

South East Mini Stock Tour

2016 RULES AND REGULATIONS

Section 1. General

- A. Competing Models: 1972 thru present mass produced 4 cylinder passenger cars, 2 or 4 door models allowed. No convertibles, mini vans, or trucks. No rear, mid, or opposed engines allowed. No AWD, AWD conversions, or 4x4 models permitted. Preapproval of any questionable make/model required.
- B. Overall weights: All racecars will weight a minimum of 2200 lbs with a 55% maximum left side weight. All weight rules are general specification. Weights and percentages may be adjusted on a per race basis to balance the lap times if needed for competition purposes. All weight and percentage rules are measured before the race and adjustments may be made at that time. Car with driver will be checked post feature to ensure compliance. SEMST scales WILL be the source of the weights.
- C. Weight Standards: All **FRONT WHEEL DRIVE** cars will have to weigh 1LB per CC (min. 2200LBS). **All solid axle REAR WHEEL DRIVE will weigh a minimum of 2250 LBS regardless of engine size Ford 2.5 will weigh a MINIMUM of 2450 lbs.** Percentage overages within the first .1% will be allowed, 55.01-.09%)
- D. Independent Rear Suspension (RWD): Must weigh minimum 2350 LBS 55% Left Side
- E. Communications: Mirrors and two-way radio communication are allowed. All cars will be required to monitor the radio frequency used by SEMST. This will allow for quicker line-ups and restarts. Driver or spotter can receive SEMST transmissions. 454.0000. Raceceiver or Scanner will need to be used during all on track activity.
- F. Appearance: All bodies must be neat appearing; tech will have final judgment. All body panels and edges must be smooth to help reduce unnecessary tire cuts. All panels must meet 4" minimum height. (this includes nose, side skirts, and tail pieces) Bodies are allowed to be gutted and small modifications may be done to meet chassis and tire installation.
- G. Transponders: All cars will be required to use an AMB 260X style transponder. Transponder may be direct wire or rechargeable. Transponder must be mounted with a clear view to the ground. Transponder must be mounted 10 feet from the front most point of the car. Transponder must face the race track. Any car found in violation to transponder mounting will receive a full event disqualification.
- H. Identification: **All cars must have the Make or Model of chassis identified on the outside of the car. Text must be 2" in height. Can be located on bumper covers, windshield, rocker panels, or sides of car. MUST BE VISIBLE FROM GRANDSTANDS**

Section 2. Bodies

- A. Inner panels: Stock firewall and floor-pan must be intact. Floor-pan may be fabricated but it MUST cover entire floor area between the front and rear firewalls. Firewalls MUST remain in stock locations. Bodies from any manufacturer can be used. Bodies may be fabricated.
- B. Bodies: Bodies must be stock appearing for make and model. Doors, fenders, quarters, and trunk-lid may be steel or aluminum be MUST be stock in appearance and size. Hoods must be stock, aftermarket steel, or fiberglass, NO ALUMINUM hoods will be permitted even if OEM. Tail section of car must be closed and no cut-outs or openings are permitted. Aftermarket noses and tails pieces are allowed.
- C. Aftermarket Bodies: Cars may use aftermarket bodies. Dirt late model noses will not be permitted
- D. Accessories:
 - 1. Spoilers: maximum 58" X 5". MUST be placed aft of trunk lid or aft of rear window base. May be constructed of lexan, steel, or aluminum. Stock spoilers allowed. Metal spoilers must be made from three separate pieces with none of the three exceeding 20 inches in length. Spoilers WILL NOT extend beyond width of the decklid.

2. Windows: Lexan windows may be used. Quarter, and rear windows allowed but not required. Door windows are not permitted. Undamaged stock front windshields may be allowed with prior request and approval. Glass windshield is permitted as long as it is factory safety style glass.
 3. Rub rails: Exterior rub rails are allowed only between the front and rear tire and MUST stay in contact with the body their entire length. Steel rails MUST be secured to the cage in two places. plastic rails may be riveted to body with a minimum rivet spacing of twelve inches.
- E. Roof Rails: 2 Roof rails are permitted lengthways of the car. Rails can be no longer then the steel roof panel. Rails must be no higher then 1½” above the surface of the roof. Rails may be made from steel, aluminum, lexan, or plastic and must be securely fastened to the vehicle.

