



## **TOMAH-SPARTA SPEEDWAY- Asphalt Modified 2022 Rules**

**1-3-2022**

### **General:**

*These rules and regulations are designed to govern driver and crew member conduct during TOMAH-SPARTA SPEEDWAY racing events. By participating in these events, all drivers are required to comply with these rules. While TOMAH-SPARTA SPEEDWAY makes no claim of guaranteed safety, these rules are enforced as a guide for the conduct of the sport.*

*TOMAHSPARTA SPEEDWAY is in the entertainment business. Drivers, Owners, Crew and TOMAHSPARTA SPEEDWAY Staff cooperate to provide this exciting level of entertainment. All rules, race scheduling and structure, are designed and implemented to support a balance between competition and entertainment value. Drivers and crew are required to conduct themselves as professionals at all times. TOMAH-SPARTA SPEEDWAY may change any rule at any time in an effort to reduce the cost of racing, maintain equal competition, or improve safety.*

**Procedural Rules:** *It is the goal of Tomah-Sparta Speedway management to maintain the safest possible racing conditions for all drivers, fans & track personnel. Only safety crews and wrecker crews are permitted on the track in the event of an accident. Pit crew members are not permitted on the track. Drivers are required to stay in their car in the event of an on-track incident. If a driver, for whatever reason, exits a car on the track during a caution period, the race will automatically be placed under a red flag and all cars will come to a complete stop. A driver may exit a car if requested by a safety crew member or if safety warrants in cases such as a fire or if car is upside down. Drivers that exit a car without permission, for whatever reason, are subject to fine and/or suspension at the discretion of track management. Drivers are also encouraged to drop the window nets after an accident as a sign to approaching safety crew members that they are ok, especially in a multicar situation to alert approaching safety crew members which drivers are in need of urgent attention.*

**Rules Infraction Policy:** *TOMAH-SPARTA SPEEDWAY Management may suspend or fine any driver, team member, or car owner for violation of track rules, policies, or procedures. Management has right to confiscate any item that is in violation of the rules.*

# **2022 TOMAH-SPARTA SPEEDWAY Modified**

## **Specifications**

### **1. SAFETY EQUIPMENT**

#### **1A. SEATS** - Approved aluminum driver's seat required.

Seat must be fastened to frame/roll cage and located to give adequate distance from driver's arm to door bars. Shoulder supports on right and left sides of seat and head support on right are required. Full containment seats recommended. Seat may not protrude outside 4 point upright or top cage halo. All driver seats must be manufactured by a recognized manufacturer of seat and safety equipment, multi-layer aluminum seat and approved by TOMAH-SPARTA SPEEDWAY officials. Seats may also be Carbon Fiber or Carbon Composite or others. This should not be used as a weight saving measure. We have found several new seats that are affordable and safe and meet with the rules and thoughts of the TOMAH-SPARTA SPEEDWAY. Seats must remain "as purchased and produced", no holes or other modifications made for weight reduction. Homemade seats or sprint car type seats are not permitted. Seat construction must be approved from the seat bottom to above the driver shoulder area; must be fully padded, with padded pelvis, rib and shoulder supports on both the left and right side. Exception – Lajoie seat where construction is such that rib supports are not required. Bolt on systems are approved for competition. Seats must be equipped with left and right leg extensions, fully padded, running from the edge of the seat to the entrance of the foot box area.

Recommendation – a minimum 1/8" (.125-inch) thick steel plate be mounted on the front of backside of the rear hoop of the midsection in front of the left rear wheel. Plate should extend from the horizontal shoulder bar downward the height and width of the driver seat.

**1B. SAFETY BELTS-Belts must be dated within 3 years of event date or newer.** All seat belt and shoulder harness systems must be SFI specification 16.1, type Y-type shoulder belts are not approved for use. A minimum five-point harness system is mandatory. Competitors using the HANS device may use a standard three-inch (3") or the Schroth racing or equivalent two inch (2") wide shoulder strap. Schroth Racing shoulder strap system has been specifically designed for use with the HANS device. Schroth part numbers are profi iii-6fh; hybrid iii-h; profi iii-6h. Shoulder harness belts shall not be mounted lower than the shoulder line of the driver or 10 degrees. Belts must be anchored to roll cage or frame. Grade "5" bolts 1/2" min diameter required. Shoulder harness belts shall not be mounted lower than the shoulder line of the driver or 10 degrees. 6-point belts (double crotch strap) are recommended.

**1C. FIRE SUPPRESSION SYSTEM**-A minimum five-pound (5) on-board fire suppression system is required. 10# fire suppression with multiple discharge points is highly recommended. Cold Fire systems recommended for cockpit usage. Must have gauge in view and must be fully charged. Cockpit must be completely sealed off from engine compartment and fuel cell.

Roll bar padding required around driver; *Recommended: Fire retardant padding.*

**1D. LEFT SIDE WINDOW NET**-Left side driver window net is mandatory. Construction must be web-type safety net with mechanical release. Net bar must be a minimum of .1875-inch (3/16") flat steel or .375-inch (3/8") round stock and run the entire length of the window net between mounting points. Mechanical release must be welded to the front or "a" pillar end of the bar. Spring-loaded releases are not approved for competition. Driver net must be secured in place and centered in the door area and must be secured to the upper roll cage horizontal member. Window nets must drop down. Must latch on top. No Fish net style window nets.

