# 2024 THOMPSON SPEEDWAY SK LIGHT MODIFIED DIVISION RULES TECHNICAL RULES

## 1) Approved Models

Approved model bodies are listed in the NWMT Rulebook. Other models – both domestic and foreign steel passenger cars – may receive approval for the Lite Modified Division providing they are the same in body configuration and meet the spirit and intent of competitive racing in the Lite Modified division.

## 2) Weight

- a) All specified weight requirements will be with the driver.
- b) The minimum total weight will always be 2645 lbs. for rebuilt sealed engines and 2580 lbs. for the NEW sealed engines. Maximum left side weight of all cars is 56% of total weight. Cars found under the minimum total weight rule after qualifying will be placed last in that event. Cars found under the minimum total weight rule after the feature event will be penalized one (1) position per pound under.
- c) Added weight must be magnetic steel or lead only, in block form, and weighing no less than five (5) lbs. per block (no pellets). Added weight must be securely bolted to the frame rail and painted white with the car number stenciled in black. No added weight will be permitted inside the driver's compartment. Weight must be welded in a box or attached with two or more 7/16" diam. (minimum) grade 8 bolts and locking nuts.
- d) Nothing may be added to or taken from the car to make total or left-side weight. Gas, oil or water may not be added. Wheels and tires cannot be changed, but an amount equal to one half of one percent (.5%) of the gross weight will be added for loss in weight due to race wear.

## 3) Window Net

A commercially manufactured, SF- rated, nylon window net must be installed in the driver's side door window opening. It must be positioned to cover the entire window opening. Window nets may not be used beyond three (3) years from the date of manufacture or no older than the date of expiration. The window net must be rib type, made from minimum three-quarter ( $\frac{3}{4}$ ) inch and maximum one (1) inch wide nylon material with a minimum one (1) inch and a maximum two and one-quarter ( $\frac{2}{4}$ ) inch square opening between the ribs. The minimum window net size must be 22 inches wide by 16 inches high. All window net mounts must be a minimum one-half ( $\frac{1}{2}$ ) inch diameter solid steel rod on the bottom and a minimum one (1) inch wide by three sixteenths ( $\frac{1}{3}$ ) inch thick flat steel or a minimum one-half ( $\frac{1}{2}$ ) inch diameter solid steel rod on the top, with mounts welded to the roll cage. The window net must fit tight and be secured with a lever-type quick release latch. The lever must be secured by a detent ball in the lever and may be supplemented by Velcro® fastener only – pins or clips are not permitted. The latch must mount at the top in the front to roof bar (#3) and release from the inside.

## 4) Windshield

A flat windshield is mandatory, per the NWMT Rulebook, made of a minimum of one eighth ( $_{1/8}$ ) inch polycarbonate, that extends from the left A-pillar to the #4A center windshield bar and from the roof to the cowl. A minimum of three Dzus type fasteners must be used on each of the four sides. For additional specifications see the NWMT Rulebook.

### 5) Rear View Mirror

One (1) single image 8" x 2" rear view mirror mounted in the center of the upper windshield is permitted. If you use a head and neck restraint system, you may run a 14" x 2" mirror. A side view or spot mirror is permitted. Oversized mirrors may be blacked out by the use of paint only, to obtain the correct size allowed.

#### 6) Doors

- a) All door panels must be made of magnetic sheet steel or aluminum. For additional specifications see the NWMT rulebook.
- b) A magnetic steel anti-intrusion plate made from a minimum thickness of .080 must be securely welded to the outside of the left side door bars. The anti-intrusion plate(s) must fill the area between the horizontal centerlines of the top and bottom door bars, and vertical centerlines of main roll bar, and the left front roll bar leg. The plate(s) must be formed to match the curvature of the door bars. Individual plates, if used, should be made as large as possible. All plate(s) must have the corners fastened / welded. To facilitate emergency removal of the left side door bars, the anti-intrusion plate(s) must have six (6), 2-1/8 inch diameter holes cut in the anti-intrusion plate, with three (3) holes forward of the front vertical supports and three (3) holes rearward of the rear vertical supports in the following locations: The upper two (2) holes must be centered vertically between the left side door bars, at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support. The lower two (2) holes must be centered vertically between the left side door bars, at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support. The lower two (2) holes must be centered vertically between the left side door bars, at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support.

