar, minimum 1 1/4-inch O.D., on passenger side of car, either horizontal or angled. (Two are recommended.)
- G. Steel door plates, 18-gauge, or 0.049-inch minimum thickness metal must be securely welded to the outside of door bars on driver's side. The plate must cover the area from the top door bar to the bottom door bar and from the rear down post to 5 inches in front of the seat. Must be visible for inspection. No panning on any part of the chassis.

**BODIES:**

- A. Tar and 5-star racing type bodies with windows are allowed.
- B. Firewall is mandatory. Minimum 0.125-inch aluminum, or 16-gauge or 0.060-inch steel, complete floor required. Body parts may be constructed of steel, aluminum, or fiberglass only, no carbon fiber.
- C. Wickers (airflow): 1" tall on the nose and roof only. No wicker on top of any type of body roll. (Like a 5-star nose.)
- D. Rear Spoiler – Allowed 4" tall, top 3" clear plastic cannot be wider than rear body. 240 square inches max. 3 inches tall spoilers can be over 60 inches wide, but not wider than the rear body or over 240 sq. inches. You may have an end cap on each side and a support in the center going forward, but it must be 12 inches from the end cap and cannot be longer than 10 inches and must taper down from the top of the spoiler to zero. The maximum wicker on the back side of spoiler is 1 inch. No wicker in the driver area or inside of the race car.
- E. Engine compartment will remain open, no side panels; hood sides may have maximum 5-inch drop and must be enclosed at rear of hood; maximum hood scoop height, 6 inches.
- F. Both sides of the body may not have any more than 1.250 gap in the center of the body when a string line is used from front to rear. The passenger side of body must be no further forward than rear of block. Rear of bodies to be solid panel at least 8 inches high within two inches of 90 degrees. No panel in front of the right door to engine compartment. No inner panels or inner fender well allowed.
- G. Engine must be enclosed from driver (hot water, oil, and fire), full windshield or back of hood blocked off will be allowed. No open holes between motor and driver.
- H. Sail panels must closely resemble examples shown on body diagram, be the same on both sides of car and be straight. Reinforcing lips on rear of sail panels must be 180-degree bends.
- I. The body may not go past the rear bumper or spoiler. The front nose may go past the front bumper 3 inches.
- J. You can have a 2-inch step in the door panel (body line) no higher than the center line of the wheelbase. (Center of front hub or rear axle)
- K. Driver and passenger side windows must have at least 12-inch opening, the same opening both sides, measured at center of window, between the lowest point at the top of window, whether the roof or roll cage, and the highest point at the bottom of window, whether the interior or body.
- L. Stock appearing front windshield and rear window support unit, painted rollbars not acceptable substitute. May utilize a full windshield, with no wings mounted to the roll cage. Must have a minimum of three windshield bars in front of driver. The cowl panel in front of the driver can be no wider than cockpit and no farther back than the steering wheel.

**BUMPERS:**

- A. Steel bumpers must be used both front and rear at all times and must be 18 inches, plus or minus 2 inches from ground and securely mounted with minimum 0.375-inch bolts, made of minimum 1.25-inch OD tubing, 0.065" wall thickness on front, 0.095" wall thickness on rear,

and must be able to support car if lifted by wrecker. Two- bar front bumpers must be mounted frame-end to frame-end, no wider than the width of material outside frame horns, with the bottom loop parallel to the ground. Top bar must be directly above bottom bar, minimum 6 1/2 inches apart, measured center to center at front of bumper (see P in body diagram), so bumper is perpendicular to ground.

B. Rear bumper, steel nerf bars and bodies must not extend beyond width of tires and must not contain any sharp edges. Rear bumper no more than 2 inches wider than body on each side. Fuel cells must be protected from bumper down to bottom of cell.