**1E. DRIVER'S ATTIRE** - Complete SFI- approved fire retardant driving suit designed for racing along with fire retardant gloves, socks, underwear, and shoes required. Eye protection and a **Snell SA-2015** or newer helmet required. Snell "M" or D.O.T helmets not allowed. Use of head and neck restraint devices is highly recommended for all hot-track activity. Approved devices are the HANS device, LFT Technologies R3, Simpson and the Hutchens ii device. TOMAH-SPARTA SPEEDWAY officials will monitor items related to safety, but ultimately it is the responsibility of the driver to monitor, maintain, and update his safety equipment.

**1F. CARBON FIBER USEAGE**-Carbon fiber for safety use only in Seats, Helmets & Hans Devices. Carbon Fiber is NOT allowed for dash, panels, duct work, bolts, brake ducts, brackets, or braces made out of this material.

**2. CHASSIS/FRAME**

**2A.** American passenger car rear wheel drive full frames 1964 or newer or Unaltered Impala copied aftermarket front clips allowed from Howe Racing PN# 35809, Pathfinder PN# PF001, or Metric version Johnson Chassis JCI-09-1M and must add 25#’s centered on the front cross member for aftermarket front clip. 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. Frames may be cut in rear only at point no further than 36 inches from center of rear-end housing

**2B.** Front cross member must remain full and intact to the firewall on the left side; center of cross member may be notched and boxed for radiator and/or steering clearance only.

**2C.** Minimum 3" ride height (exception is front cross member).

**2D.** No cutting or drilling holes in frame for weight reduction purposes.

**2E.** No titanium or carbon fiber products, parts or components allowed anywhere on racecar.

**2F.** All chassis must have driver’s foot protection bar and a .090 steel foot box protector plate 9" x 12" minimum is required.

**2G.** Floor must be metal or .125 aluminum. Must cover entire driver’s cockpit to rear edge of seat.

**2H.** Tow hooks on front and rear required.

**3. ROLL CAGE**

**3A.**Must consist of continuous hoops not less than 1.500-inch outside diameter with a minimum wall thickness of at least 0.095-inch. Low carbon, mild steel tubing is recommended.

**3B.**Seats, must be frame-mounted with grade 5 3/8" bolt and oversized washers.

**3C.**Must consist of a configuration of front and rear hoops connected by tubing on the sides or side hoops. 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.

**3D.**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.

**3E.**A minimum of three driver side door bars, at least 1½-inch O.D., must be as parallel with the ground as possible and located perpendicular to the driver so as to provide maximum protection for driver.

**3F.**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 1¼-inch O.D., on passenger side of car, either horizontal or angled. (Two is recommended.)

**3G.** Steel door plates, 0.090-inch minimum thickness metal, must be securely welded to outside of door bars on driver’s side. Plate must cover the area from the top door bar to the bottom door bar.

**4. BUMPERS & NERF BARS**

**4A.** Steel bumpers required front and rear. Two (2) bar front bumper is mandatory. Maximum size is = 1-1/2" X .095" mounted to frame-end, no wider than width of material outside frame horns and with bottom loop parallel to ground. Top bar must be directly above bottom bar, minimum 6.5 inches apart. One single bar rear bumper is required. Maximum size is = 1-3/4". Wrap around rounded rear bumpers highly recommended. The required fuel cell protection bar (maximum size = 1-1/2" X .095") may be attached to the rear bumper. One single nerf bar between the front and rear wheels, on each side of the car are allowed. Maximum size = 1-1/2" X .095". They are to be attached to the cage at the front and rear sections of the nerf bar. No center supports are allowed on the nerf bars. All bumpers and nerf bars must be capped with no sharp edges and not extend out past the width of the sidewall of the tires.

**5. APPEARANCE/BODY**

**5A. Numbers:** 18-inches on both sides, and roof, additional numbers approximately 6" high on upper right side corner of windshield & on upper left rear filler panel.

**5B. BODY:** Body may be any make or model with any style body. Stock appearing roof required. Hood must completely cover the top of engine and radiator and must extend from the nose piece to the deck.

