

# *Heath Farms Indiana/Ohio Thunder Car Rules*

## **2019**

### **Thunder Car Rules**

The absence of a particular rule does **NOT** necessarily mean its approval!

#### **FRAME**

1. Any 1968 and newer, full frame, rear wheel drive full sized car, with a stock wheelbase from 108" to 116" except **NO** Camaro, Firebirds or Mustangs.
2. Frames must remain OEM.
  - A. No cutting, sectioning, notching or modifying of frame allowed.
  - B. 2 x 3 rectangle steel stock may replace the rear tail at a point from the center of the rear end back. This material must retain stock height and configuration of the OEM frame.
  - C. Minimum frame height at any point on the car must be 6" inches at all points

#### **BODY**

1. Complete bumper to bumper steel body must be retained.
2. **NO** T-tops.
3. All doors must be welded, chained or bolted shut.
4. All glass, headlights, taillights, and mirrors must be removed.
5. Full front windshield is required. Lexan windshield ok.
6. All bumpers must be secured by means other than OEM (Extra bolts, chains or welded in place).
7. Front and rear bumpers can be replaced by structural steel no larger than 2 inch x 3 inch in size and no wider than the center line of the tires. A radiator hoop and fuel cell hoop may be attached to it.
8. Spoilers are prohibited.

#### **INTERIOR**

1. The OEM complete steel floor pan and front firewall must be retained to and including the rear firewall and located in stock location.
2. The only modifications allowed to the floor pan and front firewall are to repair rusted places and patch holes.
3. Front wheel wells, ½ the rear wheel wells, and trunk floor may be removed.
4. The stock steering column may be replaced with aftermarket tubing, heims, u-joints and column supports. A collapsible steering shaft is highly recommended. **NO** straight steering shafts (from box to steering wheel) must have a minimum one u-joint.
5. Switch and push button may replace key switch.
6. One battery box must be securely mounted outside the driver's compartment or be securely mounted, covered and behind driver's seat.

#### **ROLL CAGE**

1. All cars must have a roll cage that includes four corner posts, **roof high** that are connected to the top and welded to the frame at the bottom.

2. Cage center section must be braced back to the rear frame rails.
3. Roll cage must be centered on the OEM frame rails. Top halo must be full, no half or three quarter cages or halos. Top halo must fit tightly against the roof.  
**NO** dropped cages.
4. All cars must have four door bars on the left side that arch out to the door skin and at least two straight bars on the right side. All joints must be properly welded.
5. All cages must have a 1/8 inch thick aluminum plate or 1/8 inch steel plate on the outside of the driver's door bars, running from frame rail to top door bar and from door post to door post.
6. All roll cage tubing must be a minimum 1 3/4 inch OD and a minimum .095 wall thickness. **NO Muffler Tubing.**
7. **NO** bars off top halo forward to the right/left front hoop.
8. All roll cage installations are subject to Tech inspection and approval.

#### **FRONT SUSPENSION**

1. **All** suspension **MUST** remain in stock, **UNALTERED LOCATION** and be of stock components. No offset suspension components of any kind may be used. **Frame and suspension may not be added to or altered. Adjustable spring cups are ok.**
2. Maximum 3 inch stem on all ball joints, measured from top of base to top of stem. **NO** dust boots.
3. **NO** adjustable eye bolt sway bars. OEM stock type bars mounted in stock location maximum diameter of 1.25 inches.
4. **NO** heim joint tie rods or sleeves, OEM stock only.
5. Maximum tread width of 78 inches measured outside of tire to outside of tire at bottom. Wheel spacers are OK to use.
6. Aftermarket coil springs and shocks, mounted in stock location, are allowed.  
**NO TAKE APART SHOCKS.** Steel body, stock appearing and stock mounting shocks **ONLY.**

#### **REAR SUSPENSION**

1. Aftermarket coil springs and shocks, mounted in stock location, are allowed.  
**NO TAKE APART SHOCKS.** Steel body, stock appearing, and stock mount shocks **ONLY.**
2. Jack bolts and spring cups are allowed on **rear** only.
3. OEM rear end housing must be used for the make and model of car being used no mono balls.

4. Any available gear ration may be used.
5. Rear end differential may be open, positive or locked. 9 inch Ford rear end is ok with OEM drum brakes only. No floaters.
6. OEM rear trailing arms and top links with stock type bushings.
7. Minimum frame height at any point on the car must be 6"

#### **DRIVE LINE**

1. Automatic or manual transmissions permitted.
2. Manual transmissions must be unaltered cast iron stock oem 3 spd with all gears ( no lightning of trans or parts of trans ) FLYWHEELS **MUST BE FACTORY OEM STEEL ONLY** stock weight & size for a minimum 10"OEM STOCK STEEL PRESSURE PLATE AND A 10" MINIMUM OEM

FACTORY STOCK CLUTCH DISC. No racing clutches, ( NO NODULAR IRON OR CAST IRON FLYWHEELS ) NO light weight flywheels, No lightning of flywheels, No aluminum flywheels. ( MANDATORY blow proof bell housing or minimum 1/4" trans shield or cover is required ) Must have forward and reverse gears at all times. Racing clutch pedal, hydraulic throw out bearing permitted with single master cylinder.

