



DRIVERS PLEASE READ

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of 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 EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OF OR COMPLIANCE WITH THESE RULES AND/OR REGULATIONS.** They 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. 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 officials. Their decision is final.

1. SAFETY EQUIPMENT: Drivers under the age of 17 must have approval from Thunderbird Raceway Officials to compete. Rules apply at all times car is on track. Snell-rated SA2010 or SA2015 or newer helmet required. Roll bar padding required in driver compartment. Recommended: Fire retardant padding. SFI approved full fire suit required. Fire retardant gloves and shoes required. We strongly recommend a head and neck restraint system. Right and left seat head supports required if using head and neck restraint system. Recommended: Fire retardant head sock and underwear, collapsible steering shaft, fire bottle or on-board fire system. Drivers side window net required, minimum 16 inch by 20 inch ribbon or mesh style, and must be mounted to roll cage so latch is at top front of window. Maximum four inch tall visor attached to window net. Minimum two inch wide SFI-approved five point safety belt assembly required, must be mounted securely to main roll cage. Recommended: Safety belts no more than two years old. Battery kill switch required within easy reach of driver and must be clearly marked 'OFF' and 'ON'.

2. FRAME:

Must be constructed of two inch by two inch square steel tubing, or minimum 1.75 inch round tubing - with minimum 0.083 wall thickness. Minimum wheelbase of 103 inches, maximum 105 inches, on both sides.

3. ROLL CAGE:

Main roll cage must be at least 1.5 inch O.D. tubing with minimum wall thickness of 0.083 inches. Driver's head must not protrude outside cage with helmet on.

4. DOOR BARS:

Minimum three driver door bars must be at least 1.5 inch O.D. tubing with minimum wall thickness of 0.083 inches. Steel door plate required, 18 gauge or 0.049 inch minimum thickness, must be securely welded or bolted to driver side door bars. Minimum 16"x26".

5. BODY

(see body diagram for specific dimensions): No composite, carbon fiber body panels allowed except roof rock guard and hood scoop. No fins or lips anywhere along length of car. Maximum body width at bottom of doors is 90 inches. Minimum ground clearance is three inches. Must have approved late model nose. Dominator, MD3 and ARP nose are the only allowed. No part of body can be wider than 90 inches. Roof must be mounted directly to the roll cage with no more than 1/2 inch spacer, mounted level, parallel to body, centered on car and rounded down in all directions. Roof and hood may be aluminum or fiberglass. Maximum 1.5 inch rolled down rock guard allowed on roof front. Roof supports and window side panels must extend to edge of body. Window side panels must resemble all aspects of drawing - must have opera window and be same on both sides. Rear spoiler may be maximum 12 inches in material height (including hinge) and maximum 72 inches wide. Spoiler may have rear stiffener, must be one inch or more down from top. Maximum of three spoiler braces allowed, must be mounted in line. Car number must be minimum four inches thick and 20 inches tall and clearly visible, on both sides, top and back of car, and front, if possible.

6. DRIVER COMPARTMENT:

Minimum three windshield bars in front of driver. Lexan or aluminum cowl panel in front of driver allowed, but can be no wider than cockpit and no farther back than steering wheel. Driver must be sealed off from track, driveline, engine, fuel cell, suspension components, battery, coolers, pumps, fuel and oil lines. Aluminum high back seats only, must be bolted in with 0.375 inch bolts. No mirrors. No driver adjustable devices allowed while car is in competition except brake adjuster and right front brake shut-off.

7. FRONT SUSPENSION:

Must be of A-frame or strut configuration. Drop chain and tree bump stops allowed. No air bumps, spring stops, roller skate or hockey puck style allowed. Drop chain must have slack.

8. STEERING:

Rack and pinion steering allowed. Quick-release steering wheel required. Recommend collapsible steering column

9. SHOCKS:

Conventional closed end non-adjustable shock absorbers only. \$200 claim per shock. Must be constructed of aluminum or steel. Coil over covers allowed, must be easily removed for inspection. Remote-reservoir shocks, air shocks, air dumps, inverter, crossover, cross connected, electronic, thru-shaft or externally adjustable shocks are not allowed. One shock per wheel, plus may have one traction shock on left rear and one shock on lift bar.