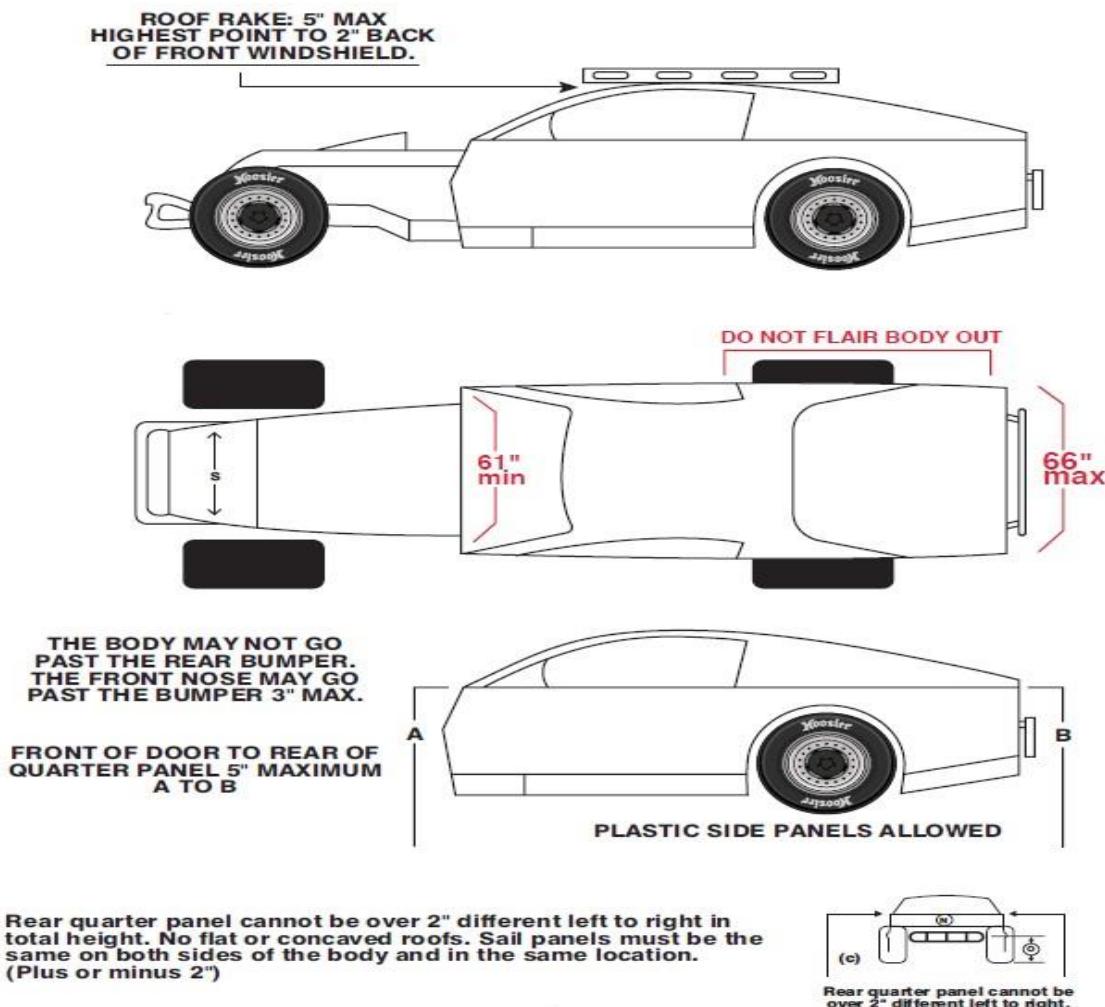
Hood may be made of metal, aluminum, or fiberglass and must provide a seal to the top of the engine compartment and cannot cover side of engine more than 5". Hood scoops allowed. No special wings or anything in front of front tires. Rear Filler Panel recommended.

**5C. WINDSHIELD:** Windshield recommended Minimum of 1/8 inch thick Lexan in front of driver. Two interior supports 1 inch wide and 1 inch deep (not plastic) recommended. Windshield must be able to deflect any debris or oil that might enter driver's compartment from the front. If bullet-style windshield used, center window bar recommended. If no windshield is used a minimum of three (3) windshield bars 5/16" in diameter is required and must be mounted in front of driver.

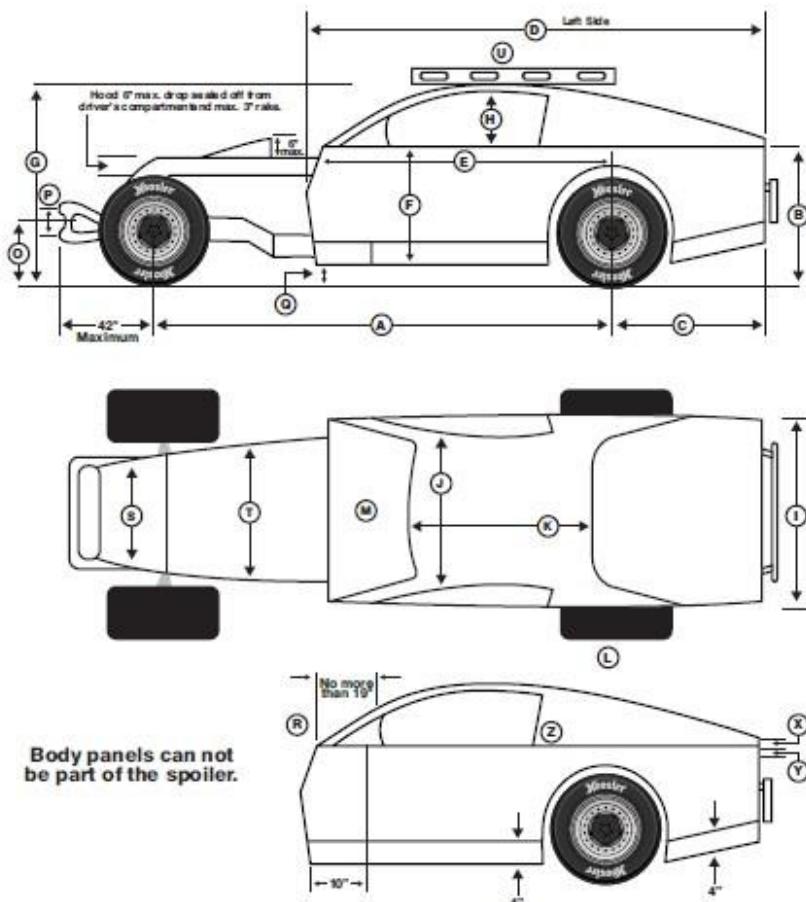
**5D. SPOILER:** A clear see thru Lexan spoiler with NO lettering is required with a Maximum height of 5" tall x 66" width with spoiler not extending outside body; 43" max height from ground with driver; must not extend down the side or outside rear quarter panels, no wings, side skirts or wicker bills allowed. Rudders or forward mounted brackets will not be permitted. 2-week grace period for non-compliance.

