SECTION 9 – MINI STOCKS

9-A. DEFINITION

The word stock will mean unaltered as originally factory produced and installed for make. All cars and trucks will be stock for make unless otherwise specified within these rules.

9-B. COMPETING MODELS

- 1. Any four (4) cylinder, three or four passenger front engine vehicles or pickups.
- **2.** Any front or rear wheel drive, non-turbo four (4) cylinder approved. Rotary models not approved. Air cooled are permitted.
- 3. No minimum ride height will be enforced

9-C. BODY SPECIFICATIONS

- 1. Body and chassis must be of the same make (i.e. Ford to Ford)
- **2.** Floor pan and firewall are to remain stock and intact and in stock location, any penetrations or openings must be sealed with minimum 20-gauge metal.
- **3.** Body must be complete for declared make and model. No convertibles. Similar models may inter change body panels (i.e. Mustang/Pinto, Tercel/Corolla etc.) if done in a clean, neat manner and resembles factory appeal.
- **4.** Bodies to remain stock in appearance. No excessive trimming permitted. The Roof, A, and C Pilars must be OEM Stock. All other panels can be fabricated using sheet metal (min 20 gauge) fiberglass or aluminum, but must, with-out question, resemble the part it replaces.
- **5.** All holes or openings in body will be neatly filled or covered (i.e. tail lights, head lights, door handle etc.)
- **6.** Cutting or shortening of body to decrease height or length of body is only permitted in the case of chassis/body swap. Any cutting or shortening must be kept to a minimum and may only be approved to keep wheel opening in correct position or roll bar position at an optimum. Any cutting is subject to a weight penalty at tech discretion.
- **7.** Fenders and quarter panels may be trimmed for tire clearance. Trimming not to exceed 3" from top of the tire. Edges must be rolled to meet tech approval.
- 8. Windshield. If removed it is recommended that it is replaced with a maximum of ½" x ½" mesh screen covering the entire opening and be securely mounted. Lexan windshields are approved. Side and rear windows may be used. Lexan only (minimum 1/8") is approved for use. Passenger door window will remain open for safety purposes.
- **9.** Front inner fenders, both inner door panels, and all other inner panels may be removed. Hood and rear deck lid may be skinned.
- 10. Inner panels in trunk area may be removed.
- 11. Doors must be securely welded or bolted shut.
- **12.** Hood and rear deck lid will be securely fastened using four (4) hood pins or two (2) hood pins and two (2) hinges. Nuts and bolts are not approved for securing hood or deck lid.

- **13.** Hood may be altered for air cleaner clearance purposes only. Exposed air cleaner is permitted. Fabricated enclosures may be used to cover exposed air cleaners, material optional.
- **14.** Factory or fabricated rear spoiler permitted, fabricated rear spoiler will be a maximum 4", as measured from the top of the rear deck lid. Spoiler may not exceed the width of the rear deck. Forward support no more than 8"
- **15.** Exterior nerf bars allowed. Nerfing not to extend more than 1.50" past the body skin at any time, ends must be capped or welded shut. Nerfing allowed on both sides, between front and rear tires only. 1.50" O.D. round or maximum 1" x 2" square tubing is the only approved material for exterior nerfing.

9-D. SUSPENSION / CHASSIS

- 1. RWD or FWD permitted. 4WD or AWD not permitted.
- **2.** Frame and/or Uni-body must be maintained for structural integrity from front to rear suspension. This means that the stock floor pan will be complete from the front fire wall to the rear firewall.
- **3.** Wheelbase will remain stock for the chassis/floor pan being used.
- **4.** All suspension parts/components will be stock for make of chassis unless otherwise specified. Replacement parts/components must be stock unless otherwise specified.
- **5.** Chassis mount or suspension parts may not be altered to accept or be accepted in to stock location. Unless otherwise specified.
- **6.** Hubs or rotors may be redressed to accommodate 5 lug wheels and larger lug studs. For safety purposes only.
- **7.** Drilling, grinding or machining of suspension parts for the purpose of reducing weight is permitted.
- **8.** Shocks and struts must be stock type and mount near stock location. Notching of strut tower bolt holes is permitted for camber/caster adjustment. Stock Towers will remain in place but may be trimmed. Support may be integrated through the front hoop. Aftermarket camber plates may be used. Camber as desired.
- **9.** Front coil spring type, size and height is optional. No adjustable spacers on top of the spring allowed. Adjustable extended shims allowed.
- 10. Coil overs are allowed but cannot replace leaf springs
- 11. Torsion bars will be stock or stock type replacement only.
- **12.** Leaf springs of any type approved. Stacks may be altered. Any spacers or lowering blocks used in the leaf stack must be securely mounted. Front and rear mounts will be stock. Adjustable rear shackles are approved.
- 13. Rear coil springs of any type approved. Shims or spacers may be used to raise or lower either corner of the car. Spring pockets may not be altered or replaced and will remain in stock location. Adjustable extended shims allowed.
- 14. Sway bar type, mounting and location are optional.
- 15. Weight Jacks are optional
- 16. Bump stops are not allowed
- 17. Use of twist ties and spring rubbers are approved.
- **18.** Redress, drilling and grinding deemed a non-performance enhancing safety upgrade will be allowed.
- 19. Poly or steel bushings approved for front or rear components.

