

Parkland Racing Association Inc.

THUNDER STOCK RULES 2011

1. **BODIES**

No modifications of any kind allowed to any part of the car unless specified. Any existing car that is unapproved will be allowed to race if it meets all safety requirements. Any car that is unapproved, and is deemed to have an advantage will be penalized.

The Thunder stock class will be open to any North American made 2 or 4 door hardtop or sedan, 1960 or newer, with a wheelbase of **not less than 113 with ½" tolerance.**

All burnable material, lights and white metal must be stripped from the car.

All glass other than the windshield must be removed.

The firewalls must be patched with minimum twenty-gauge steel to seal them.

All body parts must be stock, and mounted in the stock way. Hood, Trunk and door hinges must remain stock. Doors must be chained, bolted or welded shut. Hood and trunk lid must be securely fastened.

Sunroofs and t-tops must be enclosed.

NO gutting of vehicle allowed except room for door bars on driver's side.

Front inner wheel wells may be removed, but only what can be unbolted, no cutting out of any material other than a 2" radius around wheel wells for tire clearance.

Minimum car weight to be no less than 3400 lb. with the driver. All ballast must be painted white and marked with car number. Race officials may ask any car with an advantage to add extra weight.

All sharp edges, torn fenders, bumpers and body panels are to be repaired prior to next race day.

A hood is mandatory at all times.

B. BUMPERS

Stock bumpers, mounted with stock mounts, in stock locations.

Bumpers must be safety chained to keep them from separating from the car.

One straight tube, maximum of 2" O.D. can be welded in directly behind the front bumper and in front of the rear bumper, between the frame rails.

Metal gouge guards must be installed and attached from bumper to body panel.

NO cutting of bumpers.

Easily accessible tow chains must be mounted to the frame or bumper, on the front and rear of the car.

C. FRAME AND SUSPENSION

Stock suspension only for year, make and model of car. All replacement parts must be stock replacement parts. No modifications or exchanging parts between models and makes allowed.

Stock mounting location for shocks. Only one shock per wheel. NO racing shocks. No stock mount racing shocks.

Stock location for springs only. Stock unaltered springs only.

Anti sway bars cannot be adjustable and must be equally spaced side to side.

Body bushings must be stock.

Front alignment may be set to drivers' preference, but no modifications are allowed to any part to improve alignment over stock adjustment.

D. RADIATORS

Aluminum Radiators allowed, must be in stock location with stock type mounts.

E. DIFFERENTIAL

Must be stock unmodified differential for year, make and model. No locked, limited slip or posi-traction units allowed. The gear ratio must be a stock ratio for that year, make and model.

F. TRANSMISSION

Stock type unmodified automatic transmissions only. NO standard transmissions.

Scatter shield recommended. Stock type unmodified torque converter.

Must have all gears operational at beginning of race day, e.g. TH350 must have three forward and one reverse; PG two forward and one reverse.

All driveshafts must be steel, painted white, and have a safety hoop (can be ¼" chain) near the front universal.

G. TIRES

The tires must be DOT approved radial passenger car. NO ground grips or lugs.

NO racing brand tires (McCreary, Hoosier etc.).

Minimum tire pressure is 30 lbs.

H. WHEELS

All wheels must be of steel construction and no wider than 7".

Maximum 4" backspace, minimum 3" backspace, measured from inner bead flange to mounting flange.

NO aluminum or magnesium wheels allowed.

NO beadlocks or wheel spacers.

Steel wheel studs only, ½” studs recommended.

Stud threads must extend past the nut when rim is mounted.

1" lug nuts mandatory.

I. ROLLCAGE

All roll cage material must be a minimum of 1.66 OD steel tubing with a minimum of .095 wall thickness.

All joints must be welded three hundred sixty degrees.

All roll cages must be attached to the frame with a minimum of 4 mounting points. No part of the roll cage may protrude from the bodywork.

The main hoop behind the driver must have a minimum of one horizontal cross brace. Driver's helmet must be below roll cage.

A bar must be added to the centre of the roof hoop for added protection.

3 horizontal drivers' side door bars must be used with a minimum of 2 vertical supports per bar continuing down to frame. 1 bar must be used on the passenger side of driver's compartment.

One dash bar is required running horizontal between doorposts.

Drivers side pillar bar is mandatory.

One bar is allowed to run through the front firewall, on the drivers' side, for leg protection.

All major joints must be gusseted or triangulated.

Driver's door bars must have 18gauge anti-penetration plate covering all holes from the front pillar bar to back pillar bars closing the holes between the 3 horizontal door bars.

No tubing, pipe, or any other form of reinforcement is allowed in front of the front firewall, or rearward of the rear firewall.

J. SAFETY

All seats must be a racing type seat.

Seat belts are to be racing type 5 point 3" width mounted securely to frame, seat frame, and roll cage. All belts must be mounted as per manufacturer's specifications, and be in good condition. Must be SFI rated and be replaced as per SFI date code on tag. (Maximum 5 years old) Driver's side quick release window net is mandatory mounted securely to the roll cage.

All cars must have a windshield or screen (maximum 2" square x minimum 10-gauge wire, or equivalent) with 2 minimum 5/8" bars in the centre of opening.

Battery must be mounted securely. It must be encased in a marine style box if mounted in the driver's compartment.

Fuel tanks must be mounted inside the trunk, and be securely fastened. No tanks larger than 15 gallons allowed. Boat tanks are allowed. Fuel cells are recommended.

All cars must have an operable 2 pound minimum fire extinguisher mounted in a quick release bracket in reach of the driver at all times.

Each pit area must have an operable ABC fire extinguisher.

Drivers must wear a minimum of SFI 3.2 racing suit mandatory. Minimum DOT approved helmet; SA 2000 recommended. Driver must have appropriate eye protection.

Each car must have a clearly labelled kill switch which is easily accessible from outside the car.

All cars must have two clearance lights, red in colour, one in each corner of vehicle's back window area.

If running an electric fuel pump, there MUST be a separate pump shutoff switch within reach of the driver, and an oil pressure controlled pump disconnect (Hobbs switch) to interrupt the circuit when the motor stops.

K. ENGINE

Absolutely stock for year, make and model. If an engine change is required for reliability, maximum engine size allowed is 350 chev, 351 ford and 360 dodge, with a .040 oversize allowed within the same manufacturer family lines. When engine displacement has been changed from stock by exercising this rule, the maximum allowable carb is a 500cfm Holley.

The choke plate may be removed.

Exhaust must exit behind the driver. Mufflers and converters may be removed. Largest exhaust tubing allowed is 2-1/4".

Engines must be adequately tethered.

L. BRAKES

Absolutely stock for year, make and model.

All 4 brakes must be operational.

Every part must remain stock unless it has specifically been mentioned in these rules as being allowable to alter. Any car deemed to have a distinct advantage by tech officials may be penalized by adding weight. All tech official's decisions are final.