

## ***2009 PASS MOD Rules***

### ***2009 MODS Tire Policy***

**The American Racer 9" EC83 left and EC84 right is the mandated tire for the 2009 race season.**

**All tires must be purchased through Northern Race Tire.**

**Each team is permitted to purchase a maximum of 6 registered new tires at the seasons first 2 events. New tires must be used the event they were purchased**

**The two additional tires purchased at the opening event may be utilized throughout the season.**

**Any team that is new to the series thereafter is permitted to purchase a maximum of 4 registered tires at their first event of the season.**

**All teams are restricted to the purchase of 1 new registered tire for other events throughout the season. In the event the modified series competes in any event of 50 or more laps, teams will be permitted to purchase 2 registered tires for that given event. New tires must be used the event they were purchased.**

**If a team cuts or "flats" a new registered tire purchased the day of the event during practice, qualifying or feature for given event that team may contact series technical director and replacement may be granted upon decision. This does not include tires purchased in previous weeks.**

**Teams are permitted to purchase practice tires at their own discretion. Only registered tires are permitted during qualifying and featured events. All practice tires must be stamped practice.**

**Without question, any tampering with compound, branding, serial numbers or any alteration to any tires found in competition will be considered illegal! PASS officials have final determination without recourse.**

**All tires are subject to impound and testing at the discretion of PASS officials.**

## **Safety**

- 1. Electrical Kill switch required within easy reach of the driver. Switch must say "ON" or "OFF".**
- 2. Helmets are required and must be approved SCCA or Snell 85 type full coverage.**
- 3. Fire suits of flame retardant nature must be worn by all competitors. Fire resistant gloves required. All cars must have a working fire extinguisher within driver's reach.**
- 4. Only one battery permitted. Maximum 16 volts. Must be mounted securely outside driver's compartment.**
- 5. All cars must have fuel cells, 22 gallon maximum, in completely enclosed steel container. All cells to have a minimum of two 1/8" X 2" steel straps surrounding the. Fuel cell must be protected in rear of axle by roll cage tubing mounted securely. No part of fuel cell can be lower than protective tubing. Must be a minimum of 8 inches from track.**
- 6. Belts must be aviation type quick release and must consist of a lap belt, shoulder harness and sub strap. Belts must be a minimum of 3" and NO MORE THAN 5 YEARS OLD. Belts with no dates will be considered too old. Belts must be properly mounted to welded steel plates and not through tin, aluminum, floor, or bulkhead.**
- 7. All cars must have a minimum 5 lb. fire extinguisher within drivers reach.**

## **Bodies**

- 1. Bodies may be Tempo, Cavalier, Mustang, Daytona, Gremlin, etc. American passenger cars only. No panel vans or station wagons. Rear window area must be open. Must be full sized roof. Rear side windows must be either open or clear Lexan. Must have full, half or capsule type Lexan windshield. If running half of capsule type you must have guard on passenger side. All cars must be stock appearing, and resemble an American made car sitting in the parking lot. Chevy Motors only - may use any body style.**
- 2. Firewalls and floorboards and mandatory. The driver's compartment tub (to the right and to the rear) to be constructed from a minimum of 22 gauge steel or aluminum. The driver's footbox and firewall to be constructed of a minimum of 22 gauge steel. Fiberglass or metal duplicate of body parts are permitted. Handmade or after market body parts may be constructed of steel, aluminum, or fiberglass. Must be recognized as factory production vehicle, with name on front of driver's door. No slab bodies. All bodies must maintain OEM lines and angles, no body part may be closer than 4" to the ground. No side skirts. Right rear quarter panel to be no further than 2" to the inside of the inner sidewall of tire. No flat sided doors, quarter panels,**

fenders or rocker panels permitted. Body measurements per attached diagram.

3. Original roof line of vehicle should be maintained with a maximum 2" drop, rear to front. No wings. No air flow devices to direct air allowed. No ground effects allowed inside or outside of vehicle. Both side windows must have a minimum of 12" vertical opening from front to back. Roof height must be minimum of 44 inches. May run 5" high spoiler, 66" across, to be located at the rear of the deck lip. Deck lip not to extend more than 45" behind center of rear axle. The top 4" of spoiler must be made of clear Lexan. Competitors must be able to see through spoiler.

4. Engine compartment will remain open. No side panels. Hood sides may have a maximum 4" drop and must be enclosed at rear of hood. Bodies should extend no further forward than back of block. Rear of bodies to be solid panel at least 8" high with car number.

5. Suggested bodies: Star Track Race Car Bodies, Story City, Iowa 515-733-2282  
or 1-888-833-5174 - [www.harrisautoracing.com](http://www.harrisautoracing.com)

6. Minimum Crank height from center of crank to ground: 11 inches.

## **Roll Cage**

1. Roll cage must consist of continuous hoops not less than 1 – 3/4" outside diameter and must have a wall thickness of at least .095. Must be frame mounted in at least 6 places. Cages will be sonic tested if necessary.