Section 3. Chassis

- A. Tubing: Stock chassis may be tubed in front of strut towers, but must remain unaltered from strut or shock location to rocker panel. Chassis may be fabricated with tube beyond rear strut or shock towers. Tubing can be used to connect front and rear sub frames must be identical side to side. Piping is allowed to pass through either firewall. Caster/Camber plates are permitted and the top of the strut tower may be slotted for adjustment.
- B. Roll Cage: Main cage must be constructed using a minimum pipe size of 1.5” X .095. Frame tubing must be minimum 2”x2”x.125.
Main cage is defined as “any area between the factory firewalls”. Drivers door bars must be plated (18 gauge minimum) or covered (.250 minimum) to reduce the risk of driver injury.
- C. Strut Towers: Strut and shock towers must remain in factory locations, no movement of any factory placed suspension or chassis mounting points is permitted. No modification of stock sub frames allowed, i.e. cannot be cut open, tubed inside and resealed. Engine cross member must be stock OEM and unaltered.
- D. Removed Strut Towers: Cars that have tubing from firewall forward and removed strut towers will be subject to a 75lb weight penalty.
- E. Fuel Cell: Fuel Cell must be enclosed in a steel container. Fuel cell must have a rear crash bar in case of accident. Fuel cell must have fire wall mounted in between the cell and driver.
- F. Lead: Lead weight may be added to achieve percentages and overall weight required by the SEMST. All lead must be painted a solid color and have the car number painted or decaled onto the lead. Any cars losing a piece of lead during a race will face immediate disqualification.

Section 4. Suspension

- A. **Disclaimer: The rules within this section are made with GRAY AREAS in mind. We expect teams to take advantage of these gray areas but NOT violate the rules specifically written. Suspension mounting points MUST remain STOCK! Control Arms, Spindles, ETC MUST remain STOCK! Items not specifically covered MAY be fabricated and altered for performance enhancement.**
- B. Shocks: OEM or stock replacement shocks and struts only, Bilsteins Allowed. No racing, or adjustable shocks/struts allowed. No performance or threaded body shocks/struts allowed. Raceland Coilover Kits , height adjustable only are allowed, no damping adjustment provisions are permitted. Maximum 1 shock/strut per wheel, 4 total per car. Coil-over sleeve kits allowed. No full coil-overs. Sleeve kit must attach to unaltered DOT/OEM replacement shock. Weight jacks and adjustable spring cups are legal. Adjustable strut plates are allowed.
- C. Ride Height: All cars must meet a 5 inch suspension ride height. Ride height will be measured at factory floorboard next to unibody.
- D. Springs: Racing springs allowed. Any Diameter, any height is permitted.
- E. Tread Width: Maximum tread width 72 inches measured from outside bead to outside bead. Bead is defined as the outside lip of the wheel used.
- F. Sway Bars: Any size sway bars can be used, front or rear. Sway bar does not need to be factory for make and model used.

- G. Bolt-Ons: All suspension parts (a-frames, spindles, hubs, etc) must be unaltered OEM. Mustang may use QA1 K-Member.
- H. Brakes: Four wheel brakes must be in working order. Brakes must be OEM or OEM replacement type. No exotic, aftermarket or racing brakes allowed. Cars can be converted to rear disk brakes using factory materials, factory materials can be used from ANY make and model. Aftermarket brake pedal assemblies with bias control are permitted.
- I. Control Arms: Rear control arms may be fabricated from heim joints and radius rods. RWD may have a ¼" adjustment plus or minus stock length.

Section 5. Wheels and Tires

- A. Wheels: 7 or 8 inch wide wheels with any production offset may be used. No mixing of rim diameter or width on car. Spacers may be used. NO homemade or altered wheels will be allowed. Racing wheels are required. 1 inch lug nuts are highly recommended on all four wheels.
- B. Tires: Competitors may run any racing or DOT treaded 7 inch bias ply or radial. Durometer testing of tires will be conducted throughout the race event starting with the first practice. Any tire found to be softer than 55pts will be deemed illegal and penalties may be issued. There will be zero tolerance on durometer checks conducted by SEMST officials using SEMST tools. All tires must be same size and style. No mixing of tire brands or styles.
NOTE: *Each tire will be checked in a minimum of three locations. All locations checked must be 55pts or greater to pass.*
- C. Specified Tires: Hoosier 800 23/7/13 and 800 23.5/7/14 are the specified tour tires and will be for sale at the events. Only one new tire may be run during the feature event. Tires not purchased from SEMST must be registered with a tour official prior to the feature line-up. A \$5.00 per tire fee may be assessed.
- D. Penalties: Cars not using Hoosier racing tires will forfeit 25% of the posted purse and all additional awards.

