

## 2021 Shadybowl Speedway Thundercar Rules

IT IS UP TO YOU AS A DRIVER OR CAR OWNER TO FOLLOW THESE RULES AND COMPLY WITH THEM AT ALL TIMES **INSPECTION EQUIPMENT USED BY AN OFFICIAL WILL BE THE STANDARD OF THE RACE TRACK AND ALL TESTS WILL BE FINAL.**

### **ELIGIBLE CARS**

1. Any RWD 1955 – Present American made full frame cars. ( No convertibles, no uni-body cars Mustang , Camaro, Nova, firebird, etc )

### **WHEELBASE**

1. Minimum wheelbase 108" Maximum 116".

### **WEIGHT**

1. Minimum 3200 lbs. with driver.
2. Maximum left side weight 56% with driver
3. Track width maximum 78 inches, measured outside of tire to outside of tire at bottom.
4. Minimum FRAME & BODY height at any point on the car must be 6" inches at all points.

### **FRAME**

1. Body and Frames, Engines (NO 400 blocks permitted) must match manufacturer's and conform to all rules set forth for this division.
2. No cutting, sectioning, notching or modifying of frame allowed.
3. For rust and damage purposes, also safety of fuel cell mounting and rear bumper mounting, rear frame can be cut off after center line of rear housing towards rear and replaced with square tubing. This material must retain stock height and configuration of the OEM frame.
4. No part of FRAME OR BODY will be lower than 6" to ground.

### **ROLL CAGE AND SEAT**

1. ROLL BARS MUST BE 1 3/4" OD with .095 WALL THICKNESS. 4-point roll cage, (minimum) with front and rear hoops. No offset roll cages. Perimeter cages ONLY!! . WELDED PLATED TO PERIMETER FRAME.

- MINIMUM 2-point in front of driver. 2-point behind driver ( front & rear weight percentages will be in effect ). all cars must have 1/4" thick door plates in driver door bars.
2. aluminum racing seat MANDATORY mounted to cage (full containment seat or add on kit highly RECOMMENDED if driver is over 18 years of age ).
  3. Cage must be welded in a professional manor, seat must be mounted in a professional manor and is subject to approval by tech official.

## **FRONT SUSPENSION**

- 1. All suspension parts must remain oem stock for year, make and model of car being used to race. No offset suspension parts of any type. No offset bushings. (Aftermarket springs permitted. Adjustable cups permitted.)**
- 2. maximum 3 inch stem on all ball joints measured from top of base to top of stem (no) dust boots.**
- 3. No altering spindles, upper and lower A-frames, 1 1/4 inch maximum sway bar ADJUSTABLE ON ONE SIDE (WITH THREADED ROD ) no aftermarket allowed) , draglink, tie rods-oem parts only for year make and model of car being used. Upper and lower A-frames and spindles must be the same on both sides and match make and model of car being used.**
- 4. Shocks sealed steel non take apart non adjustable economy stock appearing and stock mounting shocks only**
- 5. Shocks must be mounted in stock oem location in stock mounts**
- 6. Springs must be mounted in oem stock factory locations. No wedge bolts, (Adjustable cups permitted) no variable rate springs, no chasis limiting devices of any kind, no bump stops, (factory rubber stops will need removed) All suspension parts must be steel oem and stock. (exception aftermarket steel springs) MAXIMUM 1 SPRING RUBBER PER SPRING**

## **REAR SUSPENSION**

- 1. Stock rearend for make and model or Ford 9" (permitted), drum brakes only for any make of rear end, can be open, posi, or locked**
- 2. Oem stock trailing arms for year make and model of car being raced. No offset suspension parts of any type. No offset bushings. Upper and lower stock oem length only, non-adjustable. Oem factory bushings only. Oem style mounts only. Rear trailing arm mounts oem or similar, No adjusting holes, must be in stock location. (one (1) mounting hole in the front mount, one (1) mounting hole in the rear mount.)**
- 3. Wedge bolts or adjustable cups are permitted in rear only. ( aftermarket steel springs permitted NO chains permitted for any reason) Shocks must remain in factory location on factory mounts. No spacers, No tubing mounts. OEM ONLY!**
- 4. Leaf spring cars. Leaf springs must be in stock mounts in stock locations. ( only one hole at top, one hole at bottom of shackles permitted and must be stock length) no sliders No lowering blocks. all parts Must be oem factory steel , OEM factory steel leaf springs only for year make and model of car being used**
- 5. No chasis limiting devices of any kind. No bump stops. (factory rubber stops will need removed)**
- 6. Shocks sealed steel, non take apart, non adjustable, economy stock appearing and stock mounting shocks only**

## **BRAKES**

1. Oem steel drums, oem steel calipers only.
2. All 4 brakes must be in working order. Complete system must be oem stock and steel.
3. Racing brake pedal with single master cylinder permitted. No brake bias adjustments permitted.

#### **BODIES**

1. All doors must be welded shut. Headlights and taillights must be removed and covered. All glass must be removed. Windshields must be lexan or equivalent. cars with no windshields must have 3 bars and screen first time to track . SECOND time to track or race MANDATORY car has a full lexan windshield.
2. Interior must be free from debris and flammable materials.
3. All outer body panels recommended to remain oem stock steel. If damaged, beyond repair can be replaced with magnetic steel formed to be stock appearing.
4. Rear 1/2 of wheel wells in trunk and Trunk floor may be removed for fuel cell mounting.
5. MANDATORY Front firewall must remain intact and oem to body, MANDATORY floor board must be stock from front firewall to rear firewall, front half of rear wheels must be retained rear firewall must be enclosed with sheet metal patching of floors is permitted No other decking PERMITTED in car.
6. No part of body will be lower than 6" to the ground.