10. SPRINGS:

One steel coil spring per wheel only. Exceptions are: left front

“take up” spring allowed. All coil springs must be maximum 16 inch (or less) free height with 0.5 inch tolerance. Progressive springs are not allowed. No torsion bars, air bags, air springs or inner liners. Spring rubbers allowed. No stack springs or preloaded spring cage combos allowed.

11. REAR SUSPENSION:

No independent rear suspension. Only one mechanical traction device is permitted, pull bar or lift arm. One bird cage attached with two solid radius rods to chassis per side. Birdcage brackets and attachments must be welded or bolted solid to birdcage except pivoting shock bolt. Chassis mounts must be solidly welded or bolted to frame. Only single puck style open chain limiter allowed on left rear.

12. REAR END:

Quick changes allowed. Standard weight aluminum or steel axle tubes only. No heavy weight axle tubes or inner liners. No weight can be mounted to axle tube. No open tube or cambered rear ends. Must have aluminum spool only, no differentials of any kind allowed.

13. BUMPERS:

Must be either capped, or bent forward at ends, no sharp edges. All cars must be equipped with tow hook or similar device front and rear.

14. TIRES/WHEELS:

Hoosier LM40 tire only. No softening, or conditioning of any kind. Maximum 14 inch wide, aluminum or steel wheels and lug nuts only. Bead locks allowed on all four corners. External bead lock only, cannot make wheel any wider than 14.75 inches. Foam type or securely bolted plastic or aluminum mud plugs allowed on any wheel.

15. BRAKES:

Must be operative and lock up all four wheels during any inspection. Steel brake rotors only. Brake shut-off allowed on right front only (electric or mechanical).

16. EXHAUST:

Round tube headers only. All primary header tubes must enter directly into one collector, at same point, at end of header. No try-y headers, No merge collectors. Must have mufflers.

17. FUEL SYSTEM:

Maximum 750 Holley type four barrel carburetor only with Holley type OEM or OEM replacement booster, float bowls and main body with a maximum of 1- 11/16” base plate on 602/604 engines. Spec engines will run Holley gauge legal 4412 2bbl and must have choke horn. No ICT type or aerosol type boosters allowed. No air dams or devices allowed to increase air flow to carburetor outside of air cleaner. Maximum two inch tall spacer between carburetor and air cleaner base. No cold air boxes, air cleaner duct work, or fuel cooling devices. No electric fuel pumps. Racing fuel cell required, maximum 32 gallon capacity, must be in minimum 20 gauge steel container. Must mount with minimum one inch square tubing or two solid steel straps around entire cell, two inches wide and 0.125 inch thick. Cell must be mounted between frame rails, behind rear end, bottom of cell can be no lower than center section. Fuel cell vents, including cap vent, must have check valves, and bladders are highly recommended. If fuel cell does not have aircraft style positive seal filler neck/cap system - a flapper, spring or ball type filler rollover valve is required. Fuel cell guard must come to bottom of fuel cell and be minimum 1.5 inch O.D. tubing. Fuel shut-off or Oberg style valve mandatory.

18. FUEL:

Racing fuel allowed. No alcohol allowed. No performance enhancing additives, no oxygenated fuel or pressurized fuel systems. Fuel must pass both dielectric meter and chemical tests for additives. Fuel sample may be taken from any car at any time. Spec engines - Gasoline only, no E85 allowed. Crate engines – Gasoline only, no E85 allowed.

19. WEIGHT:

All 602 crate cars must weigh minimum 2,300 lbs. after race with driver. All 604 crate cars must weigh minimum 2,400 lbs. after race with driver. All spec engine cars must weigh minimum 2400 lbs. after race with driver. The officials can at any time adjust these weights. Ballast must be painted white with car number on them. Must be securely fastened to frame or roll cage with minimum two 0.5 inch steel bolts, inside body panels, not on rear bumper. No ballast and/or loose objects in driver's compartment. Only carbon fiber components allowed are rock guard and hood scoop.