2. 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 above cage with helmet on. Roll cage must be securely supported and braced. Top hoop must have crossbar. Minimum height from ground to top of roll cage 44", with 4 inch frame height.

3. Protection of the feet is mandatory. Bar across back of engine with vertical bars and rub rails or similar protection.

4. No brace bars forward of the cage may be higher than stock hood height.

5. Driver door bars must be as parallel with the ground as possible and located perpendicular to the drive so as to provide maximum protection for the driver, but without causing difficulty in getting in or out of vehicle. The side bars must be welded to the front and rear of the roll cage members. Door bars less than .095 thickness should have 4 bars at least 1 – 3/4" diameter. Driver side door cage must be plated with 1/16" steel from top door bard down to frame, must be welded on outside. Right side 3 bars or X method. If door bars are not plated and car loses side panel you will be black flagged.

6. Front bumper must be mounted frame end to frame end, with bottom

loop parallel to the ground. Minimum 1 – 1/4 " pipe able to support car if lifted by wrecker. Rear bumpers may be constructed of tubing or flat stock, and must protect fuel cell. Center of bumpers (front and rear) must be 18" from ground (Tolerance 2"). Rear bumpers, nerf bars, and bodies must not extend beyond width of rear tires and must not contain any sharp edges. Rear bumper tethers are highly recommended.

## **Chassis**

1. May be offset chassis or straight up. Minimum wheel base 108". No tube type clips allowed. Maximum 58% left side weight. Added weight must be securely bolted inside of frame rails, behind front spindles and in front of rear axle. No weight inside driver's compartment. No more than 200 lbs of bolt on weight permitted. Loose objects must not be used in driver's compartment. Mounted lead must be painted white with car number on it. If a weight comes off your car and ends up on the racetrack you may be assessed a \$200 fine. This does not apply if the car is involved in an accident. All weight must be attached with at least two 1/2" bolts. Weights cannot be attached on rear bumper.

2. Chassis weights according to configuration:  
(All weights with driver, before race, race ready.)

**Metric snout** - coil spring- crate engine - 2500 lbs.

**Metric snout** - coil-over shock-spring - add an additional 50 lbs.

**Camaro-Nova snout** - coil-spring-crate engine - 2550 lbs.

**Camaro-Nova snout**- coil-over shock-spring - add an additional 50 lbs.

3. Factory production full 1960 or newer perimeter American passenger car frames only. Frames may be cut in rear only at a point not further than 36" from center of rear end housing. No Jeep, Bronco, or 4 wheel drive frames allowed. No front wheel drives. Metric frames are ok. Also Camaro or Nova Clips or you may run Howe Replacement with minimum weights above. When mounting Camaro or Nova Clip or Howe replacement a minimum measurement from lower control arm to tube frame 24-1/2 inches.

4. Maximum tread width front and rear is 78 inches, measured from outside of tire to outside of tire. ONLY authorized solid wheel spacers allowed. The front is measured at the front of the wheels, the rear is measured at the rear. The track or technical inspector's gauge is the final word. Frames may not be widened or narrowed and must be able to support cage on both sides. Must be full and complete on both sides. Minimum frame height from ground is 3". Cutting frame rails for spring clearance and radiator is allowed. No other part of the car may be lower than 3".

5. Front suspension must in stock location. Heim ends permissible. Also may run tube type tie rods, and stock or aftermarket center link. Stock passenger car spindles only. No fabricated spindles. No alterations (welding

or heating) allowed on spindle arms. Bottom A frames cannot be altered or moved. Tube type upper A frame allowed, can be moved and adjustable. Jacking bolts allowed. Conventional coil spring and shock, or coil-over suspension allowed. Must be steel shock. One steel body shock per wheel only. Only shocks with a racer list price of \$125 or less may be used. No threaded shocks. No adjustable or rebuildable shocks permitted. **No modification to any shock permitted. Any shock utilized must be as manufactured and may be subject to testing per request of series officials.** Coil-over suspension must use coil-over conversion kit.

6. Rear frame may be altered to accept leaf, coil spring, or coil-over. Any coil spring must be at least 4 1/2" outside diameter. No fiberglass coil or coilover springs permitted. No fiber glass lift bars. No torsion bars in rear. The rear center link may be a solid link or mounted in rubber bushings.

7. No hydraulic, ratchet, or electric weight jacks anywhere in or on car.

8. A right front hub must be of OEM heavy duty type only. No aftermarket replacement hubs.

9. Minimum wheelbase 108". No tube type clips allowed. No aluminum or fiberglass suspension or rear end parts. No aluminum driver shafts. Drive shafts must be painted white. No titanium parts may be used anywhere on car.

