

# ALH MOTOR SPEEDWAY

## PURE STOCK RULES 2018

### **General Rules:**

Track officials reserve the right to disassemble and inspect any part of the race car.

Cars may not race in more than one division on the same race day.

Track officials reserve the right to refuse any car, or driver.

Home Town Track Rules Allowed, at the discretion of track officials.

A copy of your home town track Pure Stock rules must be provided to track officials for approval.

Delaware race procedures will be followed.

All participants should be familiar with the general track rules, posted at the track.

Track officials reserve the right to interpret and enforce any and all rules as deemed necessary.

**1. Teams:** Teams are allowed. Teams must register their team at the beginning of the season. Only one team driver can race per day. Points will go to driver, team points will be calculated at end of season.

**2. Transponders:** Transponders are mandatory and should be mounted inside the right frame rail, in line with the front of the race seat. If the car does not have a transponder installed in this position, and there is any uncertainty as to the position of the car during a caution or at the end of the race the benefit of the doubt will go to the car or cars that have a properly mounted transponder, (at the discretion of the track officials).

**3. Raceivers and Cameras:** Raceivers are mandatory. No 2 way communication allowed. Only track officials are allowed to communicate with the drivers when they are on the track. Cameras are allowed, must be securely mounted on the interior of the car, facing forward only and not capable of wireless data transmission.

**4. Cars:** North American made passenger vehicle. Minimum wheelbase of 96 inches, no altering of O.E.M. wheelbase allowed. No trucks, vans, convertibles or T-top of any type allowed. All bodies, suspension and steering parts, transmissions and frames must remain stock O.E.M. in stock locations. No add-on parts or alterations allowed unless specified.

## **5. Bodies:**

**5.1:** Any North American made stock style steel bodies are allowed. Body may be interchanged with frame and manufacturer. Bodies must be securely mounted. Bodies may be stretched or shortened. No shortening or lengthening of frame or wheelbase to fit body.

**5.2:** All doors must be bolted, welded or chained shut. All cars equipped with a sun roof must cover sun roof opening with a well secured steel plate or heavy gauge sheet metal.

**5.3:** All body parts must be steel, no aluminum or other materials allowed. All body parts may be replaced with sheet metal of the same thickness and must conform to original body contour.

**5.4:** Wheel wells may be cut out and rounded.

**5.5:** On full frame cars front firewall and floor pan must remain stock and in stock location for frame being used with all holes covered, floor pan must run from driver side to passenger side and can not be cut off any further forward than rear of driver's seat, rear firewall must be completely closed. Rear trunk floor on full frame cars may be removed.

**5.6:** On uni-body cars front and rear firewalls and floorboards must remain stock and must be in stock location with all holes covered. Floorboards must run from firewall to rear bumper. Trunk may be cut out for fuel cell but no excessive cutting allowed.

**5.7:** Must have stock roof and stock roof rake for body being used.

**5.8:** There may be a hole in the hood minimum of ten inches in diameter directly above the carb for carb fires. No hood scoop but a deflector in front of air cleaner is allowed. Hood and trunk lid must be held down by at least 2 pins each if factory hinges are used, and at least 4 pins if hinges are not used. Hood and trunk lid must be on the car at the start of the race.

**5.9:** Boxing in cockpit allowed. Must be flat and no higher than top of doors.

**5.10:** Nose piece is optional, if nose piece is used; nose must match body and must be moulded, stock appearing, or the original stock nose. Nose can not be lower than the stock body line of the car. If nose piece is not available for the body, you may leave nose off or put plastic straight up and down. No wedge noses allowed. Aftermarket rear tail piece is allowed.

**5.11:** No wedges, foils, rudders, wings or pieces may be added or built that are specifically designed to deflect, trap or form a wind break of any nature. No add on spoilers. No side skirts allowed. No additions allowed above or below the original body lines. No side window enclosures.

**5.12:** Homemade metal sun visor is allowed, securely mounted in front of window bars and non-adjustable.

**5.13:** No lexan or plexy glass allowed anywhere on car.

**5.14:** All upholstery must be removed from the car.

**5.15:** All glass and trim and emblems and lights must be removed, no broken glass in doors. No loose items of any kind in cars.

**5.16:** No mirrors allowed.

**5.17:** Stock heater allowed in stock location.

**5.18:** Towing and lifting points must be provided on the front and rear of car.

**5.19:** Numbers must be contrasting colors and easily seen by lap counters.

Numbers must be placed on both sides and roof.

## **6. Chassis:**

**6.1:** Any North American made full-frame passenger car with a minimum wheelbase of 96 inches, no modifications to OEM wheelbase allowed. Full frame cars may replace rear frame rail from center of diff back with .125 square tubing in stock location. Any other frame repair must use .125 wall metal.

