

## **Section 7- PRA SPORT MODS**

### **7-A. BODIES**

1. IMCA Modified appearing bodies only.
2. Firewall and floorboards are mandatory.
3. Body parts may be constructed of steel, aluminum or fiberglass.
4. Use of MD 3 aftermarket nose piece acceptable. That option necessitates some minor dimension adjustments for the fabricated aluminum noses including the addition of maximum 2 ¼ inch fins on the side of the aluminum nose. Nose piece must remain inside confines of front bumper. Nose piece cannot extend any higher than top of hood.
5. No wings or any other ground effects are allowed anywhere outside or inside car.
6. Any reinforcing lips on rear of sail panels must be 180-degree bends.
7. Spoiler shall be made of clear Lexan, maximum of 8" in height. No wider than the rear deck edge, and must be mounted to rear deck edge. Forward braces shall be no taller than 8" tapering down to 2" and extend forward no more than 24". The taper must start at the rear deck.
8. Engine compartment will remain open, no side panels, and hood sides may have maximum 4" drop and must be enclosed at rear of hood. 6" maximum hood scoop height.
9. No panel in front of right door to engine compartment. No inner panels.
10. Passenger side of body must be no farther forward than the rear of the engine block.
11. Top deck of car must be on flat plane with rake of no more than 6" inches from front to back and back of car. Rear of car not counting rear spoiler must be 27" minimum - 38" maximum off ground.
12. Driver and passenger side windows must have at least 12" opening, measured at center of window, whether it's the roof or roll cage, and the highest point at the bottom of the window, whether it's the interior or the body.
13. Cars without roofs allowed. (Aka Roadsters)
14. May utilize a full windshield must be minimum 1 1/8" Lexan mounted to the roll cage.
15. Mirrors optional, limited to one (1) only.

### **7-B. CAR NUMBERS**

1. See Rule 2-B.1
2. 8 inch tall number to be placed on the front passenger side of the nose piece and spoiler at the right rear of car.

### **7-C. FRAMES & SUSPENSION**

1. Factory production complete full 1960 or newer parallel American passenger car frames only.
  - a. Frames may be cut in rear only at point not farther than 36" from center of rear end housing.
  - b. No Camaro or Nova front clip.
  - c. No front clips or tube type allowed.
  - d. No Jeep, Bronco (etc) or four-wheel drive frames allowed.
  - e. No sports car frames allowed.
  - f. No front wheel drive allowed.
2. Maximum 2"x4" tall frames: Stiffener may be welded directly to outside of the frame rails.
3. Minimum wheelbase 108 inches.
4. Frames may not be widened nor narrowed and must be able to support roll cage on both sides. Driver side must be complete through and include the second bend of frame. Passenger side must be full and complete. Front cross-member must remain full and intact where joined and the frame rails at center of cross-member may be notched for radiator and/or steering clearance only.
5. Front suspension must be unaltered OEM and be in stock location and must be replaceable by stock parts.
6. Weight jack must be in original centerline of spring.
7. Stock passenger car spindles only, no fabricated spindles.
8. Outer tie rods can have an adjustable sleeve, to accept heim end instead of tie rod end so bump steer may be adjusted on spindle end.
9. Tube-type upper A-frames allowed and can be moved.

10. Bottom A-frames cannot be altered or moved.
11. Front sway bar type optional.
12. No aluminum or fiberglass suspension or rear end parts allowed with the exception of the rear panhard bar attachments. Clamps and/or track bar adjusters can be aluminum or steel.
13. Steering box must be OEM and must remain within original bolt pattern for type of frame used. No rack & pinion allowed. OEM idler arm, pitman arm, and center link must match frame.
14. In cockpit steering may be modified to suit driver's taste, but must be kept on left side of cockpit. No center steering allowed.
15. Only one steel, non-adjustable, unaltered shock per wheel. Bumpstops allowed. No remote reservoirs. No Schrader valves allowed. Rebuildable shocks allowed.
16. No homemade coil overs used anywhere on the racecar.
17. Top link optional. Aluminum mounting hardware approved.
18. No torsion bars allowed in rear.
19. No hydraulic, ratchet, or electric weight jacks anywhere in or on the car. No air shocks or air bags allowed.
20. Coil over shocks allowed on rear axle only.
21. No titanium production parts or components allowed anywhere on racecar.

