



## 2022 HORNET RULES

**EXPLANATION:** Drivers must be 14 years of age or older. Drivers and crew members the age of 14-17 must have a minor release form signed & notarized by both parents or legal guardians to enter the pit area. All entrants must have a valid pit pass. The Hornet division is designed to promote greater interest in stock car competition, to enable new and inexperienced drivers to compete without spending a significant amount of money for race equipment. Decision on interpretation of the rules by the Technical Inspectors shall be final. No changes from stock production automobile or component parts except as listed in these rules. IF IT DOESN'T SAY YOU CAN, YOU CAN'T! Any equipment that the officials consider exotic or not in the intent of the rules shall be considered illegal. This class is designed for entry level and is meant to be an inexpensive class to race in.

### 1. **COMPETING MODELS**

A) Any 4-cylinder passenger car that come from the factory with seating capacity for at least four persons and a maximum of 104 inch wheelbase may be used. No all wheel drives.

B) No convertibles or T-tops.

2. **BODY:** Remove the carpet headliner, door panels, and all mirrors, except outside driver side mirrors and all seats. Remove head and tail light glass and all window glass except windshield. The factory dash is optional. If the dash is removed, it must be replaced with an aftermarket dash. NO trimming of body panels allowed without tech official approval. NO gutting the hood, trunk., roof and doors. Doors okay if cage is protruding out. All floor pans MUST be intact. All inner panels must be intact. You can cut out trunk for fuel cell. MUST have a sealed firewall front and rear. Stock radiator core support must be in place. Fuel cell must be in trunk and have a 20 gauge steel cover. Battery must be behind driver in a sealed box. Windshield can be lexan or glass. All other glass must be removed. Wheels must remain inside body panels. There must be an open space at the top of the windshield for the class sponsor. If the car came with a sunroof it MUST be covered with at least 20 gauge steel.

### 3. **ENGINE SPECIFICATIONS**

A) Stock Motors, 4-cylinder - no modifications. No turbos.

B) Dual overhead cam motors may be subject to weight penalty **no less than 100lbs mounted in the center of the car.**

C) Stock ECU no chips or programing allowed.

D) **ENGINE BLOCK** MUST be stock OEM. NO aluminum aftermarket. No v6 and no S2000.

E) **INTAKE MANIFOLD** MUST be stock OEM. NO porting. NO polishing. NO deburring.

F) **EXHAUST MANIFOLD** MUST be stock OEM. NO greater than one three quarter inch (1 3/4") exit. NO porting. NO polishing. NO deburring. Cast Iron Only!

G) **ROTATING ASSEMBLY** MUST BE AS FOLLOWS: Rods stock OEM rods. After-market pistons ok. Stock OEM crank per engine.

**H) OIL SYSTEM** must be stock OEM oil system.

**I) ENGINE HEAD**

- a. MUST be stock OEM casting with stock valve size. MUST match block. Can be milled, cast-iron .080 aluminum .040 MAX. NO porting. NO polishing. NO deburring. NO adjustable timing gear. NO aluminum timing gear. NO head studs.
- b. CAM .510 lift max. Style per make and model.
- c. Hydraulic lifter per make. Solid lifter per make. Hydraulic lifter MUST de-pump full stroke. NO relocating cam dowel.

**CARBURATOR** MUST be stock Autolite, Motorcraft, Holley 350/500 with choke horn and with part number in place. Fuel injection okay.

**CARBURETOR SPACER**: Adapter to Holley ok. NO CNC machined or custom machined spacer, one half inch (1 1/2") MAX.

AIR FILTER: AIR FILTER: Can be after-market. MUST fit under hood.

**IGNITION**: MUST be stock OEM per make and model. NO aftermarket, no crank triggers. NO electronic tuning.

**4. TRANSMISSIONS**

A) Manuals or Automatics must remain OEM stock and OEM stock parts including stock clutch parts.

5. **REAR END**: MUST be stock OEM per model. No Lockers. NO welded. NO posi traction. NO locked trans-axles. Driveline must be stock steel and MUST have a hoop 12 inches back from the transmission.

**6. BRAKES & SUSPENSION**

A) Four-wheel stock foot actuated brakes are mandatory – no modifications. All brakes must work.

