### 2024 Stock Car Rules

# Car & Body

- 1. No convertibles, compact cars or trucks.
- 2. Firewalls may be custom made with steel.
- 3. Firewalls may be moved back.
- 4. Front fenders must remain at least 75% of original size
- 5. Bumper type is optional.
- 6. Three (3) windshield bars in front of the driver mandatory.
- 7. No mirrors allowed.
- 8. Mandatory front & rear hook-up loops to assist wreckers.
- 9. Numbers must be on both doors and top of the car.
- 10. Factory production complete full parallel American passenger car frame only allowed.
  - a. No engineered or tube type front clip allowed.
  - b. Must be full and complete on both sides.
  - c. No part of the frame may be lower than four (4) inches from the ground except the front cross member.
  - d. Factory unibodies are ok
- 11. 5" max spoiler allowed.
- 12. Aftermarket nose pieces are allowed but may not extend outside of tires (78" max allowed).
- 13. Sail panels must be solid
  - a. Sail panels must match on both sides.
  - b. Sail panels may not connect to or touch the rear spoiler.
  - c. Max 4" roof rake front of back

#### Roll Bars

- 1. Car builders and driver/owners are responsible for roll bar installation.
- 2. Round steel tubing, seamless roll-over bars are required for the basic roll cage.
  - a. Acceptable minimum size tubing is as follows: one and three-quarters (1 ¾) inches by 0.090 of an inch or one and one-half (1 ½) inches by 0.095 of an inch for mild steel and DOM tubing one and three-quarters (1 ¾) inches by 0.083 of an inch for chrome-moly tubing).
- 3. Aluminum and/or other soft metals are not allowed.
- 4. Roll bar connections must be properly welded. Roll bar installation and workmanship must be acceptable to track officials.
- 5. Low carbon, mild steel tubing is recommended.
- 6. Must be frame-mounted in at least six places.
- 7. Must consist of a configuration of front and rear hoops connected by tubing on the sides or side hoops.

- 8. Roll cage must be at least 3" above the driver's head while the driver is strapped into a seat with helmet on.
- 9. Must have a minimum of one crossbar in the top halo of the roll cage.
- 10. Roll cage must be securely supported and braced.
- 11. Bar across the back of the engine with vertical bars and rub rails, or similar protection required.
- 12. No brace bars forward of the cage may be higher than stock hood height.
- 13. Main cage may be no further forward than the engine plate.

# Frame & Suspension

- 1. Wheelbase may be 107.5" minimum
- 2. IMCA approved upper tubular A-arms are allowed.
- 3. No rack and pinion allowed.
- 4. No coilover suspension allowed.
- 5. Weight jacks are allowed.
- 6. No extra shocks or coils allowed.
- 7. No Aluminum shocks allowed.
- 8. Racing shocks are allowed.
- 9. No Schrader or bleeder type valves are allowed.
- 10. Rear shock placement is optional.
- 11. No adjustable shocks allowed.
- 12. Extra holes in adjustable spring shackle are allowed.
- 13. Stock panhard bars are allowed on coil suspension only.
- 14. Stock trailing arms only are allowed.
- 15. No 2, 3 or 4 link suspension allowed.
- 16. Adjustable lowering blocks are allowed.
- 17. No external or internal bumpers or stops are allowed.
- 18. One steel, non progressive closed end spring per wheel only.
  - a. All coil springs must be minimum 4.5 OD
  - b. Front coil springs must be 9.5" free height with 0.5" tolerance.
  - c. Rear coil must be 11"-16" free height with 0.5" tolerance.
- 19. Leaf spring car can run one axle damper shock on top of rear end
- 20. Leaf springs can be steel or composite material

# Steering

- 1. Must be original (OE) type.
- 2. Quick release style is mandatory.
- 3. Steering guickeners are allowed.
- 4. Steering box must remain in stock location.

# Wheels & Tires

- 1. Steel wheels only are allowed.
- 2. Must use heavy duty studs and racing type lug nuts on all wheels.
- 3. Spacer or offset wheel, or any combination of the two, are allowed.
  - a. Must not exceed 2" of total offset per wheel.
  - b. Aluminum wheel spacers only are allowed.
- 4. Beadlock wheels may be used on right side only.
- 5. 8" max wheel size allowed.
- 6. , IMCA stamped G60, American Racer KK704 G60, 8" Asphalt take off tires. All tires must durometer 50 at all times. NO MIXING OF TIRE TYPES EXAMPLE ASPHALT TAKE OFFS AND G 60. No bleeder valves allowed.
- 7. Wheel covers are permitted on right side wheels only (5 fastener types recommended).
  - a. Inner mud plugs are permitted.
  - b. All mud covers must display car number on at least one side.
  - c. Foam or plastic only allowed
- 8. No weight may be added to the wheels in any fashion.
  - a. This includes the balancing of the tires.
- 9. Tires can be grooved and siped.