## 7) Quarter Panels

- a) All quarter panels must be made of magnetic steel or aluminum. For additional specifications see the NWMT rule book.
- b) Interior sheet metal: The rear center panel (over the fuel cell) must be made of magnetic sheet steel, 22 gauge, .031" thick, with a minimum width of 28", and must extend from the rear vertical panel forward to the #7 roll bar, per the NWMT Rulebook. For additional specifications see the NWMT Rulebook.

## 8) Hoods and Roof (Letter C)

All roof panels must be made of magnetic sheet steel or be a TSMP-approved manufactured fiberglass roof panel. All cars utilizing an approved fiberglass roof must install the minimum1/8" thick aluminum anti-intrusion plate in the roll cage halo as described in the anti-intrusion plate specification of the NWMT rulebook.

#### 9) Engine Requirements

- a) See Lite Modified 602 Crate Engine Specs below. The maximum static compression permitted is 9.5 to
   1. Any engine measured over 9.5 to 1 is illegal and will not be allowed to compete until serviced by a Thompson Speedway authorized service center.
- b) Thompson Speedway approved service centers for the REBUILT sealed GM Performance 602Circle Track Engines are:

Nat's Racing Engines

702 Warren Avenue

80 Ravenwood Dr

Swansea, MA 02777

Ludlow, MA 01056

(508) 336-4142

Contact: Nat Chiavettone

RAD Auto Machine

80 Ravenwood Dr

Ludlow, MA 01056

(413) 583-4414

Contact: Don Wood

Redline Performance Engines 323 Water St, Hallowell, ME 04347 (207) 623-8895

Contact: Spencer Robbins

## c) NEW Sealed Crate Engine Specs

A NEW 602 spec engine based on the GM Performance Factory Sealed Circle Track Crate Engine is permitted. The engine that must be used is the GM Part Number 19258602 GMR 350/350 Circle Track Engine with limited specific modifications that can be done only through Thompson Speedway. The engines will be inspected and sealed upon completion by the Thompson Speedway Track Division Inspector. All engine seals must remain intact and un-tampered with. Tampering with seals will result in penalties and loss of eligibility of the engine to compete in the Lite Modified division. In the event that an engine sustains internal damage or wear that requires removal of one or more seals, the engine is then said to have served its life and must be considered for rebuild or be replaced with a NEW sealed engine.

*NOTE*: All engines must be sealed and documented to compete at Thompson Speedway. A completed engine registration form must be completed and submitted to Thompson Speedway Officials. All the parts specified and/or that come stock OEM on these engines must remain as delivered, with no modifications or alterations of any kind. Engines may not be disassembled without needing repair.

Please call Jason Ricker (704) 881-4429 with any questions on these rules or to obtain information on purchasing a NEW sealed engine. For information on rebuilt engines contact one of the approved service centers.

## d) Rebuilt Crate Engine Specs

As an option for the Lite Modified Division, a rebuilt 602 spec engine based on the GM Performance Factory Sealed Circle Track Crate Engine is permitted. The engine is the GM Part Number 88958602/19258602 GMR 350/350 Circle Track Engine with spec modifications that can be done only through a Thompson Speedway approved service center. The engines will be inspected and sealed upon completion by a Thompson Speedway authorized service center. All engine seals must remain intact and unaltered. Any service work requiring the removal of any seals/ bolts must also be scheduled with and approved by Thompson Speedway Officials before the seals/bolts are removed. Tampering with seals/bolts will result in penalties and loss of eligibility of the engine to compete in the Lite Modified Division. The engine will only be available through a Thompson Speedway approved service center. This engine is a 88958602/19258602 with no internal changes performed or allowed except for the valve springs, timing chain, and gears. The external changes are the harmonic balancer and oil pan.

*NOTE*: All engines must be sealed and documented to compete at Thompson Speedway. A completed engine registration form, which can be found on the last page of these rules, must be completed, and submitted to Thompson Speedway Officials.