3. Automatic transmissions must run stock appearing unaltered working torque converter and have a working reverse gear. No direct drives or electronic clutch . (HIGHLY RECOMMENDED YOU USE A TRANSMISSION SHIELD FOR AUTOMATIC TRANSMISSION AS WELL ).

4. No trans coolers inside drivers compartment

### **BRAKES**

1. Brakes must be OEM.

2. Cars must have functional brakes on all four (4) wheels.

3. **NO** Aftermarket Pedals or Master Cylinders allowed.

4. **NO** brake bias devices allowed.

### **ENGINE**

1. The 2<sup>nd</sup> plug on the left side of the engine must be located within 1 inch of the center of the ball joint.

2. **Cylinder heads and block must be cast iron. Aluminum intake may be used with a 50 # weight penalty.**

3. Twenty-three (23) degree cast iron cylinder heads only.

4. **NO** interchanging engines between makes. Engine must be of same corporation as frame and body.

5. Any Holley or Rochester carb allowed. **NO** Dominators.

6. Carb spacers allowed 1 inch maximum.

7. Ignition system must remain completely OEM.

8. **NO** aftermarket distributors, MSD boxes or add on electronic amplifiers.

9. Aftermarket aluminum radiators OK, mounted in the stock position.

10. **NO** antifreeze allowed. **IF** detected the penalty is disqualified for the night no money no points.

11. Radiator overflow hose must exit at right side windshield.

12. All cars may have OEM cast iron exhaust manifolds. **NOTE:** Headers are allowed but may not be cross over or 180's . **NO GRASS BURNERS. If headers are used there will be 50 lb. weight penalty.**

13. Exhaust must exit behind driver, within 18 inches of the rear end housing.

14. Maximum 2 exhaust pipes with OD no larger than 3 ½ inches.

15. **NO** NASCAR exhaust.

16. **NO** Roller Cams.....Roller Rockers permitted

17. **NO** oil coolers allowed inside drivers compartment.

### **WHEELS/TIRES**

1. All cars must use a maximum 8 inches wide, steel, racing wheel. Racing wheels are encouraged.

2. **NO** magnesium, aluminum or slotted wheels allowed.

3. **Hoosier Comanche or any 15" or 16" D.O.T. 70,75 series radial tire may be used on a maximum of an 8" wide steel wheel.**

### **FUEL CELL**

1. All cars must have a made for racing fuel cell.

2. Fuel cells shall be securely mounted as far forward a possible, between the OEM frame rails and no less than 10 inches off the ground.
3. Fuel line may **NOT** pass through the driver's compartment.
4. DOT pump gas or approved racing fuel only.
5. **NO** electric fuel pumps.

#### **WEIGHT**

1. Minimum weight 3200lbs with driver.
2. All ballast must be painted white and securely mounted with the car number on it.
- 3.

#### **SAFETY**

1. All cars must have an approved aluminum seat, mounted securely to the frame and cage. **NO** plastic or fiberglass seats.
2. All cars must have an approved five point seat belt assembly, minimum of 3" inches wide, less than 3 years old and securely bolted to the frame and cage.
3. A Hans, Hutchens or Neck collar is mandatory.
4. A Snell 2005 SFT or higher helmet is mandatory. Last year for 2005 helmets. No motorcycle helmets.
5. A minimum single layer one or two piece fire suit is required, with gloves.
6. Fire Bottle is highly recommended. Fire Extinguisher is mandatory.
7. An approved window net is required, with the latch at the top/front.
8. **NO** mirrors. ALL mirrors must be removed. **NO** radios.
9. **All roll bars must be padded.**
10. All safety equipment and installation must be approved by Tech.

#### **DEFINITIONS**

1. STOCK – A part that was mass produced for the automotive industry.
2. OEM – AS it was produced by the Original Manufacturer for the make model and year of the particular car or style of car.
3. STOCK TYPE - Aftermarket part similar in design and functions as the stock OEM part.
4. **NO MEANS NO.**

#### **OVERALL**

#### **NONE OF THESE RULES ARE MEANT TO IMPLY OR GUARANTEE IF FOLLOWED, THESE SAID RULES WILL PREVENT INJURY OR DEATH.**

1. THE INTERPRETATION OF THESE RULES IS LEFT TO THE DISCRETION OF THE TRACK TECH OFFICIALS.
2. RACE TRACK RESERVES THE RIGHT TO CHANGE, MODIFY, ADD OR DELETE TO THESE RULES AT **ANY** TIME AS THEY DEEM NECESSARY TO ENSURE **FAIR, COMPETITIVE AND AFFORDABLE RACING.**
3. ALL DECISIONS OF THE TECH OFFICIALS ARE **FINAL** AND BINDING WITHOUT EXCEPTION.
4. **THE CAR DRIVER IS RESPONSIBLE FOR ALL CREW MEMBERS AT ALL TIMES.**
5. **SPECIFIC PROTESTS MUST BE IN WRITING ON PROTEST FORM (AVAILABLE FROM TECH MAN) BEFORE THE START OF THE FEATURE RACE ACCOMPANIED BY PROTEST FEE OF \$100. IF PROTEST IS UPHOLD PROTESTER GETS ALL MONEY BACK**