**5E. BODY-GENERAL:** NO PANING UNDER THE SIDES OR REAR OF THE CAR, NO LOUVERS OR VENTS IN THE FENDERS, DOORS, OR QUARTER PANELS. NO FINS, VORTEX GENERATORS, VERTICAL LIPS, WICKER BILLS, OR WINGS, ANYWHERE ON THE BODY.

#### 5E. BODY CONFIGURATION GUIDELINES



A	108"min	I	61"min 66"max	Q	3" minimum	Y	4"max interior slope from front to rear
B	28"min 38"max	J	44"min 52"max	R	19"max must be same both sides	Z	Must be same both sides
C	34"min 48"max	K	41"min 56"max	S	Min. 24" nose must be flat and flush with sides.		
D	106"min 120"max	L	N/A	T	66"max		
E	72"max	M	Windshield must be sealed from engine compartment	U	2"max clearance at rear of roof and 5" at top front.		
F	22"min 31"max	N	8" min. / 90 degree Solid material	V	N/A		
G	42"min 54"max	O	16"min 20"max	W	N/A		
H	12"min both sides 1"max both sides	P	6.5"center to center	X	2"max at rear of car		

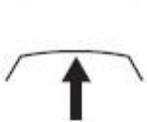


## EXAMPLES

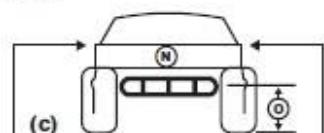
Sail panels must be the same on both sides of body plus or minus 2"



Rear bumper must be capped, with no sharp edges, and bent forward on the ends at a 90°degree angle.



Fuel cell must be protected from bumper down to bottom cell.



Rear quarter panel cannot be over 2" different left to right.

## 6. WHEELBASE & TRACK WIDTH

**6A.** Minimum Wheelbase 108" both sides no tolerance.

**6B.** Maximum track width (front or rear) shall not exceed 78" measured outside to outside of tire. **6c.** The Five Star Referee is the official device of measurement

## **7. SUSPENSION**

**7A.** Stamped steel OEM replacement lower a-frames; rubber, nylon, or steel lower a-frame bushings; Heims; welded or bolted shock mounts on lower a-frames; Lower a-frames must be right and left, and of the same design. Lower a-frame mounts and bolt holes on frame must be in OEM location. OEM type ball joints only. Sway bar must be OEM type, no splined bars; no rear sway bars (back of car)

## **8. REAREND**

**8A.** Spool type differential only. Any 3 or 4 Link Steel Floater type or steel tube quick change rear end allowed.

**8B.** Minimum 10" ring & pinion quick change.

**8C.** No open tube or cambered (1/2 degree tolerance) rear ends. No cambered or torsion type hubs or drive plates **8D.** One-piece straight spline drive plates only.

**8E.** Magnetic steel axles required

**8F.** All Links, trailing arms & top link must be solid link from heim to heim NO Springs, Biscuits or Rubber bushings allowed. No Lift Bars Allowed. No Birdcages or Senneker T-arm assemblies or bridge kits allowed.

**8G.** Steel coil-over eliminators, or steel or aluminum coil-over kits allowed on rear end only with 4.5" minimum spring, must conform to shock and spring rules. **8H.** All drain plugs must be safety wired.

## **9. SPRINGS**

**9A.** The only springs allowed are one steel, non-progressive coil spring and/or steel leaf spring per wheel. Coil Springs must be at least 4.5" inches in O.D. No Torsion bars or air bags. Leaf spring rule: Steel multi leaf springs allowed. Other suspension parts not allowed include floating leafs, half leafs, mono leafs, or top springs. Aluminum lowering blocks and adjustable rear shackles are allowed. Solid bar 3rd link only. Steel coil-over eliminators, or steel or aluminum coil-over kits allowed on **rear** only with 4.5" minimum spring.

## **10. SHOCKS**

**10A.** One steel shock per wheel that is non-adjustable; unaltered, with a welded bearing on one end of shock minimum. No buldtype, threaded body, coil over, air, or remote reservoir shocks. No Schrader valves or bladder type valve allowed. No external or internal bumpers or stops. Maximum 2.125 inch O.D. shock body. No shock covers allowed. All shocks must be completely collapsible and extendable at any time.

### **10B. Shock Claim Rule**

**10C.** A claiming driver may place a claim on competitor's shocks only if claiming driver has participated in 75% of current season point shows and has finished in top five of feature event and on lead lap of current nights event. Claim must be filed by claiming driver with tech inspector immediately after feature event with all parties still present in tech area.

**10D.** Shock claim is \$200.00 per shock, (shock only-no exchange), Cash must be presented to tech inspector within five minutes of claim. Claim may be for one or up to four shocks.

**10E.** A claiming driver is only eligible for one successful claim during current calendar year. Exception is any claimed driver who has had more than one shock claimed, they are eligible to claim as many shocks as they have had claimed in current calendar year.

**10F.** Claiming driver is allowed only one claim per event, regardless of outcome. No driver may claim the same driver more than once during current calendar year. If multiple claims are filed on same driver on the same night, highest finishing driver takes precedence for claim.