**6.2:** Any North American made uni-body passenger car with a minimum wheelbase of 96 inches allowed, no modifications to OEM wheelbase allowed. Front and rear frames must be tied together, using .125 steel, must be a neat job, if your frame does not pass tech inspection you will not be allowed to race.

**7. Crash Bars:** No front or rear crash bars. All bars must remain within the perimeter of the frame, except door bars. Maximum of two horizontal bars allowed in front of the radiator. No front or rear bars past the end of the frame except for bumper and bumper mounts. No excessive bars. Factory rad cradle may be removed. If any part of the fuel cell is below the frame rail there must be a fuel cell guard behind the fuel cell running from frame rail to frame rail. Uni-body cars must have protective tubing (similar to roll cage tubing) around fuel cell.

**8. Bumpers:** Front and rear stock bumper mounts may be replaced with a maximum 6 inch .125 wall square or rectangular tubing mounted at a right angle to the frame bolted or welded. Stock or fabricated bumpers of similar size and same location as O.E.M. allowed, fabricated bumpers to be made of the same round tubing as roll cage or similar material, with a maximum of 2

horizontal bars. No sharp edges. Bumpers should not extend past the side of the car, and should not extend an excessive distance in front of or behind the frame. Ends of fabricated bumpers should be rounded or curved inward. Must have a front and rear bumper to race, if a bumper falls off during the race you will be disqualified.

**9. Weight Rule:** Minimum 3200 lbs. with driver after the race, no allowance for missing parts. Weights may be added anywhere on the frame rail or cross members, and must be securely mounted with a minimum ½ inch bolts. Weights must be painted white and have the car number on them. Top 3 heat finishers and top 5 feature finishers must scale immediately after the race is finished before leaving the track, if you do not scale or are too light you will be disqualified.

**10. Wheels and Tires:** maximum tire size 275-60 series radial tires only, no off-road, recaps or snow tires allowed, no aggressive treads. Used Hoosier racing tires allowed, no other brand of racing tire allowed. DOT all season passenger car tires allowed. No softening, chemical treating of tires is not allowed. No tire needling is allowed. Steel rims only, 8 inches maximum. Oversized wheel studs and nuts recommended max 5/8 stud. No rims with bead locks allowed.

**11. Brakes:** 4 Wheel working drum or disc brakes are mandatory, all 4 must lock up. All brake parts must be in stock location. Master cylinder and proportioning valve and brake pedal must remain stock for model of vehicle. No adjustable brake bias valves or add-on restrictors allowed. Front brakes must remain O.E.M. stock. Rear brakes may be drum or disc, drums, rotors and calipers must be steel.

## **12. Steering and Suspension:**

**12.1:** Steering column must be collapsible, any steering wheel allowed provided it is properly attached.

**12.2:** No adjustments of steering and suspension allowed beyond the maximum O.E.M. capabilities. O.E.M. style parts only allowed. No racing parts allowed.

**12.3:** Only 1 shock per wheel stock mounted in stock location, no coil-overs allowed. No adjustable shocks.

**12.4:** Springs must be in stock location.

**12.5:** Leaf springs must be stock or replacement, must use original mounts, no adjustable shackles allowed.

**12.6:** No independent rear suspension.

**12.7:** Tubular non-adjustable upper A-arms allowed. Must have same dimensions as O.E.M. A-arm. Must be steel, must have stock or stock replacement cross shaft; cross shaft may be aluminum. Stock or stock replacement ball joints only. No heim joints. A-arms with bearings allowed. Frame mounts must be stock and in stock location. Bottom A-frame mounts and bottom A-frame bushings must be in stock location. Bushings must have bolt hole in the center of bushing, not an offset bolt hole.

**12.8:** Aftermarket stock length upper and lower non-adjustable steel rear control arms are allowed. Stock length for chassis being used. Steel bushings are allowed on rear suspension. The bolt hole must be in center of bushing. Spherical bushings are allowed. No offset bushings allowed. Boxing of stock control arms is allowed.

**12.9:** No add-on aftermarket or fabricated suspension travel limiters allowed.

**13. Battery:** 1 battery only. Mandatory shut off disconnect in reach of the driver. Battery either mounted in passenger floor area or trunk area in a marine battery case only and securely bolted to body and with a hold down strap (eg, seat belt).

#### **14. Engines:**

**14.1:** 8 cylinder naturally aspirated, North American passenger vehicle small or big block 400 C.I.D. max.

**14.2:** Air conditioning, heater, alternator, and emission devices may be removed.

**14.3:** Entire engine must remain O.E.M. stock unless otherwise specified. NO MODIFICATIONS TO ENHANCE HORSEPOWER. No racing or high performance parts allowed unless specified.