#### **BUMPERS**

1. Stock bumpers or aftermarket covers nose or tail pieces permitted ends must be hooked to fenders and quarter panels. ( no late model or template nose or tail pieces permitted ) a inner bumper made of a maximum of 2"+ 2" hollow tubing ( maximum .095" wall thickness ) behind oem bumper , behind bumper cover , behind nose piece , behind tail piece if applicable is permitted. ( example some cars have fiberglass nose and a chrome bumper no cover these cars could have a tubing bumper exposed ( highly recommended to use some type of some type of cover ) like an impala cover on a chevelle looks good. Radiator hoop and fuel cell hoop behind bumpers is permitted. .
2. No spoilers, scoops, or ground effects either stock or aftermarket are not allowed.
3. Numbers must be 18" tall on both doors and on top with number readable from outside of track. Car number in upper right hand corner of windshield at least 6" in height.

#### **ENGINE**

1. Factory OEM production only (NO Aftermarket blocks or NO 400 blocks permitted) Must be same as corporate manufacture of car GM to GM, Ford to Ford. Block and Heads must be cast iron only. GM cylinder heads must be 23 degree only. 2nd plug on the left side (driver) of the engine must be located within 1 inch of the center line of the ball joint.
2. Heads must be standard valve angle and plug angel per engine manufacture.
3. No roller cams. Roller rockers permitted. ( no shaft mount rockers permitted )

4. EXHAUST: Manifolds ( Headers permitted No cross over or 180's, No grass burners. Maximum of 2 exhaust pipes with OD no larger than 3 1/2" exhaust pipe may be used. Pipes must exit behind drivers seat. No flex pipe. No X or H pipes allowed 50 lb penalty for headers
5. INTAKE: Unaltered stock cast iron. ( aluminum intake may be used with a 50lb penalty.) Intakes may have 1/2 inch high (maximum) carb flange on intake carburetor spacers permitted with a 1" maximum total for all used.
6. ignition system : must remain completely OEM
7. NO aftermarket distributors ,MSD boxes or add on electronic amplifiers.
8. CARBURETOR: any Holley or Rochester ( 1 single carb permitted) No Dominators or predators.
9. wet sump aftermarket oil pan permitted. ( no dry sump systems.)
10. FUEL LINE: Must run direct from fuel cell to fuel pump to carburetor. No coiling of fuel of line. No cool cans. Fuel line can run through right side of drivers compartment, must be encased in a 1" outside diameter steel tube.
11. If electric fuel pump is used a mandatory oil pressure shut off switch must be used
12. aftermarket aluminum radiators permitted in stock location. radiator overflow must exit at right side of windshield. ( NO ANTIFREEZE PERMITTED IF LEAKED ON TRACK FOR ANY REASON YOU WILL BE FINED \$100 )

#### **TRANSMISSION**

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. 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.

#### **WHEELS & TIRES**

1. WHEELS - Maximum 8" steel rims. Racing wheel option - 15x8
2. TIRES - Hoosier Comanche or any 15"16" D.O.T. 70, 75 series radial tire may be used on a maximum of a 8" wide steel wheel
3. All wheel lugs must be 5/8 with at least 3 threads showing beyond lug nuts.

**SAFETY MANDATORY OR HIGHLY RECOMMENDED PLEASE READ.**

1. Racing seat and mounting subject to approval by Tech personnel. ( full containment or add on kit HIGHLY RECOMMENDED ) ANY MINOR UNDER 18 YEARS OF AGE MUST HAVE A FULL CONTAINMENT SEAT AND HANS DEVICE OR EQUIVALENT HEAD AND NECK RESTRAINT IT IS MANDATORY.
2. Fuel cells with steel can are MANDATORY.
3. Batteries must be securely mounted and covered with non-flammable material in the driver's compartment or can be mounted under the left side of car in front of rear end by left side wheel MANDATORY.
4. All lead must be painted white with car number in contrasting color. All lead must be securely fastened. No lead in driver compartment MANDATORY.
5. All cars must have two safety loops around drive shaft drive shaft must be steel and painted white MANDATORY.
6. Window nets are MANATORY, no homemade or string nets. Must have quick release latch, latching mechanism must be mounted on the top left side of the window. Window net must be welded to the roll bars, not the body.
7. Resilient padding designed for roll bars must be used on any part of the roll cage that can be reached by any extremity of the driver MANDATORY.
8. Snell2015 or newer helmet MANDATORY with sticker visible for inspection.
9. Clean, fire retardant driver racing uniform, racing shoes and racing gloves MANDATORY for fire protection.
10. Approved seat belts: Double shoulder (5-point) harness and lap belt MANDATORY. Must be mounted to roll cage, no floor mounted belts and must be less than 3 years old.
11. All competing cars must possess a working fire extinguisher (MANDATORY).
12. No radios allowed PERMITTED. No mirrors PERMITTED.
13. A shut off switch clearly marked on and off located in reach of driver and track crew is MANDATORY.

**ALL RULES SUBJECT TO INTERPRETATION OF SHADYBOWL SPEEDWAY OFFICIALS ALL RULINGS ARE FINAL.**

**These rules are subject to change as conditions warrant without notice to benefit this class or series. All general guidelines for participants; including Guidelines Disclaimer, Safety, Racing Rules, Conduct, Substance Abuse Policy, Official Decisions, etc.; listed in the 2021 Shadybowl Speedway "Official Rules and Regulations" (stated in general rules apply unless otherwise stated in these rules.)**

**All cars will display a one or two digit number series (0-99) as assigned.**