**10G.** Refusal to allow shocks to be claimed will result in claimed driver automatically forfeiting the win and all prize money and points for that race. Claiming driver will be refunded his/her posted claim money. **10H.** No reverse shock claims, cannot claim shocks from cars that finishing behind you.

## **11. SPINDLES**

**11A.** No Fabricated Spindles (OEM Type cast spindles) reconditioned cast OEM spindles allowed P/N#3448B LH and P/N#3449B RH.

## **12. BRAKES/ROTORS/HUBS**

**12A.** Four wheel brakes required at all times.

**12B.** Single piston steel "GM" calipers only Max MSRP \$119.99.

**12C.** Single or dual master cylinder after-market brake pedal is allowed. **12D.** No ABS units, brake recirculation systems, or floating caliper brackets **12E.** Only one brake bias adjusting unit allowed.

**12F.** No "wheel fans" or blower motor devices allowed

**12G.** Directional vane rotors allowed with a maximum MSRP \$105.

**12H.** Minimum rotor width .800" for front brake rotors.

**12I.** No floating or self-centering rotors. Directional vane rotors allowed with a maximum MSRP \$105.

**12J.** Steel hub and rotor (2 piece allowed) No aluminum hubs. No W-5 Hubs allowed.

## **13. STEERING**

**13A.** Steering Box only. No rack & pinion allowed. Steering box with center link style required must be steel in OEM location. (OEM aftermarket type center link allowed) Exceptions are inner/outer tie rod ends may be replaced with heims and adjuster sleeves, steel or aluminum.

**13B.** Quick release steering wheel required.

**13C.** Steering shaft must incorporate a minimum 2 U-joints and deflect force away from driver.

**13D.** Collapsible steering shaft recommended.

**13E.** No electric power steering units. No titanium steering components or hardware allowed.

## **14. TRANSMISSIONS/CLUTCH**

**14A.** OEM production type & Aftermarket (*Bert, Brinn, Falcon*) allowed. (2-speed, 3-speed, 4-speed and automatic).

**14B.** Transmission must have two forward and 1 reverse working gears plus a neutral position minimum.

**14C.** Automatic transmissions & stock clutches must have an approved scatter shield

**14D.** Standard clutch type transmissions must have a blow proof bell housing (*steel or aluminum*). Inspection hole required.

**14E.** No bottom load transmissions.

**14F.** No 5-speed or more transmissions, No 'in and 'out boxes allowed.

**14G.** All drain plugs must be safety wired.

**14H.** Performance grade stock or racing clutch permitted. Minimum

diameter 5½" **14I.** No carbon fiber clutches allowed.

## **15. DRIVESHAFT**

**15A.** Steel Only; 2" minimum diameter. No energy absorbing or carbon fiber drive-shafts allowed. No chrome moly steel allowed.

**15B.** Drive shaft must be painted white.

**15C.** Safety hoop required on front half of drive shaft. Driver must be protected from drive shaft.

## **16. WHEELS**

**16A.** Aftermarket made for racing, 15"x 8" inch maximum.

**16B.** Minimum Wheel Weight 14 lbs. Steel Wheels only permitted.

**16C.** No tire pressure reliefs or bleeders of any kind allowed.

**16D. Wheel Studs and Spacers**-A minimum of five (5) lug nuts per wheel, minimum 0.625-inch (5/8") Solid steel nuts only, showing a minimum of two (2) threads through the nut, must extend through the lug nut when clamping the wheel to the hub.

## **17. TIRES**

**17A.TIRES-Approved tire:** **Hoosier D800 only.** Tire bank system will be utilized; Teams may purchase a maximum of 6 tires into their initial tire bank, and can purchase one new tire on the 3<sup>rd</sup> week of competition, and continue with one new tire per week of competition thereafter. New competitors coming in after the first event of the season may only purchase 4 tires to start their tire bank and must start behind the invert if using all 4 new tires or if you only use two new on the first night of competition and two used with 4/32" wear on them you can start where you qualify. All tires used in competition, (heats, dash, feature, etc.), must come from that Competitor's tire bank.

You may qualify and race on any combination of tires from your bank. Tire bank follows the driver. Used tires purchased for "race" use will be counted as new tires. Hoosier D-800 will be sold at track.

**18c.Chemical treatment of tires:** (softening) is not permitted and if found guilty will result in the disqualification from the event and loss of prize money and points. Drivers guilty of altering and/or chemical treatment of tires will also be suspended for the next night of racing. If a driver is found altering and/or chemical treatment of tires on the last night of competition, he/she will be disqualified for that night of points and prize money and deducted of all points from the previous night of competition. The definitive method to determine if a tire is legal will include a durometer reading with the exact number to be provided by Hoosier, taking into account model of the tire and tire temp. Failure of a tire to meet the minimum reading may result in seizure of the tire, fine, penalty, and/or disqualification as mentioned above.

## **18. FUEL PUMP/FUEL CELL/FUEL**

**18A.** Fuel Pump Stock type mechanical drive (belt drive ok) NO electric fuel pumps.

**18B. Fuel Cell is mandatory** with a 15-gallon (U.S.) maximum capacity complete with a rubber style interior bladder, full foam baffling inside and must have a functional roll over check valve ball and or safety flap system. Teams are responsible to verify that fuel cells and bladders are up to date and in good condition, All fuel cells must be SFI or FIA rated and within 7 years of build date. **An in-line fuel safety shut off valve (OBERG #SV0828 or SRI #FPP-FSV)** at the point the fuel exits the cell and after fuel filter are mandatory. The use of "U" style fuel cells or non-standard-shaped fuel cells are prohibited.