C. Nerf Bars: All cars must be equipped with approved side rail bars and scrub rails constructed of .083-inch minimum magnetic steel, seamless tubing with an outside minimum diameter of 1 inch. Must be full length from front to rear with minimum tire clearance. Side rail bars must be center lined with the front and rear axles. Only 2 intermediate supports per bar will be permitted. Side rail bars and scrub rails must be fastened to the frame. Side rail bars and scrub rails must not extend past the outside edge of the rear tires and taper slightly toward the front tires. Rear quarter-panel side rail bars, right side will be no wider than 4 inches to the outside of the side rail. Both sides will be no wider than the outside of the left rear tire.

#### **FUEL / FUEL SYSTEM:**

A. **Mandatory Sunoco 110 Fuel only**, fuel samples may be taken at any time and tested. Street-use pump gas, E85, Alcohol, nitromethane, nitrous oxide, other oxygenating agents, other additives and/or fuels that contain masking agents or oxygen are not permitted. Use of such substances or additives will result in immediate disqualification. A variation of more than +/-0.3 in the Dielectric Constant (DC) reading from Sunoco 110 will be illegal.

B. Mandatory fuel cells with a 32-gallon maximum capacity, in a steel container and be mounted at a minimum of 9 1/2 inches, securely behind rear axle and with at least two 1/8" x 1 1/2" solid steel straps, 1 1/2" x 1/8". Plus 1" x 1" square tubing front, back and bottom of cell.

C. Protective tubing must cover the rear and extend past both sides of the fuel cell. Fuel cells must be protected from bumper down to bottom of cell.

D. Fuel cell must be a minimum of 4 inches ahead of rear bumper and no part of fuel cell shall be lower than protective tubing.

E. Bladders are highly recommended. OBERG OR SRI safety fuel valve is mandatory near cell and after filter.

#### **EXHAUST:**

A. Mufflers (Highly recommended muffler Magna Flow part #14162) are required and 92 Dbas at 100 feet. One large muffler is allowed. B. The exhaust system must be mounted to direct gases away from the cockpit of vehicle and away from areas of possible fuel spillage.

#### **TRANSMISSION / DRIVESHAFT:**

A. Must have at least one forward gear and one reverse, plus a neutral position. With the engine running and car in still position, must be able to engage car in gear and move forward, then backward. Manual aftermarket transmissions allowed: two-speed, three-speed, four-speed and automatic. No five- speed transmissions, 'in and out' boxes, overdrive or quick-change devices are not allowed. All belt drive pumps must be mounted on front of engine.

B. Falcon and Brinn types are allowed.

C. Minimum 2-inch diameter steel drive shaft and must be painted white with steel slip-yokes only. Two 360-degree drive shaft loops are required and must be constructed of at least 0.250-inch by 2-inch steel, mounted 6 inches back from U-joints.

#### **SUSPENSION / STEERING:**

A. Front suspension must be unaltered approved OEM and be in stock location and must be replaceable by stock parts. Tie rod ends and adjustment sleeve may be replaced by a minimum 0.625-inch rod end and steel tube (Heim joints allowed.) Weight jack must be in original center line of spring. Bottom A-frames cannot be altered or moved (exception: can weld shock mount on A-frame, removal of steering stop, aftermarket ball joints rings are allowed.) No offset lower-control arm bushings. Front sway bar can be an aftermarket type. Chain on one side is allowed.

#### **SPINDLES: (Spears Manufacturing Modified Series Approved Spindles Only)**

A. Unaltered Stock passenger car spindles only. NO fabricated or dropped spindles allowed. You can drill out or tap the steering arm to accept minimum .625-inch diameter bolt for tie rod. Spindles can be ground for brake caliper clearance only.

B. Aftermarket steel front hubs are allowed.

C. Suspension, steering – Aftermarket OEM copies with hole location changed are approved, steel only, and rear end suspension must be steel. OEM steering box must be steel and must remain within original bolt pattern for type of frame used ratio may be changed. No rack and pinion allowed. Steering columns must be collapsible (U-joints are acceptable) and with steel steering shafts and knuckles only.