B) Right front notching of strut tower bolt holes is permitted. STRUT IS NOT TO BE MODIFIED OTHER THAN NOTCHING OF BOLT HOLES.

C) No other suspension modifications allowed. NO RACING SPRINGS. SPRING RUBBERS MAY BE USED, BUT MAY ONLY BE USED IN THE SPRING NOT ON TOP OR BELOW THE SPRING. NO Weight jacks. NO adjustable spring cups.

D) **Right front camber shall be 6 degrees MAX. Measured with MVSO tools.**

E) **Left Front and both rear shocks/struts shall be in stock location. Shocks MUST be stock OEM per make and model. NO air shocks. NO adjustable shocks.**

**7. ROLL BAR**

A) 4 point 1-3/4" .090 tubing roll cage required. Must have 3 door bars on driver side and 2 on passenger side. Technical Inspectors approval.

**8. SAFETY**

A) Head and neck restraints are highly recommended e.g. (HANs or Hutchens Devise)

- B) 5-point harness is mandatory. Belts must be secured to the roll cage. **No mounting to the floor pan.** Belts must be dated by the manufacture and must not be used beyond 5 years past manufacture date.
- C) Fire suits are mandatory.
- D) Driver's window screen or window net.
- E) Helmet. Full face helmet. No open face or motocross.
- F) Neck Rolls are mandatory, if not using head & neck restraint.
- G) Leather gloves or racing gloves. Leather boots or racing shoes.
- H) May have cutter blade or rub rail running from fender to rear quarter, at the center of the door. No sharp edges. Doors must be welded bolted or chained shut.
- I) Race cars must have fire extinguishers securely mounted within reach of the driver. The extinguisher must be mounted on a metal mounting bracket (no extinguisher may be taped to roll bars).
- J.) Battery may remain in engine compartment and be securely fastened down. Or relocated to rear but must be in covered battery box and bolted down
- K) A clearly marked Master Battery shut-off switch within 6 inches of the center of the car must be installed and hooked to negative post on battery. Emergency Responders must be able to reach the switch from both sides of the car. A brightly painted, solid square of at least 4 inches square must surround the switch. The shut-off switch must be operational at all times.
- L) Aluminum racing seats are mandatory.
- M) Must use a dry cell battery.
- N) All roll bars within reach of driver's hand, feet or legs must have roll bar padding.
- O) **Racing fuel cell is recommended in 2022**

## **9. WHEELS & TIRES**

- A) 60 Series or larger. No racing tires. Must be DOT street tires. NO Recaps. NO softening.
- B) Must be OEM tire size. All tires on vehicle must be same size.
- C) Wheel weights must be removed.
- D) Must be stock steel wheels. No racing or offset allowed.

## **10. EXHAUST**

- A) Removal of the muffler is ok.
- B) Exhaust must run past driver's seat.

## **11. MIRRORS**

- A) **Mirrors are permitted on the left outer side of the car with a 4inch max diameter. Track Officials reserve the right to ban the mirrors if they see fit for any reason at all.**

## **12. WEIGHT:**

**Single overhead cam; 2 valves per cylinder**

**Weight 2400 min    Left 54% max    Rear 44% max**

**Single overhead cam; MORE than two (2) valves per cylinder**

**Weight 2500 min Left 54% max Rear 44% max**

**Dual overhead cam; front wheel drive. Fuel Injection okay with stock injectors and 180cc max.**

**Weight 2600 min Left 54% max Rear 44% max**

**Single overhead cam; UNDER 1800cc front wheel drive**

**Weight 2100 min Left 54% max Rear 44% max**

**Single overhead cam; OVER 1800cc up to 2000cc front wheel drive**

**Weight 2300 min Left 54% max Rear 44% max**

**13. CAR NUMBERS:**

Doors: Twenty inch (20") MINIMUM Roof: Twenty six inch (26") MINIMUM

**14. TRANSPONDER:** location: Right rear frame rail; fifteen Inches (15") behind center of rear-end.

**THESE RULES CAN BE ADJUSTED AT ANY TIME TO EVEN THE COMPETITION.**

**IF IT DOES NOT SAY YOU CAN, YOU CANNOT. PLEASE BUILD TO THE RULES AND NOT AROUND THEM.**

The tech officials reserve the right to assess penalties as needed to ensure that the competition is close.