#### **7-D. REAR END**

1. No quick-change gears allowed.
2. No cambered rear ends, one-piece drive flange only. Locking devices optional.

#### **7-E. ROLL CAGES**

1. Must consist of continuous hoops not less than 1 3/4 " O.D. and must have a wall thickness of at least .095 inch and 1/8 inch inspection holes required in halo, main loop and top door bar 1" from welded seam.
2. Must be frame mounted in at least six (6) places. Roll bar padding required in driver compartment. Fire retardant padding recommended. No foam rubber allowed.
3. Must consist of a configuration of front and rear hoops connected by tubing on the sides or side hoops. Driver's head must not protrude outside cage with helmet on and strapped in driver's seat. Must have minimum of one (1) cross bar in top halo of roll cage. Minimum of three (3) tire bar in windshield area. Roll cage must be securely supported and braced.
4. Low carbon, mild steel tubing is recommended. No brazing or soldering allowed.
5. Protection of feet is mandatory. Bar across back of engine with vertical bars and rub rails, or similar protection.
6. No brace bars forward of cage may be higher than stock hood height. Main cage no farther forward than engine plate.
7. A minimum of three (3) driver side door bars at least 1 1/2 O.D. must be parallel with the ground as possible, and located perpendicular to the driver so as to provide maximum protection for driver, but without causing undue difficulty in getting into or out of vehicle. The sidebars must be welded to the front and rear of the roll cage members. No brazing or soldering allowed. Doorplates required must be 1/8 inch thick plate minimum.

#### **7-F. BUMPERS AND NERF BARS**

1. Steel bumpers must be used both front and rear. Two-bar front bumpers must be mounted frame end-to-frame end, no wider than width of material outside frame horns. Must be made of minimum 1 1/4 inch tubing and must be able to support car if lifted by wrecker.
2. Rear bumper, steel nerf bars and bodies must not extend beyond width of right side tires and must not contain any sharp edge. Left side nerf bars will have zero clearance between body and door bars.
3. Rear bumper may be constructed of square or round tubing.
4. Rear bumper no more than 2" wider than body on each side.
5. Center of the front and rear bumpers must be between 16 inches to 20 inches (recommend 18 inches) from ground.

#### **7-G. ENGINE OPTIONS AND SPECIFICATIONS**

1. All engines must be able to be used in conventional passenger vehicle without alterations. External engine casting and threaded holes cannot be altered.
2. Rear of engine (bell housing flange) is to be mounted at least 72" forward from the centerline of rear axle. Engine offset must be kept within 2" of centerline of front cross member. Engine height must be minimum 11" from ground to front center of crankshaft when car frame rail is 4" off the ground.
3. 602 Crate motor allowed with GM factory seal or IMCA seal.

**4. BLOCK:**

- a. OEM steel passenger vehicle production block only. No GM Bowtie, Ford SVO or Chrysler W components allowed. No 400 or larger cubic inch parts allowed. Maximum 361 cubic inches (GM); 363 (Ford); 370 (Chrysler). Violation of cubic inch limit must be verified by removal of head and will result in disqualification.
- b. Maximum compression ratio is 9.0 to 1, no tolerance. Compression ratio checked using Whistler and cubic inches checked using pump, OR by visual inspection of part and/or casting numbers, pistons, etc. (class option which method is used).
- c. Flat top or dished pistons only, no gas-ported pistons. OEM or OEM appearing replacement steel crankshaft only - cannot be lightened.
- d. No aerowing, bullnose, knife edge, undercut or drilling of second or third rod throws. OEM or OEM cast appearing replacement steel rods only – GM 5.7 inch or 6 inch allowed.
- e. Cap screw allowed. No splayed main caps.
- f. Conventional flat tappet cam and lifters only, cannot alter lifter bores.
- g. OEM firing order cannot be changed (GM: 1-8-4-3-6-5-7-2).
- h. May use oil restrictors. 'Wet' sump oiling system only. Steel oil pans only. Racing oil pans allowed. Accumulator allowed.
- i. Pistons must match to obtain 9.0 to 1 compression only. No exception.

**5. CYLINDER HEADS:**

- a. Steel only. Must be unaltered approved OEM heads.
- b. No GM Bowtie, Ford SVO or Chrysler W components allowed. No Vortec heads.
- c. No porting, polishing or unapproved alterations allowed to any cylinder head or intake.
- d. Guide plates, screw-in shouldered studs and stud girdles allowed.
- e. Roller rockers allowed. No shaft rockers allowed.
- f. Oversized springs and valves allowed.

**6. INTAKE:**

- a. Unaltered, approved OEM cast iron low rise, two- or four-barrel. Only unaltered (no porting or polishing) aftermarket aluminum intakes allowed are: Weiand GM #7547, #7547-1; Edelbrock GM #2701; Ford #7515, #8023, #7516, #7121, #7181, or #7183; Chrysler #8022 or #2176.
- b. Cooling lines allowed on intakes.
- c. Unaltered OEM type steel or aluminum water pumps only. No LS parts allowed.