### **Transmission**

Any automatic or manual four speed transmission or Approved aftermarket transmission Falcon PN 60100

Bert LMZ and Generation 2 models 1300 & 1400

Brinn PN 70001 Brinn Predator PN 70600

Mitchell Machine Bullet internal clutch

Race Gator pn 140002

These are aluminum case transmission No Ball Spline

No coating or paint on transmission.

Automatic transmission Scatter shield or 1/4" or more plate is required over bell housing.

Multi disk clutches allowed.

# Rear Ends

- 1. Any passenger car or half ton rear ends are allowed.
- 2. Interchanging and locking rear ends are allowed.
- 3. Floaters rear-ends are allowed.
- 4. No guick change rear ends allowed.
- 5. Rear end lower control arm mounts may be a maximum 7.5" long.
  - a. May have a maximum of five holes for adjustment.
  - b. Lower spring perch must be welded to axle tube.
- 6. All components and mounts must be steel.
  - a. Must be unaltered OEM or OEM replacement.
  - b. Must be in OEM location and match the frame.
  - c. No independent rear suspension allowed.
  - d. OEM appearing one piece full rubber or nylon control arm bushings only are allowed.
  - e. No offset or bearing type allowed.

## **Brakes**

- 1. All four wheel brakes must remain in working condition at all times.
- 2. Brake adjusters are allowed.
- 3. After-market master cylinders are allowed.
- 4. Racing pedals are allowed.

#### **Engines**

- 1. Engine must be OEM appearing, and must be able to be used in a conventional passenger car without alteration. GM with GM, Ford with Ford, Chrysler with Chrysler.
- 2. All cars must clearly display on the driver side which carburetor/engine option you are competing with. 350 or 500.
- 3. Any American make engine allowed.
- 4. Steel heads, block and oil pan only are allowed.
- 5. OEM firing order cannot be changed (GM 1-8-4-3-6-5-7-2).
- 6. Steel or aluminum water pumps allowed.
  - a. No electric water pumps allowed
- 7. Wet sump oiling system only allowed.
- 8. Accumulator allowed.
  - a. Cannot be located between seat and door bars.

- 9. Intakes allowed:
  - a. Weiand GM #7547 or 7547-1 Ford #7515, 8022; Chrysler #7545, 8022; Edelbrock GM #2701, 2716; Ford #7121, 7181, 7183; Chrysler #2176
- 10. Cooling lines are allowed on aluminum intakes.

# **Engine Option 1**: 350 CFM Carburetor Engine:

- 1. No cubic inch or compression limit.
- 2. Flat tappet cam/lifters and stud-mounted rocker arms are allowed.
- 3. No shaft, offset or pedestal rocker arms are allowed.
- 4. No titanium engine components allowed.
- 5. No stud girdles allowed.
- 6. No mushroom lifters allowed.
  - a. Lifter diameter and configuration must match OEM passenger block.
- 7. Full roller rocker arms allowed.

# **Engine Option 2:** 500 CFM Carburetor Engine:

- 1. Max. 361 cubic inch(GM); 363(FORD); 370(CHRYSLER)
- GM approved block numbers are: 10105123, 10066034, 3892657, 3914660, 3914678, 3932388, 3932386, 3956618, 3970000, 3970006, 3970010, 3970014, 10066033, 10066036, 10243880, 14010207, 140010209, 14010287, 14010287, 14016376, 14016376, 14016379, 10054727, 14088528, 14088548, 14088552, 14093638, 14101148.
- 3. Stroke must match block.
- 4. No 400 or larger cubic inch parts allowed.
- 5. Max compression ratio is 10.5 to 1 with no tolerance.
- 6. Flat top or dished pistons only allowed.
  - a. No gas ported pistons allowed.
- 7. OEM or OEM appearing replacement steel crankshaft only allowed.
  - a. Crankshaft cannot be lightened.
- 8. No aerowing, bullnose, knife edge, undercut or drilling of second or third rod throws.
- 9. OEM or OEM appearing replacement steel rods only allowed. GM 5.7" 6" or GM Vortec rod part number 10108688 allowed.
- 10. Cap screw allowed.
- 11. No splayed main caps allowed.
- 12. Conventional flat tappet cam & lifters only allowed...
  - a. No alteration to lifter bores allowed.
- 13. Mandatory 1" inspection holes in all pans.
  - a. No obstructions to crank & rods.