**18C. Fuel Cell Can Containers made of 1/8 inch (0.125 thick) sheet steel are strongly recommended.**

All fuel cell cans must be magnetic steel with one-inch lip being a one piece design. Top cover must be made of magnetic sheet steel not less than 22 gauge (0.031" thick) and bolted to the bottom container with a minimum quantity of 14, grade 5, 1/4 inch bolts, with flat washers on top and lock nuts or lock washers and nuts on the bottom, cell must be banded on top both ways with two steel (1" x 1/8") straps in each direction. (No aluminum fuel cell top covers allowed period)

**18D. Fuel Cell Protection Plates:** Cars without a .125" (1/8 thick) steel fuel cell container are required to have full steel protection plates no less than 13 gauge (0.090 thick) mounted securely thru welding or bolting to the outside of frame rails on sides and rear in an approved manner to cover the entire height and width of fuel cell container used. Also required is a front protection plate between the fuel cell container front side and the rear end cover. This said plate must be full width and height of fuel cell container, no less than 0.090" thick magnetic steel or 0.125" thick aluminum and securely fastened in an approved manner to the front fuel cell container mounting cross member. **Add 10#s for non-approved 1/8" steel fuel cell container.** **18E. Fuel Cell Mounting** must behind rear axle and between frame rails. Fuel cell can is to be no closer than 2" to the back of the rear end. Bottom of Fuel cell ,must be at least 10

inches from the ground, fuel cell height measurement based with chassis up on TOMAH-SPARTA SPEEDWAYcertified 4" blocks front & rear. Fuel cell must be mounted utilizing a front and rear cross member configuration with a minimum 1" x 1" 0.095 wall thickness square steel tubing. Cross members must be bolted thru the frame or fuel cell mounting brackets that have a minimum thickness of 1/8 inch (0.125"). Cross member mounting bolts must be 7/16 inch grade 5 minimum with support washers. Strongly recommend 1/2 inch grade 5 minimum mounting bolts for fuel cell cross members to frame and or mounting tabs. All fuel cells must be protected with top and bottom frame support bars and the lower rear protection bar extending below fuel cell.

**18F. Fuel Lines** must be Aeroquip type or equivalent; routing must be outside of cockpit and protected from damage.

**18G. Fuel Filler** must be accessed through deck lid; filler spout may be extended, but not connected to bodywork.

**18H. Fuel:** Pump gas only in crate engines or built engines may use racing fuel; 110 Octane maximum allowable race fuel, Fuel samples may be taken at any time and tested. Alcohol, nitro-methane, nitrous oxide, other oxygenating agents, or 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 VP or Sunoco baseline 110 will be Illegal.** No icing or cooling of fuel system. **Ethanol (E-85) is not allowed.**

## **19. EXHAUST**

**19A.** Headers or cast iron manifolds allowed on all engines (No Tri-Y Headers or stainless steel headers allowed.) Mufflers required and 100-decibels Max at 100 feet. Any car not meeting the 100 decibel rating will add 25#'s for the night, & must remedy the issue before next visit.

## **20. BATTERY/IGNITION SYSTEM**

**20A.** 12-volt systems maximum

**20B.** Batteries must be securely mounted ahead of rear axle, away from fuel cell and lines.

**20C.** All batteries in driving compartment must be in approved sealed battery box.

**20D.** Battery disconnect switch required & must be located in center of driver compartment accessible to the safety team from the passenger side window.

**20E.** All Engines must be equipped with a Distributor Type Ignition System, No crank fire ignitions.

**20F.** Vacuum advance may be removed and the pick-up coil locked.

**20G.** MSD, any brand, or GM ignition boxes are allowed.

**20G.** No magnetos.

**20H.** No electronic traction control devices of any type.

## **21. COOLING SYSTEM**

**21A.** Radiator mounted in front of engine, between frame horns.

**21B.** Fan protection required and overflow tank recommended.

**21C.** Water pump must be stock type in stock location. Electric water pumps are NOT allowed.

**21D.** Antifreeze is strictly prohibited.

**21E.** Cooling system shall consist of any conventional system that employs the use of a standard radiator cap or caps. THE USE OF ANY MANUAL HIGH PRESSURIZED COOLING SYSTEMS, EITHER WITH OR WITHOUT EXPANSION / SURGE TANKS IS STRICTLY PROHIBITED.

**21F.** Oil and transmission fluid coolers are not allowed in driver's compartment.

**21G.** Accumulators cannot be mounted between driver and left-side door.

## **22. ENGINE & LOCATION**

**22A.** American make 8 cylinder small block engine allowed with max CID 410. Steel block.

**22B.** No machine work to the outside of block.

**22C.** Wet sump oiling system only.

**22D. (NO LS Series Engines Allowed)**

**22E.** Rear of engine must be mounted at least 72 inches forward from centerline of rear axle.

**22F.** Engine offset must be within 2 inches of centerline of front cross member with engine level.

### **23. ENGINE SECTION**

**23A. GM 602 CRATE ENGINE** (P/N #19258602) must be used as produced from factory; motor will be allowed one Holley 4 bbl 650 cfm carburetor #80541-1 (with no modifications) with no adapter plate or spacer. One .065 paper gasket allowed. Crate engines must run stock style HEI distributor with coil in cap and a maximum timing of 34 degrees. MSD Soft Touch Rev Control Part #018-8728 or 018-8727CT with a maximum 6200 rpm chip required. Box must be mounted out of reach of driver. Maximum compression can never be greater than 9.2:1. All crate engines may not be altered from factory specs. Any evidence of tampering with engine components will result in disqualification, confiscation, fine, and suspension for balance of season. TOMAH-SPARTA SPEEDWAYTech staff reserves the right to impound motors for inspection or dyno testing. No refreshing, buy new instead. Some repairs may be allowed with prior TOMAH-SPARTA SPEEDWAYmanagement approval. No Ford or Chrysler crate engines allowed.