**14.4:** Only GM motor in GM, Ford in Ford etc.

**14.5:** No engine setback allowed. Engine must remain in stock O.E.M. location using O.E.M. engine mounts or fabricated mounts that are of the same configuration.

**14.6:** Flat top or dished pistons only, pistons cannot go past top of block. Maximum overbore .060 inches. Maximum compression ratio 9.5 to 1.

**14.7:** Maximum camshaft lift intake/exhaust is .450 inches, including stock rocker ratio. Hydraulic cams only. No roller rockers/lifters. Roller timing chain allowed.

**14.8:** No aluminum heads or blocks. No Vortec, Magnum or Boss heads.

**14.9:** Cast iron exhaust manifolds only, no center dumps or factory tuned manifolds allowed. No IT1 manifolds. Exhaust must exit under vehicle, exhaust pipes must extend past rear transmission mount.

**14.10:** Stock type ignition system for that make of car. No performance ignition parts. No locked distributors. Must remain stock for make of engine.

**14.11: SMALL BLOCK CHEVY:** 327ci + must use a cylinder head with a minimum of 72cc, 1-cc tolerance. No centre hole (valve cover) heads e.g.: Vortex.

**14.12: SMALL BLOCK FORD:** 351ci+ must use a cylinder head with a minimum of 60cc. 1-cc tolerance. No Boss heads.

**14.13: SMALL BLOCK CHRYSLER:** 360ci + use a cylinder head with a minimum of 72cc, 1-cc tolerance. No magnum heads.

**15. Cooling System:** Any radiator allowed in stock location. Air ducts (for cooling purposes only) allowed in nose piece in front of radiator only, but cannot stick out in front of nosepiece. Belt drive water pumps only. Mechanical fans only. No electric cooling fans allowed. Factory rad cradles may be removed.

## **16. Fuel System:**

### **16.1: Engines 327 C.I.D. and larger:**

American made passenger vehicle naturally aspirated O.E.M. stock 2 barrel carburetor, one carburetor only. Carburetor may be interchanged between manufacturers. Choke plate and unnecessary external parts may be removed, no other modifications allowed. 1 ¼ inch carb adapter plate may be used, distance from intake to base of carb must not exceed 1 ¾ inch. No Holley 4412 500 or 600 cfm carbs. Intake manifolds must be cast iron, no aluminum intakes allowed.

### **16.2: Engines smaller than 327 C.I.D.:** *(may use same configuration as 327 and larger engines)*

American made passenger vehicle O.E.M. stock 4 barrel 650 cfm or smaller carburetor for make of engine. Choke plate and unnecessary external parts may be removed, no other modifications allowed. O.E.M. stock manifold for

make and size of engine, carburetor must match manifold, no adapters or spacers allowed.

Stock holley 4412 2 barrel carburetor allowed with cast iron manifold only, no aluminum manifold. Distance from intake to base of carb must not exceed 1 ¾ inch.

**16.3:** Pump gasoline only, no racing fuel, max 10% ethanol enriched. No nitro, alcohol or additives allowed. No oxygenated fuel.

**16.4:** Approved, racing fuel cells are mandatory, mounted in trunk area between frame rails. If any part of the fuel cell is below frame rail there must be a steel guard behind fuel cell running from frame rail to frame rail. No filler spouts on fuel tank. Uni-body cars must have protective tubing (similar to roll cage tubing) around fuel cell securely mounted.

**16.5:** Mechanical stock style fuel pumps only, no electric fuel pumps allowed. Max 3/8 steel fuel line allowed. No excessive size fuel line or multiple lines.

## **17. Transmissions:**

Stock type automatic transmissions only: must be able to bolt to engine without alterations or adapters. GM with GM; Ford with Ford, Chrysler with Chrysler. No standard transmissions allowed. No power glides allowed. No in and out transmissions allowed. Stock torque converters only, must match transmission and motor. Car must be able to idle in gear. (1000 RPM or less). No torque converter lock ups. All ranges must work (e.g.: Park, Reverse, Drive, 2nd, 1st). Any size transmission cooler allowed. Cooler must be mounted away from driver as to not spray on driver if ruptured. Kick-down mechanism may be disabled. Fabricated shift linkage is allowed.

## **18. Differentials:**

Stock passenger rear ends only, for make of car, or you may use Ford 9 inch non-floater or full-floater rear ends in any car. Must be mounted in the factory stock location for the car. Max ratio 4.11. Differentials may be locked or welded. Steel mini spools allowed. No aluminum parts allowed. No lightening of gears. No traction control devices. No other racing parts allowed.