### 10) Carburetor

- a) Holley two-barrel model #4412 carburetor must be used. The body, base plate, metering block, and bowl must be a standard Holley 4412 part, HP parts are not permitted. Carburetors and/or carburetor components machined from billet materials are not permitted.
- b) OEM type gaskets, jets and power valve must be used.
- c) The diameter of every hole in the carburetor must pass the standard Thompson Speedway pin and tooling gauges as part of our routine inspection process.
- d) The only changes that will be allowed are as follows:
  - i) The choke plate and shaft may be removed but must be permanently sealed.
  - ii) Throttle plate screws may be trimmed flush with the shaft.
- e) Body of carburetor and metering block: No polishing, grinding, or reshaping of any part. Drilling of additional holes or plugging holes is not permitted.
- f) Choke horn may not be removed.
- g) Boosters may not be changed. Size or shape must not be altered. Height must remain standard.
- h) Venturi area must not be altered in any manner. The casting ring must not be removed.
- i) Alterations to allow additional air to be picked up below the opening of the venturi such as altered gaskets, base plates, and drilling holes into the carburetor will not be permitted.

- j) Base plate must not be altered in shape or size.
- k) The stock Holley 4412 or Stainless-Steel Holly part #346 butterflies must be used. They may not be thinned or tapered. The Butterflies must remain as manufactured, and must maintain the Holley production tolerance thickness of .0438" to .0398". Idle holes may be drilled in butterflies. Screw ends may be cut even with the shaft, but screw heads must remain standard.
- I) The Throttle shaft must remain standard and must not be thinned or cut in any manner.
- m) Holley Carbs may NOT use aluminum center sections.

## 11) Carburetor Adapter

The Canton Racing Products aluminum adapter plate (part number 85065A) or the Big Haus USA #001 must be used. These are the only spacers that can be run in 2024.

One standard gasket per side, maximum gasket thickness of .075" permitted. Alterations of any kind to the adapter plate are not permitted.

## 12) Carburetor Air Filter & Air Filter Housing

- a) Only a round dry type paper air filters elements maintaining a minimum 12 inches and maximum 14 inches in diameter is permitted. The air filter element must be a minimum of one and one-half (1 ½) inches and a maximum of five (5) inches in height. All air must be filtered through the element.
- b) Only a round, magnetic steel or aluminum filter housing is permitted. The top and bottom of the air filter housing must be solid with no holes. A maximum one (1) inch lip will be permitted from the air filter element to the outer edge of the air filter-housing top and bottom. The air filter housing carburetor mounting ring must have only one (1) round hole a minimum of five (5) inches in diameter. It is permissible to attach a shield to the front area of the air filter housing up to a maximum of one half of the air filter circumference. The shield must not be higher than the height of the air filter element. The air filter housing top and bottom must be the same diameter. The air filter housing must be centered and sit level on the carburetor. No air induction, ducts, baffles, tubes, funnels or anything else which may control the air entering inside of, or between, the air filter and carburetor is permitted.
- c) The bottom of the air filter element must measure within one (1) inch of the carburetor's top flange. A spacer may be used between the carburetor and the air cleaner so long as the one (1) inch specification is not exceeded.
- d) No portion of the hood may be higher than the bottom of the air cleaner.

## 13) Ignition System

- a) Approved ignition system must be used.
- b) Electronic distributors are permitted. All electronic distributors must be in stock type housings, have stock-type controls and modules (no circuit board modules), be equipped with a magnetic pickup, be gear driven, and be mounted in the stock location. Billet distributor housings are permitted.
- c) ONLY camshaft driven distributors are permitted.
- d) Only one (1) ignition coil is permitted and must be mounted on the engine side of the firewall internal to the distributor cap.
- e) Electronic firing module amplifier box is not permitted.
- f) Computerized, multi-coil, dual electronic firing module box or crank trigger systems are not permitted. Magnetos are not permitted. All ignition systems are subject to approval by Thompson Speedway Officials.
- g) Adjustable timing controls are not permitted.
- h) Retard or ignition delay devices are not being permitted.
- i) An MSD #8727CT set to 6400 RPM is mandatory. Cars with rev limiters reading 5200 RPM or less during post-race inspections will be disqualified. Cars with rev limiters reading more than 6400 RPM during post-race inspections will be disqualified.