**23B. IRON HEAD CONCEPT ENGINE** Two valves per cylinder. No aluminum blocks or heads. GM & Ford - 362 CID maximum, Chrysler - 373 CID maximum. All engines must meet the following specifications regardless of manufacturer: Stock or stock replacement cast iron heads with factory valve angles. GM Bowtie numbers 14011058, 10134392,(casting number 14011034 and 12480034), World Products Sportsman II numbers 011150, 011250 & Dart Iron Eagle numbers 10110010-10220010 allowed. Ford 351N and 352N heads, World Products Windsor Sr. 053040 allowed. Chrysler 5249769, 4529446, Casting numbers must be visible on all heads. Minimum combustion chamber 62cc, maximum 2.02-inch intake and 1.6-inch exhaust valves required. Flat top pistons required. A minimum of zero deck height required. 10.8 to one maximum compression ratio. Connecting rods must be magnetic steel. Rod journal minimum diameter 1.900". Oil pan minimum depth 6.5". A 3/4" NPT inspection hole in oil pan required. Inspection hole must be located in line with second or third rod journal of crankshaft, on either side of pan and above sump area (oil level). Hole in windage tray in line with inspection hole required. Valve spring retainers are the only titanium parts allowed. No radius edge lifters. Lifters must be able to rotate in their bores. **No solid roller cam/lifters.** Flat tappet maximum valve lift - .600" (measured at retainer). **Hydraulic roller cam/lifters allowed Maximum lift of .575" (measured at retainer).** OEM style rocker arm mounting required. Firing order may not be altered. Ignition system may not be computerized, programmable or have memory circuits. No magnetos, crank trigger, multiple coil or programmable ignition systems allowed. Production type steel crankshaft with normal configuration counter weights. No dry sump or vacuum systems of any kind allowed. External single stage oil pump allowed on Ford engines. OEM type, mechanical fuel pump, in original location, required. Chrysler engines add 20 lbs. for CID over 362. Intake Manifold: Edelbrock Victor Jr. 2975 (GM) standard (Not tall version), 2915, 2920. (Chrysler), 2921, 2980, 2981 (Ford). Plenum and port configuration must remain as produced. No adapters/ spacers between intake and heads.

**23C. OPEN CONCEPT ENGINE**-American make 8 cylinder small block engine allowed with a maximum cubic inch of 410cid. No aluminum blocks. **(NO LS Series Engines Allowed)** No machine work to the outside of block (*lightening*). Wet sump oiling system only. No magnetos. Aluminum cylinder heads allowed with 25 lbs. bolted in front of the torque plate on each side of the engine; with a total weight package of **2700 minimum. Any roller cam allowed.** Motor mounts cannot be removed or altered. Castings and fittings must not be changed.

### **24. CARBURETOR IRON HEAD & OPEN CONCEPT-**

**24A.** The Holley Ultra Series is NOT Allowed.

**24B** All Non-GM Crate Motors will use Holley 4412 style 2bbl approved carburetor.

**24C.** The Holley Aluminum (Part#0-4412CT) 500 cfm carburetor is now approved.

**24D.** All carbs must pass all UMA gauges and specs.

**24E.** Double throttle return springs mandatory.

**24F.** Holley 4412 Carburetor Rework Guidelines: Body of Carbs: No polishing, coating, grinding, or drilling of holes allowed. Gasket surfaces may be machined for improved sealing. The choke may be removed, but all screw holes must be permanently sealed. Choke horn may not be removed. Boosters may not be changed including no additional holes. Height, size, and shape must remain standard and unaltered. Venturi area must not be altered. Casting ring must not be removed. Base plate must not be altered in shape or size. Butterflies: Must not be thinned or tapered. Screw ends may be cut even with shafts, but screw heads must remain standard. Throttle Shafts: Shafts must remain standard and must not be thinned or cut in any manner. Holley 4412 HP metering block is allowed but cannot have any additional fuel passages drilled and or plugged. Standard 4412 metering block may be drilled/plugged, but can only have a total of 3 fuel passages per side of block, must remain stock appearing for carb style, no aftermarket blocks permitted. Any attempt to pull outside air other than straight down through the venture is not permitted. Jets 12 may be changed. No dial-a-jet devices. No addition of any material, such as epoxy, may be added to carb or parts except to seal vacated external screw holes. Epoxy allowed on boosters of 4412-2 bbl. at main body only. 24G. No fuel injection systems of any kind allowed.

**25. CARBURETOR 602 CRATE**-Holley 4 bbl 650 cfm carburetor #80541-1 (with no modifications) with no adapter plate or spacer. One .065 paper gasket allowed. Double return springs required. (*No fuel injection*)

**26. CARB ADAPTER-** 1-5/8" max thick w/gaskets. Original orientation required, adaptor may protrude into plenum of Intake Manifold by a Maximum of 1/4". Adaptors are one piece only. Tapered or Beveled Adapters Allowed.