**7-H. GAUGES/ELECTRONICS**

1. No timing retard controls, or digital gauges (including tach). No electronic monitoring computer devices capable of storing or transmitting information except memory recall analog tach.
2. Only gauges allowed are analog oil pressure, fuel pressure, brake bias, water temperature and tach. OEM type alternator with internal regulator allowed.
3. 12 volt ignition system and HEI distributor only.
  - a. No billet distributors or crank triggers.
  - b. Ignition rotor, cap, coil and module must remain OEM appearing.
- c. 602 crate engines MUST use unaltered MSD #8728 or #8727CT rev-control and maximum 6,200 rpm chip for crate engine. No unapproved or additional ignition accessories allowed. All components must be out of reach of driver, but with rev-control easily accessible facing up or out for inspection. All wiring must be visible for inspection.
4. No electronic traction control devices.

**7-I. CARBURETION**

1. All engines must use unaltered 500 CFM Holley - part no. 0-4412 (may only be modified to Holley

part no. 0-80583-1 specs only) or Holley - Keith Dorton Signature Series part no. 0-80538-1.

2. Float bowl must face forward.
3. Any adapter, maximum one inch thick.
4. No throttle bore adjustable carburetor spacers.
5. Must be naturally aspirated, no fuel injection or electric fuel pumps.
6. Two (2) throttle return springs required.
7. Gasoline only.

**7-J. WEIGHT RULES**

1. Base Weight (2500 lbs. total maximum 58% left side) as weighed with driver in driving position.
2. See rule 2-G Scaling

**7-K. TRANSMISSIONS**

1. Transmissions must have at least one gear forward and one reverse, plus a neutral position. With motor running and car in a still position, driver must be able to engage car in gear and move forward, then backward.
2. Automatic transmissions must remain in OEM stock appearing automatic case. Original bell housing must remain. Must have an approved scatter shield or blanket. Scatter shield may be constructed of ¼ inch x 3" steel; 270 degrees around flex plate or flywheel.
3. Stock type flywheel and clutches must have steel bellhousing or scatter shield.
4. Any type transmission that is compliant with above rules is allowed.

**7-L. TIRES/WHEELS**

1. Track tire will be American Racer 970.
2. These tires to be purchased only through PRA official tire vendor.
3. Aluminum or steel spacers allowed.
4. Wheel must be 8" steel, no aluminum.
5. No softening, siping, or grooving of tires allowed.
6. Wheel bleeders allowed.

**7-M. BRAKES**

1. All four wheels must be equipped with functioning brake system (4 brakes).
2. Proportioning valve allowed, front to rear only.
3. Brake bias cable to pedals is allowed.
4. No electronic limiting devices.
5. Calipers cannot be lightened and must be OEM.
6. Rotors cannot be lightened. Rotors may be re-drilled for different bolt pattern or larger studs.

**7-N. DRIVESHAFT**

1. 360 Degrees drive shaft loop required and must be constructed of at least 1/16 inch x 2" steel, mounted 6" back from front of drive shaft.
2. Drive shaft must be painted white. Steel drive shafts only.

**7-O. FUEL/ FUEL CELLS**

1. Gasoline only. No nitrous oxide or alcohol.
2. Racing fuel cells required and must be mounted by at least two (2) solid steel straps, 2" wide around cell.
3. Fuel cells must be enclosed in steel containers and must be mounted securely behind rear axle, protected by roll cage tubing.
4. Protective tubing must be a minimum of 4" ahead of rear bumper and no part of fuel cell can be lower than protective tubing.
5. Fuel cells must have check valves.
6. Bladders are highly recommended.
7. Fuel cells are limited to 32-gallon maximum capacity.

**7-P. EXHAUST/BALLAST/BATTERIES/FIRE CONTROL**

1. See General Safety Requirements section 3-B

**7-Q. SAFETY**

1. See General Safety Requirements section 3-B for racecar/driver requirements.

2. Head and Neck Restraints, such as the HANS device, Hutchens, Simpson or G-Force are highly recommended.

**7-R. RADIOS/SPOTTERS**

1. Two –way radios allowed.
2. Spotters are required to attend all driver and spotter meetings.
3. Spotters are required to report to official spotters stand prior to race.
4. Spotters are required to have headsets clearly marked with car number on right side.
5. Objectionable conduct such as arguing with or shouting at officials will not be tolerated and will subject the driver to be Black-flagged.

**7-S. PRE- QUALIFYING TECH**

1. All competing drivers will participate in driver-led tech prior to qualifying.
2. Post-Race Tech: see rule 2-C