#### **SHOCKS / SPRINGS:**

A. Only shocks allowed are one steel, nonadjustable, unaltered shock per wheel. No threaded body shocks, front or rear, or air type, or remote reservoir shocks. Shocks cannot be mounted in the center of spring. If the shock utilizes an external gas port; the only legal gas port is a Schrader valve style. Gas plugs that do not allow the shock to be degassed without removal of the plug, and gas ports that utilize needle filling systems, are not allowed. Internal, stationary base valves, meant to reduce gas pre-load, are not allowed. *\*The steel body of the shock must be the same diameter top to bottom, except for Penske 7100/7150 series, Advance 7200 series, Ohlin's CCI-8, JRI SL/10, or SL/14 and Bilstein SNS2 series are approved.* Aluminum caps are allowed. Bump Stops may be applied to shock absorber shaft to limit travel. Bump Stop styles allowed are Foam, Polyurethane, Rubber, Spring, Belleville Washer. NO COMPRESSED AIR STYLE BUMP STOPS.

B. No cockpit adjustments allowed other than one brake bias. No air shocks or air bags allowed. No torsion bars or air bags. C. Only one steel spring per corner allowed, Minimum 4 1/2 inches non-progressive coil spring and/or steel leaf spring per wheel.

#### **REAR END / REAR SUSPENSION:**

A. Any approved OEM passenger car type or truck rear end may be used.

B. No aluminum allowed, except lowering blocks, axle cap and drive flange. A 1-inch inspection hole in the center section is recommended. Full steel spool, steel mini spool or welded rear ends only. No open or unlocked rear ends, steel axles only.

C. One-piece drive flanges only.

D. No independent rear suspension. All components must be steel. No covers allowed. All trailing arms/link bars must be steel tubing. No birdcage set-ups of any kind (3 or 4 links). Trailing arms must mount to rear end in a solid fashion (heim allowed) and no part of the trailing arm mounting may freely rotate around the rear end or move. The rear of frame may be altered to accept leaf or coil springs, and truck arms. Steel coil-over eliminators. Minimum 19-inch long Panhard bar, measured center to center. No cambered rear end housings. Aluminum jack bolts and spring plates allowed.

E. Upper 3 Link traction bar may have rubber bumper or spring damper. Rubber bumper allowed on rear lower trailing link. No springs. Rear torque link suspension allowed. No springs. **FRONT OR REAR SUSPENSION HAS TO BE PRE-APPROVED BY SERIES TECH OFFICIALS.**

F. Coil-over shocks on rear suspension with a 4 1/2" minimum spring diameter will be permitted.

G. Quick change option, only rear ends with a 10" ring gear, aluminum or steel spool, standard steel axle tubes, steel axles only, minimum one-inch-wide spur gears and bolt on rear cover are required. Safety hubs (floater) allowed. All additional components must be steel, except lowering blocks, axle caps, U-joint caps, and one-piece drive flange. One-inch inspection hole required in housings. No cambered rear ends, heavyweight axle tubes (max .250" wall), and housing braces.

H. Quick change rear ends are limited to gear ratios within .06 points of the 9" ford gear ratios. (i.e.: ford 9' ratio is 5.83 a quick change can be 5.89 or 5.77) All cars regardless of what rear-end being used must qualify and race on the same gear ratios.

#### **BRAKES:**

A. Must have a working caliper and rotor on each wheel. All calipers must be steel and approved OEM or OEM replacement. Minimum rotor width .800" for front brake rotors, 11-inch diameter.

B. After-market steel rotors will be allowed. NO holes in rotor face. The rotor must be externally round, internally may have scalloping between mounting holes. Rotor hat may be aluminum. The hub must be steel and not drilled, no additional holes.