**(THIS DOES NOT APPLY TO 602 CRATE ENGINE PACKAGES)**

**27. AIR FILTER**-All air must enter engine through top of carburetor ONLY; Air filter maximum size 14-inches outside diameter by 4-inches high. No flow enhancers or cold air induction permitted. K&N filters permitted. Air filter is mandatory to act as a flame arrestor.

**28. WEIGHT/ENGINE PACKAGE COMBINATIONS.**

**28A.** All cars will be allowed up to a maximum left side weight percentage up to 58% **28B.** Weights include driver, race ready with fuel on board.

**28D.** All weights are minimums with no fuel allowance.

**28E.** All lead weights must be painted white, with the car number painted on each individual piece. All lead weights must be securely fastened. Any lost weight will result in a \$10 per pound fine. No Tungsten or similar weight allowed! All weight must be in solid blocks.

**TOMAH-SPARTA SPEEDWAYMODIFIED**

WEIGHT	ENGINE	CARB	Notes	%
2550	GM 602 Crate #19258602	Holley 650cfm 4bbl 4150 HP carburetor, part number 80541	6200 RPM Chip	58% Left Max
2650	Iron Head Concept Engine	Holley-4412 500 cfm 2bbl	7200 RPM Chip	58% Left Max

<b>2700</b>	<b>Open Concept Engine</b>	<b>Holley-4412 500 cfm 2bbl</b>	<b>7200 RPM Chip</b>	<b>58% Left Max</b>
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Weight Options	Weight
<b>Base Weight</b>	<b>See chart above</b>
Solid Rear Axles with minimum of 1.125 O.D	-25
TOMAH-SPARTA SPEEDWAY Certified 602 Crate Engine	-25
Fabricated/aftermarket front clip add weight to center of front cross member	+25
Ratcheting/Torque Sensing Rear End	<b>NOT ALLOWED</b>

**29. ILLEGAL EQUIPMENT**-Super chargers; turbo charger; nitrous or other injection systems; pressure or electric fuel systems; aluminum blocks; dry-sump systems; floating brakes; Aftermarket brake recirculators; or external oil pumps; multi-coil or crank fired ignition; on board data gathering or timing devices, ABS units, or traction control devices of any kind are not allowed. No titanium, magnesium, carbon fiber or tungsten products. No digital gauges (including tach) no electronic monitoring computer devices capable of storing or transmitting information except memory recall analog tach. All wiring must be visible for inspection. All illegal parts are subject to impound until Nov 1<sup>st</sup> of race season.

30. **RADOS:** Radios are optional but allowed for communications between one spotter only and driver. Spotter must be in designated spotters stand during race.
31. **RACECEIVERS:** Raceceivers are mandatory for Race Director Communications frequency is 454.000
32. **TRANSPONDERS:** Transponders are required, and *are to be attached to the torque plate (back of engine block) on the right side of the car 72" from centerline of rear axle*. All competitors must have timing transponders on their car for the entire program including practice. Available at event.
33. **CAMERAS:** Two cameras max allowed must point out front or rear window.
34. **TEAM DRIVING:** Not Allowed
35. **CHAMPIONSHIP POINTS:** will be awarded per your finishing position. If drivers are disqualified, points do not advance, only winner's purse is past onward.
36. **LOCAL TRACK VISITING EXCEPTION:** Cars from local neighboring tracks/series that have similar but differing rules, and/or similar performance, may be allowed to participate during the season in the interest of welcoming competition. These cars will be granted temporary eligibility status for two weeks at the discretion of TOMAH-SPARTA SPEEDWAYofficials on a case-by-case basis for eligibility and rule book conformity.
37. **TECH INSPECTION:** All cars are subject to inspection ANYTIME before, during, or after a race; Officials reserve the right to disqualify cars, require changes, or impound illegal parts until Nov 1<sup>st</sup> of that race season. Any interference with any official(s) and his/her duties will result in an automatic disqualification, and/or possible suspension. Disqualification (except weight violation) is retroactive to ALL previous events competed in that race meet. Any driver/owner refusing to allow the track officials to inspect his car will lose points and money earned for the night. Driver must provide their own tools for inspection.

**38. PENALITIES: See Below TOMAH-SPARTA SPEEDWAYMODIFIEDS**

<b>WEIGHT</b>	<b>OFFENCE</b>	<b>POINTS</b>	<b>FINE</b>
1-5 LBS LITE	ANY OFFENCE	-10 POINTS	-\$100
6-10 LBS LITE	ANY OFFENCE	-25 POINTS	-\$200
11 LBS & OVER LITE	ANY OFFENCE	DQ	DQ
<b>LEFT SIDE %</b>			
UP TO 0.2% HIGH	ANY OFFENCE	-10 POINTS	-\$100
0.3 TO 0.5% HIGH	ANY OFFENCE	-25 POINTS	-\$200
OVER 0.5% HIGH	ANY OFFENCE	DQ	DQ
<b>TRACK WIDTH</b>			
UP TO 1/8" WIDE	ANY OFFENCE	-10 POINTS	-\$100
1/8" TO 1/2" WIDE	ANY OFFENCE	-25 POINTS	-\$200
OVER 1/2" WIDE	ANY OFFENCE	DQ	DQ