- j) The green wire of the MSD #8727CT must run directly to the coil negative. The MSD RPM Limiter must be mounted on the engine side of the firewall in plain view. RPM limiters must be always fully functional and operational. The MSD Rev Limiter must be mounted on the right side firewall and must be visible but shrouded so the driver cannot access it.
- k) Accessories to regulate the power supply are not permitted.
- The tachometer wire must run from the distributor to the tachometer along the #8 dash bar separate from any other wires and in unobstructed view for inspection. The tachometer wire must be isolated from any other wires, connections or devices. The entire length of the tachometer wire must be visible from distributor to the gauge.
- m) The vacuum advance unit may be replaced with a manual, non-electronic timing adjuster that does not extend more than two inches beyond the distributor housing.

## 14) Alternator

A functioning 12-volt single alternator system with an internal voltage regulator and one (1) output wire must be used. No 16-volt or higher alternators allowed. External voltage regulators are not permitted. The alternator must be mounted on the front of the engine. Only standard production V-type or flat type V-ribbed alternator drive belts will be permitted.

## 15) Battery

One (1) 12-volt gel or Glass Mat type battery with a minimum of 17lbs. is mandatory. The battery must be located between the frame rails under the hood or the floor of the car. If located under the floor, the battery must be completely encased; if located under the hood the battery must have a suitable cover. The battery must not be forward of the radiator or rear of the rear end housing of the car. The battery location must be acceptable to Thompson Speedway Officials.

## 16) Engine Cooling System

Only water or Water Wetter-type additives may be used in the cooling systems. No antifreeze allowed.

#### 17) Water Pump

A steel or aluminum, OEM-type mechanical pump must be used. Combination water pump/alternator units are not permitted. Any serpentine, cog or V-belt pulley system is permitted.

### 18) Engine Oil Specifications

Combustion enhancing oils or additives are not permitted.

## 19) Engine Exhaust System

- a) The following part numbers are the only headers permitted. All headers must remain unaltered and exactly match the Thompson Speedway factory sample headers.
  - i. Troyer Chassis: Kooks #SMS1033 or Flowrite #SMS25 or Beyea #AMSST-602N1-TA
  - ii. Raceworks Chassis: Kooks #SMS1033 or Flowrite #SMS45 or Beyea #AMSST 602N1-3
  - iii. Chassis Dynamics Chassis: Kooks #SMS1435 or Flowrite #SMS35 or Beyea #AMSST 602N1-3
  - iv. SPAFCO Chassis: Flowrite #SMS55 or Beyea #AMSST-602N1-3
- b) The exhaust header flange must mount directly to the cylinder head with no spacers between the flange and the cylinder head. A maximum header flange thickness of one half (½) inch is permitted.
- c) Inserts are not permitted in any part of the header or collector. Merge, crossover, and pyramid collectors are not permitted.
- d) Exhaust pipes must come out of the engine at cowl and must extend a minimum of six (6) inches past the cowl. The right exhaust pipe may run beneath the car, but must turn down and out toward the bottom of the right side frame rail.

- e) LOBAK #RCM 30-12-30, LOBAK #35-12-35, Kooks #R300-10, or Flowrite P/N FR300 mufflers are always required. Modifications or repairs of any type are not permitted on the muffler. Both muffler flanges must be intact. Mufflers must be removable for inspection.
- f) Thermal wrap is not permitted anywhere on exhaust system.
- g) Only one muffler and exhaust pipe allowed per side. Exhaust pipe ends must be turned down to track.
- h) Exhaust system subject to approval by Thompson Speedway Officials.
- i) Interior coatings are not permitted.
- j) Exterior coatings other than paint are not permitted. All other coatings including powder coatings are not permitted.
- k) The life expectancy for all Lobak mufflers is two years. Race teams are responsible for the condition of their mufflers. Mufflers found to have deteriorated baffles due to rust/rot will be treated the same as if they were modified. Your mufflers must be in good condition and have complete baffles.