20. BATTERY/STARTER:

12volt battery only, no lite weight lithium batteries. Battery must be securely mounted to chassis, protected by tubing, and positive terminal must be covered. Starter must be in working order. Car must start under its own power. Car must leave initial staging area on demand, unaided, or go to rear of that race.

21. GAUGES/ELECTRONICS:

No cell phones, unapproved cameras, transmitting or listening devices (exception is one-way Race Receiver radio by officials), timing retard controls, or digital gauges (Exception is digital tach). No electronic monitoring computer devices capable of storing or transmitting information except memory recall tach. All spec engines MUST use maximum 7,800 rpm rev limit. All crate engines MUST use maximum 6,600 rpm rev limit. The MSD 6427 ignition box is the only box allowed in this class. Track officials reserve the right to exchange or impound the ignition box at any time. No additional ignition accessories allowed. All components must be out of reach of driver, but accessible for inspection with rev limiter facing upward. No crank triggers. No electronic traction control devices.

22. TRANSMISSION/DRIVESHAFT:

Must have at least two gears forward and one gear reverse, plus a neutral position. Brinn, Falcon and Bert type transmissions allowed. Must be able to put in and out of gear with car sitting still and engine running. No overdrive transmissions. All transmissions must bolt directly to back of bellhousing that bolts directly to engine block. Must use steel or aluminum driveshaft (NO carbon fiber driveshaft) 2" min in diameter and be painted white. 360-degree drive shaft loop required, minimum 0.25 inch by two inch steel strap, or one inch tubing, mounted six inches back from front U-joint.

23. ENGINE LOCATION:

Measured from centerline of upper ball joints to center of number one spark plug hole. Maximum setback is eight inches.

24. (A) SPEC ENGINE:

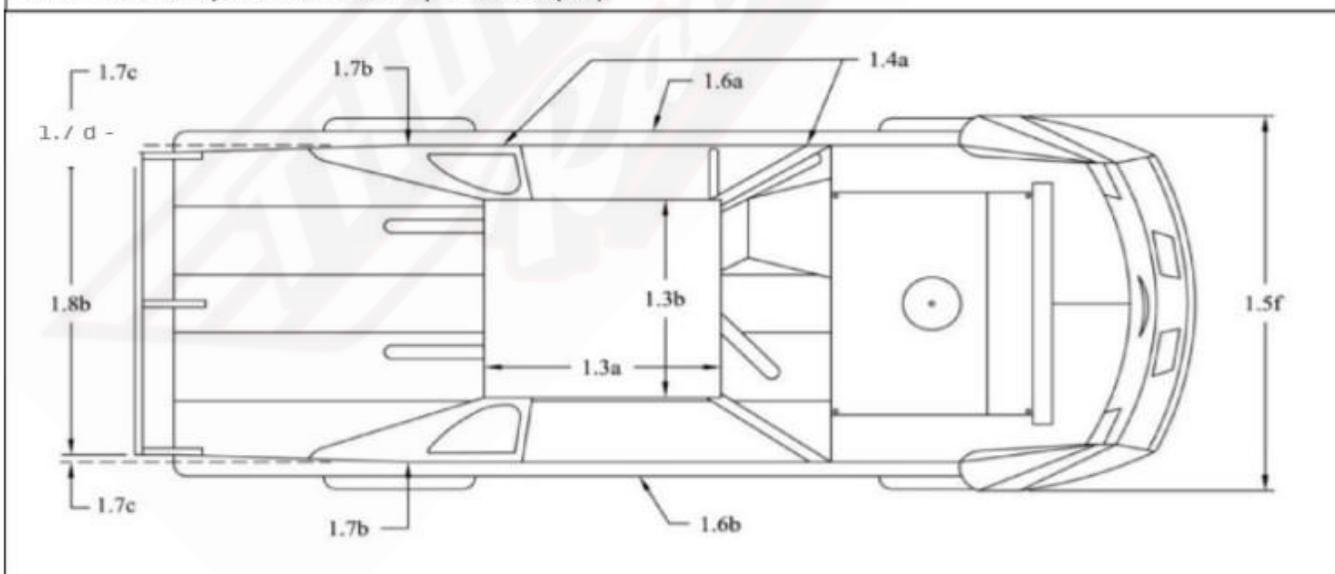
Any American make engine allowed. Steel heads, block and oil pan (no aluminum). Castings and fittings cannot be changed, no machine work to lighten the engine will be allowed. No cubic inch limit. Full roller rocker arms allowed. Must have 1-inch inspection hole in intake to view camshaft and lifters. No stud girdles. Flat tappet cam/lifters only, cannot alter lifter bores they must be stock diameter. Cam must be stock diameter no large bore cams allowed. No mushroom lifters. No roller cams. OEM firing order cannot be changed (GM: 1-8-4-3-6-5-7-2). Steel or aluminum water pumps allowed. No electric water pumps allowed. 'Wet' sump oiling system only. Accumulator allowed – cannot be located between seat and door bars. Must be on 4412 gauge legal carb.