# SAFETY RULES

## **1: DRIVESHAFTS:**

Must be painted white and have a front continuous loop around drive shaft within 6 inches of the front universal joint. Loop must be made out of steel at least ¼ inches thick by 2 inches wide. No chains.

**2: SEAT BELTS:** Minimum 5 point racing harness mandatory, properly adjusted and worn at all times including if you are stopped. While on the track do not undo your belts unless instructed by an official. Belts will be inspected for wear, age, condition and proper mounting. Maximum 5 years old.

**3: RACE SEATS:** Approved racing seat and window net required. Race seat mounted securely to roll cage at 4 points, welded or bolted.

**4: FIRE SUITS:** Approved fire suit is mandatory.

**5: HELMETS:** 2010 Snell approved or newer full face helmet is mandatory, and will be inspected for age, wear and condition. Tear-offs should be used for visors.

**6: FIRE EXTINGUISHER:** Must have one readily available in your pit area.

**7: WINDSHIELDS:** windshield must be removed and 4 or 5 vertical bars ¼ inch minimum diameter (3/8 recommended) welded to the upper roll cage cross bar and the dash roll cage cross bar.

## **8. ROLL CAGE:**

**8.1:** Steel tubing for roll cage must be at least .095 inch wall and minimum 1.50 inch outside diameter mild steel tubing. No pipe fittings or galvanized tube allowed. Must have a 3/16 inspection hole in a non-critical area.

**8.2:** Roll cage must conform to body interior.

**8.3:** Driver's head cannot extend past top of roll cage.

**8.4: Roll cage diagram is now the minimum required.** a 4 or 6 point frame mounted roll cage is mandatory and must have one main rollover continuous hoop to extend from the frame up to the roof across and back down to the opposite side frame, with a cross or X brace running from top corner of hoop to bottom of hoop on opposite side. Two bars from the top of the main hoop going forward, (bent approx. 30 degrees) at the top of front window and (approx 60 degrees) at the bottom of window, continuing to front frame on both sides. All other cross bars to be gusseted and butt welded (see diagram).

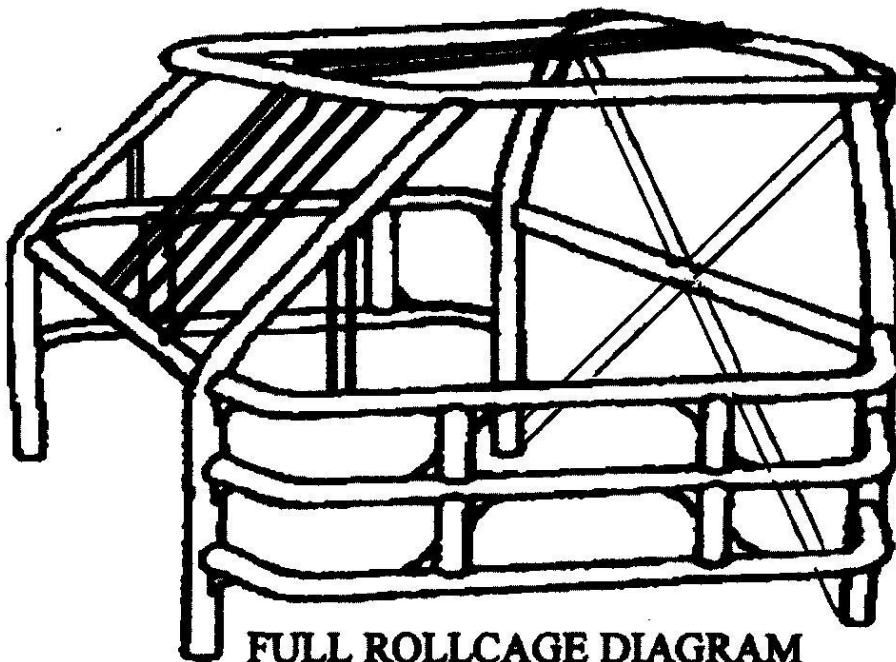


**8.5:** Minimum of three (4 recommended) torso or kidney bars made of the same material standards as above must be welded horizontally and equally spaced between window opening and lower door jam. These bars must be welded to the roll cage with ¼ inch gussets along the inside of the driver's door.

**8.6:** A minimum of 1/8 inch steel plate must be welded from top door bar extending down to at least the bottom door bar, extending the length of the drivers compartment.

**8.7:** Roof bar, front window bar and front corner posts required.

**8.8:** All bars must tie into frame with gussets, uni-body cars must use a minimum 12 inch x 1/8 inch square floor plate bolted or welded to floor (for roll cage). Uni-body cars must use sub-frame connectors minimum .125 square tubing.



Roll cage minimum requirements, driver door plate is required, see text for details. Additional bars may be added provided they do not obstruct the side window openings.