## 20) Engine Drive Train, Flywheel and Clutch

- a) Stock OEM dimension steel flywheel for engine type. OEM type steel pressure plate and steel disc only. Solid type disc only, no paddle or button type discs. Minimum diameter 10" clutch and pressure plate. Drilling or lightening of any part is not permitted. Steel bolts only. Flat surface machining allowed only on the face of the flywheel. Any cutting on the backside of the flywheel is illegal.
- b) The following weights are the minimum allowed for each part:

Flywheel Only (no bolts): 14.5 lbs.

Pressure Plate, Cover, & Solid Disc: 16 lbs.

- c) The steel solid disc (no bolts) must maintain a minimum weight of 2.5 lbs. and a maximum weight of 3.8 lbs. after the combined weight has been determined.
- d) All flywheels, pressure plates and clutch discs must be approved by Thompson officials.

## 21) Bell Housing

Only commercially manufactured magnetic steel bell housings may be used. The bell housing must enclose the flywheel 360 degrees with minimum three sixteenths ( $_{3/16}$ ) inch magnetic steel. Any modifications you make to the bell housing must be done with three sixteenths ( $_{3/16}$ ) inch steel and welded in place (no bolt on pieces). A commercially manufactured bell housing (like the Quarter Master #008110440) with a bolt on bottom cover may be used. An opening no larger than 3 three and one half (3  $\frac{1}{2}$ ) by four (4) inches may be used for throw out bearing access. This hole may be covered with sheet metal.

### 22) Transmission

- a) Only OEM production stock 3 & 4 speed transmissions will be permitted. Top loader transmissions are not permitted. Gear ratio must be of stock OEM production.
- b) Only stock OEM factory housing will be permitted.
- c) Only OEM type, steel, angle cut forward gears are permitted. Square cut forward gears are not permitted.
- d) Removal of first gear or replacement of first gear with a metal spacer, in 4-speed transmissions is permitted. All other forward and reverse gears must be in working order, and they must be operational from inside the driver's compartment. All transmissions must have a constant engagement of the input shaft with gear and countershaft with cluster gears.
- e) Five-speed transmissions, with gears removed, are not permitted.
- f) Quick change transmissions are not permitted.
- g) Automatic or semi-automatic transmissions are not permitted.
- h) Machining or lightening of any internal rotating or non-rotating parts including gears, shafts and case is not permitted. Gun drilled transmission shafts are not being permitted. Welding on any internal part is not permitted.

- i) Additional or different from OEM bearings other than the tail-shaft, which may have roller bearings, is not permitted.
- j) Auxiliary, over or under drive transmissions are not permitted. High gear must have a ratio of 1 to 1 and no other gear may have a ratio higher than 1.20 to 1.
- k) The shifter and all of its components must be made of steel or aluminum.

#### 23) Rear Axle

- a) A standard weight/manufactured quick-change or straight rear end may be used. Ultra-light or lightweight rear ends or components are not permitted.
- b) Only magnetic steel axles, bearings, and axle housings are allowed.
- c) All axles must be a minimum of seven (7) lbs. while still maintaining a 1.200-inch manufactured outside shank size.
- d) Standard ten (10) inch housing and ring gear rear end must be used.
- e) Thermal dispersant coatings are not permitted.
- f) Lightened, ultra-light, EDM, scalloped, back-cut, ring gears are not permitted. g) Only locked rear drive axle assemblies permitted. No limited slip, ratchet, detroit locker, posi or gold track type differential permitted. Solid spool only.
- h) Cambered rear axle housings or other cambered components will not be permitted. A tolerance of 1½ degrees of camber (positive or negative) will be permitted.

### 24) Gear Rule

- a) 4.12 Maximum for straight rears
- b) 4.26 Maximum for Quick Change rear ends.
- c) Rear ends and components will be weighed as part of post-race tech.