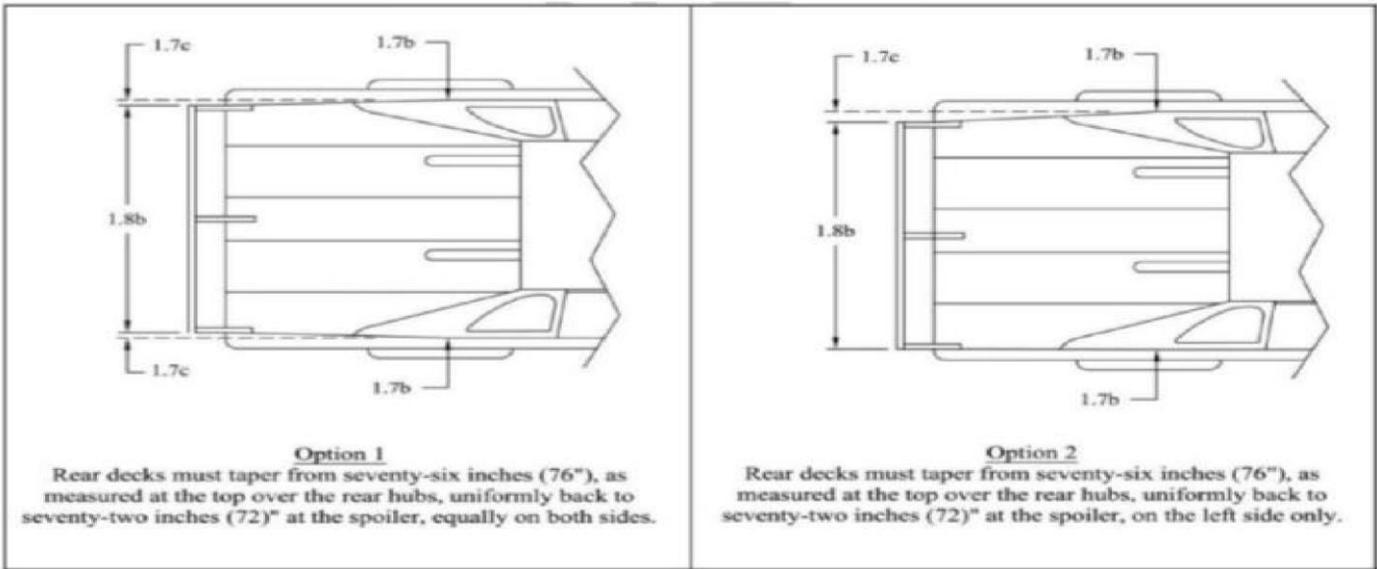
(B) CRATE ENGINE:

If carburetor spacer is used on crate it can only be a maximum of 1" tall. The spacer cannot extend into the intake manifold. Maximum 0.100-inch thickness gaskets only, one on top and one on bottom of spacer. Must use unaltered sealed GM 604 or 602 crate engine. Upon inspection, any different, altered, or missing GM seal bolts will result in penalties. Track officials reserve the right to exchange or impound any engine at any time for competitive analysis and inspection. Failure to allow the engine to be impounded will result in disqualification from the event and further penalties.