C. Proportioning device allowed front to rear. Brake fluid re-circulators allowed.

D. Brake lines must be visible and outside of frame rail.

#### **TIRES / WHEELS:**

A. Series tire only.

The driver's soaking, shaving, or altering tires in any way will forfeit all purse and points for that event and all series points for the year. Driver must also pay a minimum \$2,500 fine prior to being allowed to compete in the Series. Any illegal tire, in the judgment of Series Officials, will be confiscated.

B. 5X5 Steel wheels, steel studs and steel lug nuts only. 8" maximum wheel width measured inside beads. Bleeder valves are not allowed.

C. Must qualify and race on the same tires and wheels.

#### **SAFETY:**

A. It is mandatory that the driver wear an SFI OR FIA driving suit, shoes, and gloves. It is recommended that the driver wear fireproof underwear and a fire-resistant head shock.

B. Full-face helmet required and must be 2010 but recommended 2015 Snell standard or better and have sticker visible for inspection.

C. Neck restraints are mandatory. (Hans Device is recommended).

D. Roll bar padding required in driver compartment. The steering wheel shaft must be padded. Fire-retardant padding recommended.

E. Full-size (minimum 16"x20") driver-side SFI OR FIA window net required (no string type nets). Window net to be mounted so latch is at top front of window.

F. Approved SFI OR FIA seat belts and double shoulder harness will be required, no older than five (5) years. A crotch strap will be required.

G. Professional manufactured aluminum racing seats with an SFI rating are highly recommended. The Kenny's Components JL1 seats are approved if bolted in 6 locations with a minimum of 3/8 bolts, but any other carbon fiber seat must have prior approval and may be required to have a minimum SFI rating of 39.2.

I. Current test date (2lbs. minimum) fire extinguisher to be installed in the car within driver's reach while strapped in with steel mounts only.

J. All cars will be required to have in their pits a minimum of one 5-lbs, halon or dry chemical fire extinguisher. This is to be visible to tech officials and all crew members. All crew members must be made aware of its location, and knowledgeable in the use of the fire extinguisher.

#### **APPEARANCE / IDENTIFICATION:**

A. All cars must be numbered with large legible numbers on both sides, on top and rear panels. The numbers on the sides and top of car must be in contrasting color from body, be at least 4 inches thick and at least 20 inches high. Recommended that no holographic or reflective numbers be used.

B. Sponsors' names must not interfere with car numbers and must be neatly lettered.

#### **COMMUNICATION:**

A. Two-way radio communication between driver and minimum of one spotter for each team is always required for all competitors while on track. **Mandatory each spotter must have a dedicated stand-alone radio or scanner to monitor Race Control at all times frequency at 461.2000.**

#### **TRANSPONDER:**

A. All competitors must have timing transponders on their car for the entire program, including practice. Available at event.

B. All transponders must be mounted 160" (front of nose to center of transponder) from front of the nose and on the outside of right-side frame rail.

## **BODY INSTALLATION GUIDELINES** Letter Max-Min

A. N/A - 108"

B. 38" - 28"

C. 48" - 34"

D. Body cannot go further forward than rear of engine block.

E. \* 72"

F. 31" - 22"

G. 52" - 42"

H. 18" - 12" Vert. Opening

I. 68" bottom, 66" top - 61"

J. 52" - 44"

K. 56" - 41"

L. Tires maximum 1" inside of body both sides

M. The driver's compartment must be totally sealed from the engine and racetrack.

N. 8" minimum within 2" from 90-degree angle

O. 20" - 16" from ground to center of bumpers

X. Must have gradual slope from roof to this point.

Y. 6" Maximum interior slope front to rear. See "Z" on car diagram.

Z. Maximum body rake is 6" front to rear and both sides of body must not have any more than 1.250 gap in the center of the body when a string line is used from front to rear.

\*\* Using a level or straight edge, must have between 1/2" and 2" clearance at rear of roof, 1/2" to 5" at front

\*\* Maximum A post from front of the door to back of post is 19."

\*\* Maximum nose width is 45.5", flat and flush with side