## 25) Tires

- a) Hoosier Tire East of Manchester Connecticut will be the sole supplier of tires for the Lite Modified Division. Their contact information is listed in the "General Rules" section above.
- b) The size and compound numbers are 26.0/13.0-15 M30 on the left side and 27.0/13-15 450 on the right side. If a tire cannot be identified, it will be considered illegal.
- c) Thompson Speedway Officials may confiscate and/or impound tires at any time for inspection.
- d) The JTR Eagle PPM Tester will be set at a fixed level and will be strictly enforced.
- e) A participant competing in any race at Thompson Speedway specifically agrees that he/she acknowledges it is illegal to soak or treat racing tires and that said soaking or treatment of racing tires is against EPA regulations and further contains carcinogens and hazardous material which are unfit for his/her health and the health of all competitors and spectators. Any participant found violating the rule is subject to suspension.
- f) Thompson Speedway will announce the number of tires available to teams in advance, using an event information form. Thompson Speedway competitors are required to register tires for each event. Tire registration form must be submitted to Thompson Speedway designated tire coordinator prior to the beginning of Qualifying Events for the day.
- g) Participants are responsible for competing on tires that satisfy all of the above rules. Tire samples may be taken at any time to be analyzed by an independent testing laboratory that has been approved by the respective tire manufacturer. The participant's samples will be compared with control samples provided by the tire manufacturer. Any tire samples that are found to not match the factory control sample will be deemed illegal and the participant will be subject to the penalties outlined above.

#### 26) Coil Over Shocks

a) The Lite Modified Division must utilize the track specified shocks only. Shocks are subject to dyno verification and must be within the manufacturer's tolerance limits for each part number. Shocks must remain as manufactured with no alterations of any kind. b) Approved shocks are:

Pro Shocks #TA55.5B Front Pro Shocks #TA745.5B Rear

- c) Shocks may be swapped at any time by a Thompson Official with Thompsons inventory.
- d) Cars will be inspected using one & one half inch (1½") ramps and will be pushed and held down by 3 crew members.
- 26) a) COIL SPRINGS Only coil spring suspension will be permitted. The suspension and coil springs at all four (4) wheels must be active and permit suspension movement in compression and rebound. All downward chassis movement while the race vehicle is in competition must be limited only by the normal increasing stiffness of the springs or the bottoming of the chassis against the racetrack, whichever occurs first. Any device or procedure that in the judgment of Thompson Speedway Officials attempts to detract from or compromise the above will not be permitted, including "coil-bind". Any type of chassis travel limiter, used in compression or rebound, will not be permitted. Front shocks must have a minimum of 2" of piston available for spring travel in compression. All coil springs must not be colder than ambient temperature.

A maximum of two full (360 degree) non-adjustable spring rubbers in each coil over spring is permitted. Shock/Coil over boots or bags are not permitted.

## b) Coil Over Springs:

- **1.** Coil over springs must mount to the lower A-frames.
- 2. Strut bars will not be permitted for mounting of coil over front springs.
- **3.** Coil over springs must be manufactured from one solid piece of heavy-duty magnetic round steel (flat or oval wire is not permitted) and must be constructed with both coil ends closed and ground.

One inactive coil on each end of the coil spring is permitted.

- **4.** Only one (1) spring per wheel will be permitted.
- **5.** Coil springs may be coated but coating thickness and material must be acceptable to Thompson Speedway Officials.
- **6.** All active coils of the spring must have the same coil spacing, same wire diameter, and same inside and outside diameter. The first and last coils may be different due to having closed and ground ends.
- 7. Progressive or digressive rate springs will not be permitted.
- **8.** Front coil must be a minimum of 6" in free height and a minimum of 250 lbs. per inch of spring rate. Rear coil must be a minimum of 8" in free height.

Thompson Speedway reserves the right to set and enforce a maximum coil spring rate.

### 27) Bearings and Hubs

- a) Front spindles must be linked to frame per NWMT rulebook using approved tethers. Low drag components (oil filled hubs, oiled bearings, low friction bearings, non-steel bearings, coated or polished spindles, bearings or races) will not be permitted.
- b) Oil filling of any spindles, wheel bearings or hubs is not permitted.

## 28) Ground Clearance Requirements

The frame rail and sheet metal ground clearance is a minimum of two (2) inches. All ground clearance requirements are measured with the driver in the car. Minimum tire pressures for all inspection purposes are ten (10) psi for both left side tires and fifteen (15) psi. for both right side tires. Air may be added to the tires to achieve only the minimum tire pressures during inspections, per a Thompson Speedway provided tire pressure gauge. Immediately following competition, just prior to inspection, Team members are not allowed to work on cars without approval from an official. This includes but is not limited to adjusting or manipulating the cars ride height by pushing down or lifting up on any part of the car.