10. Steering box must be OEM. NO rack and pinion. No aftermarket steering box. Must remain within original bolt pattern for type of frame used. In cockpit steering may be modified to suit driver's taste, but must be on left side of cockpit. No center steering. Collapsible steering column highly recommended.

11. No aluminum wheels, hubs, "A" frames or spindles or any aluminum suspension parts. Steel wheels only. No plastic carbon fiber wheels. All rims must be 15" X 8". No tire bleeders.

12. Brakes must operate on all 4 wheels and lock on inspection. All calipers must be OEM! No floating brake calipers permitted. Brake bias adjuster is allowed.

13. Weight jacks must be in original centerline with coil springs.

## ***Engine/Drive Line***

1. Only OEM production type transmissions will be allowed. 3 speed or 4 speed and automatic. No 5 speed. No in and out boxes. No buttons or couplers. Must be clutch operated. Clutch or torque converter must be inside of bell housing. Shift with motor running imperative! Multiple disc clutches are permitted. Minimum disc diameter is 7 1/4 inches, steel discs and pressure plates only, must mount to back of engine in stock location. Any steel flywheel permitted. Clutch must be mounted inside of bell housing. No Jericho type transmissions.

2. Transmission must have at least two gears forward and one reverse gear, and must have neutral. All race cars must join lineup on demand, unaided, or go to rear of race.

3. If using stock type clutch, car must be equipped with explosion proof steel bell housing. If using multi disc clutch you may use standard bell housing.

4. Drive shaft loop is required and must be constructed of at least ¼ inch X 2" steel. Must be mounted no more than 6" back from front of driver shaft.

5. Gear rule: 5.38 or to be announced at larger tracks.

6. Any passenger OEM car type or truck rear end may be used. No aluminum allowed, except for lowering blocks or axle cap. No quick change devices allowed. No titanium. Locked rear end, spool type only. No coating or internal rear end or transmission parts including but not limited to ceramic. Steel mini spool, no gold or true track type rears. All rear ends must have racing axle for safety if not floater. For 9" rear OK. If you run a floater you must run steel hubs and steel drive plates, no aluminum.

7. GM crate engine p/n 88958602 is mandatory in full untouched factory form from intake to oil pan. The only change from production will be that of replacement oil pan Moroso p/n 21319 and matching oil pump p/u assy. Before mentioned oil pan is the only legal replacement permitted.

a. **Exhaust System.** Exhaust system must be mounted in such a way as to direct spent gases away from areas of possible spillage of fuel. Headers may be used but must be pointed away from the ground. All cars must have a working muffler, passing a maximum of 100 decibel noise test 50' from the track. Exhaust may exit by the nerf bars but may not extend beyond them. Exhaust must be collector type header. No 180 degree headers allowed. Left exhaust header must exit on left, right header on right side. Only headers allowed are IMCA type - no cross over headers.

b. **Carburetor.** 650 cfm. Holley p/n 80541-1 or -2 or 500 cfm Holley 4412 only. No modifications from factory production other than removal of choke plate and jet size.

c. **Air filter.** Maximum size 17 inches outside diameter by 4 inches high. No flow enhancers or cold air induction permitted. No notching of cowl, back of hood must seal to cowl top.

d. **Fuel pumps.** Only stock type, mechanical fuel pumps, mounted in stock position. No electrical pumps.

8. Only Sunoco standard (purple) race fuel permitted or pump gas only.

**9. Stock motor mounts may be replaced with solid mount. Motor must be a minimum of 72 inches from the center of the rear end to the rear of the engine block. Engine offset must be kept within 2" of the centerline of the cross member (within 1" of center).**

**10. Ignition system. Any battery powered ignition system produced for highway use is allowed. No crank trigger systems, no magnetos, boosters or other devices allowed. One working coil only. No after market electronic ignitions allowed. No systems with external box allowed. Battery must be securely fastened inside the main frame rails and outside of cockpit. Battery must have protective cover.**

**GM HEI stock type distributor only.**

**11. Cooling system may be modified. No anti-freeze permitted.**

## ***MISCELLANEOUS***

**1. Radios are optional, and if used, frequencies must be supplied to the technical inspector prior to race event. Frequencies are subject to be scanned during race event.**

**2. Mirrors are allowed and are NOT to be used for blocking purposes.**

**3. American Racer 9" EC84 27.0 and 26.5 will be the tires used. Tire purchase schedule will be posted.**

**4. Wheels: no wide fives, 8" Steel conventional only.**

**5. Side bars, Nerf bars. All sidebars should run parallel to the ground and have rounded ends. Sidebars not to extend past outside tread of tires.**

**6. All rules are subject to change if it becomes necessary to keep competition equal or for safety issues.**

**7. Spoiler boards, vertical or airfoil or any other aerodynamic devices will not be permitted anywhere on the car.**

**8. Tech reserves the right to add or subtract weight to keep competition equal.**

**For technical questions concerning rules call Scott Reed at 207-625-3230.**