20. Front and rear shocks must be stock or stock type replacement.

9-E. REAR END

- 1. Any rear end may be used; all mounting points must be made to be direct bolt in to receiving car. Quick-change rear ends are not approved. Gusseting from the pumpkin to the axel housing is permitted.
- **2.** Gear ratio optional.
- 3. Welding, mini spool or full spool may lock differentials.
- **4.** No posi-trac, limited slip, Gold track or Detroit Lockers.
- **5.** Floater rear ends approved.
- **6.** Aftermarket axles allowed. No gun drilling.

9-F. ROLL CAGE

- 1. A minimum six-point roll cage is mandatory.
- **2.** Bars will be a minimum 1.50" O.D. roll cage tubing with minimum thickness of .095 wall.
- **3.** Gussets are required on all 90-degree joints
- **4.** Cage must have a minimum of three (3) door bars on the driver's side and two (2) on the passenger side.
- **5.** 1/4" inspection hole to be provided in the main bar.
- **6.** Any bar within driver's reach while belted into the seat will be padded with industry standard roll bar padding.
- **7.** Front hoops allowed to penetrate the firewall. Hoop bracing behind the upper A-arms is approved. Radiator support may be integrated into the hoop.
- **8.** 1/8" door bar plates are mandatory on the driver's side.
- **9.** Uni-body. Roll cage must be securely fastened to the floorboards by welding 1/8" thick minimum plate, 4" x 8" or 6" x 6" on top and/or underneath the floorboards using 3/8" bolts per mounting, or cage may be directly integrated into the sub frame at all main points with full circumference welds.

9-G. BUMPERS

- 1. Bumpers will be stock automotive type bumper of any manufacturer.
- **2.** Fabricated tube style bumper may be used if covered by a factory stock rubber bumper cover or after-market front bumper cover.
- **3.** All Front or Rear bumper covers will be stock or aftermarket. (i.e. 5 star or performance bodies) No wedge.
- **4.** Front and rear bumpers will be strapped to the fenders or quarter panels with a minimum 2" x 1/8" thick steel strap, unless covered by a bumper cover. Strap should be securely bolted or welded in place from the outside edge of the bumper to the outside edge of the body.
- **5.** Height of bumpers is to be compatible with other cars.
- **6.** All cars are to have tow hooks or tow points at the front and rear of car.
- 7. Front bumper may be reinforced for radiator protection.

9-H. ENGINES

1. Must be same make as the body. 2600cc max displacement.

- 2. Must be Factory OEM block. Machining of surfaces approved.
- 3. Engine must remain in stock location. Aftermarket solid motor mounts approved.
- **4.** Only factory produced OEM parts and components will be approved unless otherwise specified.
- **5.** Any intake manifold for make. Interior manifold modifications approved. Welding of injector ports for the purpose of plugging is approved.
- **6.** Headers are approved.
- 7. Cylinder heads will be stock/OEM for make.
 - **a.** Aluminum head approved only if stock/OEM for engine and car being used.
 - **b.** Aftermarket performance heads (Esslinger or other brands) are not allowed.
 - c. Machining and surfacing approved.
 - **d.** Porting of intake and exhaust ports approved.
- **8.** Only stock OEM diameter steel flywheels for engine type approved. Surfacing approved. Cutting, milling, or excessive machining (at tech discretion) will deem the part illegal. Scatter shields recommended.
- **9.** Clutch disc and pressure plate will be stock type replacement only. Ram type not allowed.
- 10. Rocker arm assembly optional.
- 11. Piston Type optional.
- **12.** Valves, and valve springs of any type may be used.
- **13.** Fuel pumps must be factory type replacement. Electric pumps must have oil pressure shut off switch. (If engine dies, fuel pump must shut down immediately.)
- 14. Solid or hydraulic camshaft and lifters of any manufacturer approved.
 - **a.** Roller Cam and lifters approved only if OEM for year make and model of car.
- 15. Adjustable cam gears are approved.
- 16. Oil pans may be over-sized, interior baffles allowed. Claimer pan approved.
- **17.** Oil coolers and remote pump/filter locations are approved. Oil coolers must be located forward of the front firewall and rearward of the radiator.
- **18.** Dry sump oil tanks are not approved.
- 19. Mechanical or electric fan only, after-market allowed.
- **20.** Fan must be shrouded, must cover both sides and top.

9-I. CARBURETOR

- 1. One (1) two-barrel carburetor or two (2) one-barrel carburetors allowed.
- 2. No variable venturi carburetors
- **3.** Maximum 2" adapter or spacer plate allowed. Plate must be bolted or welded to the factory intake location of manifold only.
- **4.** Two throttle return springs required.
- 5. Air cleaner or butterfly cover required.
- **6.** Fuel injection
 - **a.** Must be for stock make and model of engine. No swapping of injection system from other families. Must be stock OEM, including throttle body, fuel rails, injectors, sensors, and wiring for that specific engine. Computers must be maketo-make; may have provisions for adjustability. No aftermarket ECU.
 - **b.** ECU must be mounted in an easily accessible and visible place.