#### 29) Brake Components

- a) Four-wheel disc brakes are mandatory. Only magnetic cast iron or cast steel, round, circular rotors are permitted. Only metal brake calipers will be permitted. Drilled, slotted or grooved rotors are not permitted. Only factory dust cleanouts are permitted. Dust cleanouts should not exceed .038 in depth. If the dust cleanout exceeds .038 in depth, the rotor will be deemed illegal. The brake rotors must be bolted to the hubs. Floating brake rotors will not be permitted.
- b) Only single stage master cylinders are permitted.
- c) Brake calipers with a maximum of four (4) pistons are permitted. Each brake caliper's piston must all be of equal size. Each brake caliper may not exceed a racer net price of \$265.00 d) All rotors and brake components subject to Thompson Speedway Officials' approval.

#### 30) Brake cooling

Electric blowers are not permitted for cooling purposes in brake duct systems. Additionally, electric blowers are not permitted anywhere on the car for cooling (i.e. brakes, rear end, etc.).

## 31) Fuel Specifications

- a) Sunoco Race Fuel 260GTX is the only fuel permitted for use in the Lite Modified Division. Any Blending of fuels or use of any additives is not permitted.
- b) Pump gas and E85 are not permitted.
- c) Thompson Speedway Officials will take fuel samples as part of their normal inspection process.
- d) Icing or cooling of the fuel system is not permitted in the garage, pit or paddock areas. e)Nothing may be placed in the fuel line except a standard fuel filter. The use of any type of fuel catalyst or other fuel-altering device is prohibited.

## 32) Fuel System

See NWMT Rulebook

#### 33) Fuel Cell

Must meet specifications with a fuel cell bladder made of a material that returns to its original size and shape after deformation. Rotational molded bladders are not permitted. It is highly recommended that the fuel cell bladder be no more than six (6) years old. Competitors must provide bladder model, serial number and date(s) to Thompson Speedway Officials before competing. If a gas cap is used it must be painted white with the car number on it for identification. The minimum requirement for approved fuel cells at Thompson Speedway is as follows: ATL Super Cell "100" FB1 Series Bladders. (Note: the complete cell will be the SU1Series), and the Fuel Safe Sportsman Cell (SM Series). Any cell that is rated above these cells (ATL 200 & 500 series), and the Fuel Safe Pro Cell (PC Series), will also be approved for competition at Thompson Speedway.

## 34) Fuel Cell Container Installation

See NWMT Rulebook

## 35) Fuel Filler & Vent Requirements

See NWMT Rulebook

## 36) FUEL LINE SHUT OFF VALVE & FIRE SUPPRESSION SYSTEM

An Oberg fuel line safety valve (part #SV-0828) or SRI Performance (part #FPF-FSV) shall be installed in close proximity to the fuel cell so a visual inspection of the valve may be performed by removing the body panel above the fuel cell. It should be securely mounted in the fuel line per the manufacturer instructions.

*NOTICE*: Competitors are solely and directly responsible for the safety of their race cars and racing equipment and are obligated to perform their duties (whether as a car owner, driver or crew members) in a manner designed to minimize to the degree possible the risk of injury to themselves and others.

All cars are required to have a functioning onboard fire system or extinguisher with appropriate mounting brackets.