Body Dimensions

- 1.3a – Roof length must be a minimum of forty-four inches (44") to a maximum of fifty-four inches (54").
- 1.3b – Roof width must be a minimum of forty-eight inches (48") to a maximum of fifty-two inches (52").
- 1.4a – All roof side panels must extend to edge of decking.
- 1.5f – Front fender flares cannot extend beyond front tire more than one inch (1") in width with the wheels pointing straight.
- 1.6a – Door cannot exceed seventy-six inches (76") in it's entirety at top of door.
- 1.6b – Door cannot exceed ninety inches (90") in width at the bottom in the center of car.
- 1.7b – The quarter panels cannot exceed seventy-six inches (76") in width at any point behind the center of the rear hub as measured at the top.
- 1.7c – Rear decks must taper from seventy-six inches (76"), as measured at the top over the rear hubs, uniformly back to seventy-two inches (72") at the spoiler, equally on both sides.
- 1.7d – Four inches (4").
- 1.8d – Maximum spoiler width is seventy-two inches (72").





1.2c - Stock Nosepiece can extend a maximum of thirty-three inches (33") from center of front hub to farthest point extending forward!

1.3d - Roof height must be between forty-five inches (45"), and forty-eight inches (48") from the ground.

1.5d - Front fenders may not be higher than fenders by more than four inches (4")

1.6c - Doors can not exceed thirty-seven inches (37") in height measured from the ground.

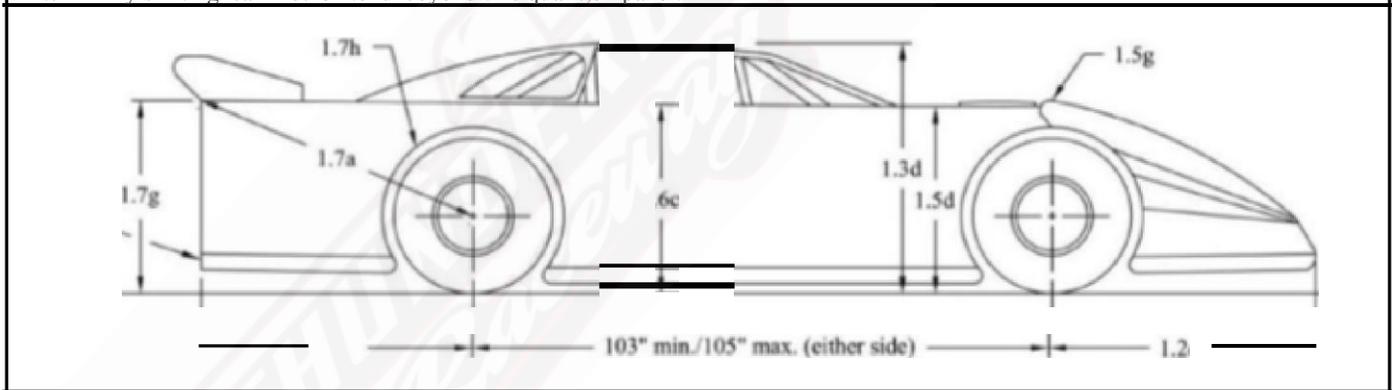
1.7a - fifty-three inches (53") maximum height from center of rear hub to top center of quarter panel.

1.7f - forty-nine inches (49") maximum length from center of rear hub to end of quarter panel.

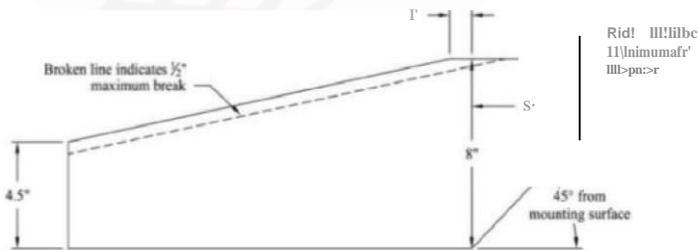
1.7g - forty-nine inches (49") maximum height from top of deck to ground.

1.7h - Minimum of two inches (2") clearance from body.

1.7i - Any skirting can not extend beyond the quarter panel.



Spoiler Support



Not more than three (3) spoiler supports permitted. Front and rear must be in line.

Dimensions Have Zero Tolerance