- **c.** ECU must be inspected and sealed by tech before being allowed to race and will be inspected for seal at each event.
- **d.** All fuel injection components are to be proven legal by the car owner.
- **e.** ECU on any fuel-injected car may be claimed for \$200 by the PRA or any PRA member participating in that event.
- **f.** Fuel injection models may be converted to carburetion.

9-J. MINIMUM WEIGHTS

- 1. Minimum weight, including driver and gear in driving position:
 - a. 2250lbs for solid axle
 - **b.** 2350lbs for independent axle
 - c. 2000lbs for 2.0L or less engine displacement
- 2. In fairness of competition, the board may adjust minimum weights on specific cars.
- 3. Maximum left side weight percentage as weighed with the driver will be 56%
- **4.** Weight declaration must be visible to track official during weigh-in.

9-K. TRANSMISSION

- 1. Transmission must be same make as body and engine.
- **2.** Automatic transmission use is optional.
- **3.** Torque converters will have stock stall speed.
- **4.** Transmission coolers and cooler lines shall be contained outside of the driver's compartment. It also must be located in front of the front firewall or behind the rear firewall, no exceptions.
- **5.** Manual gearboxes will be stock for make with no alterations.
- **6.** NHRA approved explosion proof bell housing for manuals or a transmission blanket for automatics is recommended.

9-L. TIRES/WHEELS

- **1.** Maximum 8" width, street legal, DOT approved tire with a 300 or greater tread wear rating is approved.
- **2.** Any used treaded slick 13"x8" or new American Racer 13"x8" treaded slick. New tires must be purchased at DCS and limited to 6 tires per season.
- **3.** Tire groove depths must be factory grooves. Cutting/grinding deeper grooves of tires not approved.
- **4.** Tires may not extend outward beyond the fender more the 3" from the widest part of the fender well.
- **5.** Heavy duty, aftermarket or racing style wheels are recommended on all four corners.
- **6.** Minimum $\frac{1}{2}$ " wheel studs mandatory on the right front wheel
- **7.** Back spacing is optional.

9-M. BRAKES

- 1. All four wheels must stop when brake pedal is applied. Stock swaps of the same make for larger or disc brakes allowed in front and rear.
- 2. All brake components will be stock-type for chassis being used unless otherwise provided in these rules. Includes master cylinders, calipers, rotors, and hubs.

- **3.** Aftermarket brake shoes and/or pads allowed.
- 4. Brake bias adjusters allowed.

9-N. RADIATOR

- **1.** One radiator of any type allowed.
- **2.** Must mount in stock location and be contained under the hood and may not interfere with bodylines.
- **3.** Mounting optional.
- 4. One quart over flow tank required.

9-O. DRIVESHAFT

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

9-P. FUEL

1. Pump fuel, racing fuels, and Av-gas approved. No alcohol, Methanol, or additives allowed

9-Q. FUEL CELL

- 1. Safety approved fuel cells are mandatory. Fuel Cells must be enclosed in a metal case of 18-gauge metal and must have a protective hoop at the rear that extends at least 1" below the fuel cell. The fuel cell overflow hose must go to the bottom of the cell on the outside and must be fastened at the bottom of the cell or a check ball valve must be used. All fuel cells must have a minimum of two (2) 2" x 18" metal straps or equivalent metal, surrounding the cell.
- **2.** Rubber line passing through the driver's compartment will be contained in conduit or pipe from the front firewall to the rear firewall. Braided steel high-pressure fuel lined approved.
- **3.** Fuel pumps must be factory type replacement. Electric pumps must have oil pressure shut off switch (if engine dies, fuel pump must shut down immediately)

9-R. ELECTRICAL

- **1.** Any coil type, battery powered ignition approved. Fuel injected cars see rule 10-I, section 6.
- 2. Magnetos not approved.
- **3.** Alternator is optional.

9-S. BALLAST/BATTERIES/FIRE CONTROL

1. See General Safety Requirements section 3-B

9-T. EXHAUST

- 1. Mufflers will be mandatory and must be no louder than 95db at 100ft
- **2.** Headers are approved.

- **3.** Exhaust systems that enter the driver's compartment will be completely enclosed with minimum 22-gauge sheet metal. Shielding the driver, pit crew, and safety crew from being burned.
- **4.** Exhaust must exit behind the driver and be no more than 16" from the ground as measured from the top of the exhaust pipe. Exhaust must exit behind and away from the driver and away from the fuel supply.
- 5. See General Safety Requirements section 3-B

9-U. SAFETY ITEMS

- 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.

9-V. RADIOS

1. Two-way radios allowed. Spotter must have car number clearly marked in a high contrasting color on ear muffs.