### **Cylinder Heads**

1. Steel only allowed.

- 2. Must be unaltered approved OEM & original minimum 76cc combustion chamber (GM).
- 3. Only GM OEM approved head numbers are: 14079267, 3986336, 3986639, 3986339X, 3986388, 3932441, 376445, 3928454, 3932454, 3876487, 3973487, 3973493, 3951598, 468642, 330862, 333882, 3998920, 3998991, 3998993, 3998997, 3970126.
- 4. Max size valves on these heads are 2.02" intake and 1.60" exhaust.
- May use stock replacement (SR) cylinder heads. EngineQuest (EQ) GM part #CH3501, (EQ) Chrysler part #CH318B. World Products Ford part #53030- 1.250 inch (+.015 tolerance) maximum OD valve springs.
  - a. All SR heads must remain as produced, seat angles & valve sizes can not be changed; three angle valve job only (no casting removal in valve pocket of EQ or World products head, for any reason).
- 6. No porting, polishing, or unapproved alterations allowed to any cylinder head (flat milling is allowed).
- 7. Guide plates, screw-in shoulder studs (7/16-inch max) and polylocks are allowed.
- 8. No stud girdles are allowed.
- 9. Full roller rocker arms allowed. GM 1.250inch (+.015 tolerance) max. OD valve springs, No beehive valve springs allowed.
  - a. Unaltered OEM type harmonic balancer only.

Due to unavailability of the EQ head these heads can be used also. Dart (Part #10024267 or #10024360) or World Products (Part #043600 or #042670) VORTEC heads are not allowed. Beehive valve springs are not allowed

Aftermarket Steel blocks will be allowed. Recommend the Brodix BRS400035842 and the Dart 31161111

# **Engine Set Back**

1. Upper ball joint must be between first & second spark plug.

#### Headers

- 2. Headers with collectors must be pointed rearward.
  - a. No TRY-Y, crossover or 180 allowed.

#### Carburetor

1. **Engine Option 1 (unlimited cubic inch limit engines):** must use unaltered 350 c.f.m. Holley part# 0-80787-1 with no modifications, or part # 0-7448 which may be modified to meet the specs of part #0-80787-1.

- 2. Holley carburetor components only allowed.
- 3. Air bleeds cannot be removed, .076 inch maximum diameter.
- 4. **Engine Option 2 (limited cubic inch limit engine):** must use unaltered 500 c.f.m. Holley part #0-4412, may be modified to Holley HP dorton part #0-80583-1 specs only.
- 5. All float bowls must face forward.
- 6. Carburetor adapter/spacer allowed, maximum 1.20 inches thick, including gaskets.

# **Ignitions & Battery**

- 1. All cars must use a max 7800 RPM rev limiter chip.
  - a. This may be accomplished by using one, non-adjustable 12 volt ignition box with one high end rev limiter setting or an internal setting inside the box.
  - b. MSD #8728 or MSD #8738 rev control boxes are allowed.
  - c. Preset Crane #6000-6478 ignition box allowed.
  - d. No additional ignition accessories are allowed.
  - e. All components must be out of driver reach, but accessible for inspection.
  - f. No magnetos or crank triggers are allowed.
- 2. Battery must be securely mounted and covered.
  - a. Batteries in cockpit must be fully enclosed

# Fuel Cells & Fuel

- 1. Fuel cells are mandatory, 16gal max allowed.
  - a. Must be located inside the trunk.
  - b. Must use screw type cap.
  - c. Must be set in a steel box with safety straps and securely tight.
  - d. Must have a rollover valve in the fuel cell.
- 2. No alcohol allowed, racing fuel or gas only.
- 3. No electric fuel pumps allowed.

# **Seats & Seat Belts**

- 1. Seat belts and shoulder harnesses cannot be more than three years old.
  - a. The date of manufacture should remain visible at all times.
- 2. A lever-type quick release latch must be fastened to the lap belt.
- 3. All seat belts and shoulder harnesses must connect at the lap belt with a quick-release buckle acceptable to series officials.
- 4. Only custom manufactured racing aluminum seats acceptable to officials.
- 5. All seats should have padded rib protectors.
- 6. All seats are required to have a head rest on the right side.
- 7. All belts must be a minimum of 2" wide.
- 8. Belts must be bolted to the roll cage with no less than 3/8inch bolt.
- 9. A center, crotch belt must be securely mounted to the lower seat frame at the bottom and to the lap seat belt on the top.

- a. Where the belts pass through the seat edges, it must be rolled, have a grommet installed and/or be padded to prevent cutting of the belt.
- b. Window nets are mandatory.
- c. Windshield must have three (3) bars in front of the driver.

#### **Driver Uniform**

- 1. Helmets, fire resistant driving suit, fire gloves, neck collars and racing shoes are mandatory.
- 2. Helmets are required and must be a minimum of SA2015 OR NEWER with certification label inside helmet.
- 3. Helmets must be worn at all times car is on track.
- 4. SFI approved flame/fire retardant fire suits, gloves and shoes are mandatory.
- 5. An approved head/neck restraint system is mandatory (Hans, G-force, Hutchens or SFI rated neck collar).
- 6. Nomex underwear in highly recommended.
- 7. No cell phones, or radios in cars or in drivers possession except for Raceceiver one way listening device set to race directors channel.

# Weight

- 1. 2900lbs minimum with driver.
- 2. All bolt on weight must be securely mounted and pass safety inspection.
  - a. No bolt on weight in the driver's compartment.
  - b. Any bolt on weight must be painted white with the drivers number indicated.

### **Drive Shaft**

- 1. Steel drive shafts only allowed.
  - a. Must be painted white.

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