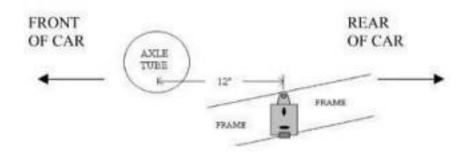
## 37) Roll Bars

- a) The door bars (#9 A & B), on both the left and right sides, must have a minimum of four (4) bars equally spaced from top to bottom that must be welded horizontally between the vertical uprights of the main roll bar (#1) and the front roll bar legs (#2 A & B). The top door bar on each side must maintain a minimum vertical height of 15-1/2 inches from the top of the main frame rails to its centerline and match up with the intersection of the dash panel bar (#8) at the roll bar legs (#2A & #2B) at the front and the intersection of the horizontal shoulder bar (#7) at the main roll bar (#1) at the rear. All door bars must be convex in shape. The door bars (#9 A & B) must have a minimum of six (6) vertical supports per side with two (2) equally spaced between each door bar. These supports must be made from a minimum of one and three-quarters (1 ¾) inches by 0.090 inch wall thickness magnetic steel seamless round tubing (not numbered but shown in the left side view of diagram #3). Right side door bars must cover a minimum of 25 inches of door length and may be either four (4) horizontal bars with six (6) vertical studs or two (2) horizontal bars and two (2) bars configured in an X design. If the X design is used, a vertical bar must connect through the center of the X from the top horizontal bar to the frame.
- b) A 13 gauge (0.0897 inch thick) magnetic steel anti-intrusion plate(s) must be securely welded to the outside of the left side door bars. The anti-intrusion plate(s) must fill the area between the horizontal centerlines of the top and bottom door bars, and vertical centerlines of main roll bar (#1), and the left front roll bar leg (#2A). The plate(s) must be formed to match the curvature of the door bars. Plate(s) welded between the vertical upright bars should be as large as possible. All plate(s) must have the corners welded with one (1) inch of weld followed by a maximum of three (3) inches of surface not welded and followed again by a minimum one (1) inch weld. To facilitate emergency removal of the left side door bars (#9A), the anti-intrusion plate must have six (6), 21/8 inch diameter holes cut in the anti-intrusion plate, with three (3) holes forward of the front vertical supports and three (3) holes rearward of the rear vertical supports in the following locations: The upper two (2) holes must be centered vertically between the left side door bars (#9A-1&2), at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support. The middle two (2) holes must be centered vertically between the left side door bars (#9A-2&3), at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support. The lower two (2) holes must be centered vertically between the left side door bars (#9A-3&4), at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support (see Diagram #9A in NWMT Rulebook).
- c) All cars must have a foot protection bar acceptable to Thompson Speedway Officials installed on the left side of the roll cage. The foot protection bar must be located at, or in front of, the pedal assembly, when viewed from the side and above. The foot protection bar must be completely welded to the left front roll bar leg (#2A) and extend forward and be completely welded to the main frame rail or front sub-frame.

### 38) For more information, please contact:

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## 2: Transponder Mounting Location



Spec Engine Owner Driver	Team #
ThompsonSpeedway	2024 LITE MODIFIED CRATE MOTOR REGISTRATION ALL COMPETITORS USING A CRATE ENGINE TO COMPETE IN ANY TS EVENT MUST COMPLETE THE FOLLOWING AGREEMENT:
Crate Engine #1 Serial Number:	
Crate Engine #2 Serial Number:	
Crate Engine #3 Serial Number:	
Crate Engine #4 Serial Number:	
Crate Engine #5 Serial Number:	
points at Thompson Speedway-sanctioned registering spec engine with the Thompson AGREEMENT:  1. I agree to the policies regarding the	ement, you will be allowed to compete and receive prize money and events. There will be NO prize money or points issued without Speedway Office prior to competing.  Thompson Speedway Lite Modified engine program, as outlined in tions, this registration, or any other requirements which might be
	eedway Crate Engines are not to be tampered with. Any
·	thorized freshening or altering in any way is a violation of the rules.
	crate engine(s) and using it/them to compete in any Thompson med driver(s), are subject to any and all penalties which might be n Speedway organization.
inspection at any time. If the integrity of the	Speedway policy that a crate motor may be confiscated for said motor is not fully in compliance with the Thompson Speedway that I am subject to penalties which may be imposed by Thompson ay be forfeited.
motor for inspection purposes will result in of Thompson Speedway choice for transpo	of the Thompson Speedway Official in Charge to confiscate a crate penalties. Team will be responsible to place motor in truck or trailer art to builder inspection facility. Cost of inspection and delivery will be all, and all costs will be the responsibility of competitor if found are and conditions as outlined above.  Crate Engine Owner
	Witness
	Crate Engine Driver
	Witness