Section 6. Engine

- A. Engine Identification: All cars MUST have their engine size and minimum weight post via vinyl decal or paint on either the hood or windshield of the vehicle.
- B. VVT: All cars a variable valve timing system will be required to use make and model specific engines. Cylinder head and block must match. No mixing of VVT engines, heads, or models.
- C. Block: Block must be stock for make. 2540cc maximum displacement (Actual displacement, not advertised engine size will determine the minimum car weight) Maximum overbore .040. Compression ratio may not exceed 12:1. No stroking/destroking of engine.
- D. Heads: Milling of head is allowed. No porting or polishing of any kind. The cylinder head must be stock for make. The combustion chamber must not be modified at all. Ford 2.3/2.5 will be allowed to use Race Engineering Cast Iron replacement head.
- E. Valves: Engine valves must remain stock size for the engine being used. 1mm Oversized replacement valves are allowed, must be used in conjunction with factory sized valve seats. Stainless Steel OE replacements are allowed. Valves may use narrow stem. Ford 2.3 will be allowed to use 1.89/1.59 valve combination. (Oversize valves must use .470 camshaft or smaller)
- F. Crankshafts: Crankshaft MUST be OEM stock, no knife edging or weight removal allowed. No aftermarket cranks. Crankshafts may be balanced. Aftermarket pullies are allowed.
- G. Camshafts: Camshafts max lift .550 at the valve(stock valves) or max of .470 for oversized valves, must be flat tappet, non-roller style valve train. Valve train must match make, model, and year of car declared. **Fords, no roller rockers, lifters, or camshafts.** Lift is measured at the outermost portion of valve retainer. VTEC will require camshaft removal for lift inspection. ALL LOBES will be checked on VTEC equipped cars.
- H. Pistons and Rods: Must be stock appearing. No light weight piston or rods allowed. All replacement rods and pistons MUST have a weight equal to or greater than the stock part.

- I. Carburetor: Carburetor must be stock bore; Holley 7448 350cfm MAX any brand may be used. Choke plate MUST be removed to allow inspection. 1" spacer or adapter between intake and carb allowed. Carbs are subject to outside flowbench testing for flow capabilities. Carbs found illegal will be confiscated.
- J. Fuel Injection: Fuel Injection is allowed. Any size fuel injectors may be used. Any size throttle body may be used for fuel injection. ALL electronic fuel injection (EFI) cars will be required to run a SEMST supplied air restrictor in the intake piping. Air restrictors will be available to tour registered teams prior to the first race. Units must be bought for \$20 from the SEMST and will be swapped out periodically at events. If tampering or modification is discovered the driver will receive a one calendar year suspension from tour competition and be stripped of all points accumulated.
- K. Air Filter: Air filter may stick above hood but will need to be covered so the filter is not exposed to open air. EFI cars must leave air filter in engine bay, filter must not extend ahead of radiator. Air filter spacer in between carb and filter is allowed up to 1"
- L. Intake manifold: No porting or polishing of any kind. MUST use a stock intake manifold for make and engine used. Gasket matching is legal but you MUST use Fel-Pro Gasket for Engine Declared, maximum gasket match with be ½ inch (0.5").
- M. Cooling system: Any radiator may be used and MUST be mounted forward of engine. No anti-freeze.
- N. Exhaust: Headers will be allowed; 2.5" maximum exhaust pipe diameter after muffler. All cars will be required to run a muffler. Failure to meet such request will disqualify any finishes made in that event.

Section 7. Transmissions

- A. Transmissions: Transmission must be a stock unit for make and model; gear ratios may be swapped from other factory units. Must have 4 forward gears in working condition. 5th gear lockouts may be used but will need to be removed for transmission inspections .
- B. Final Drive (FWD): All front wheel drive cars allowed to have locked front end. No Limited Slip
- C. Driveshaft: Driveshaft must be steel and painted white. Shaft MUST have 1 driveshaft loop within 18 inches of the forward u-joint.
- D. Clutch: Clutch must be functional, single disc, or puck style clutch with a stock finger type pressure plate.
- E. Flywheel: Must be steel and weigh a minimum of 10 lbs. measured with SEMST tools. Must retain stock diameter. Weight will include mounting bolts. Dodge Neon: Factory riveted clutch/flywheel assembly. Must weigh minimum of 22 lbs including flexplate and mounting bolts.

Section 8. Rear End

- A. Rear Ends: Rear end needs to be factory for make and model used. No quick change or 9" units allowed.
- B. Control Arms: Control arms may be reinforced, off-set bushing allowed. Fabricated heim joint arms allowed, ¼" +/- maximum adjustment.
- C. Camber: No camber changes allowed to rear wheel drive solid (non-independent) rear ends.
- D. Differential: Welded or open rear ends only, No limited slip, spool, or true-trac type assemblies.

Section 9. Electrical

- A. Ignition: Stock ignition systems only, no magneto or MSD systems allowed. High output coils allowed if stock appearing. Aftermarket distributor may be used. Must be run from factory electronics. NO MSD BOXES ALLOWED.
- B. Starter: Any starter in working condition. Alternators are optional but recommended.
- C. EFI: Fuel Injection computer must be stock OEM style computer, factory computer upgrades allowed. Chips and Flashers allowed to re-tune settings. Must use the actual factory computer unit. ** NO STAND ALONE**
- D. Firewalls: All wires and/or fuel lines that cross through any firewall will be required to maintain a rubber grommet to prevent arcing.

Section 10. Safety

- A. **Racing Seat:** Racing seats must be used and must be attached to the cage by a minimum of four 3/8" bolts. SEMST highly recommends the use of a containment seat system. The minimum of 1 headrest must be used on the passenger side of the racing seat.
- B. **Restraint Systems:** SEMST **HIGHLY SUGGESTS** the use of a head and neck restraint system. Hutchins, HANS, Leatt, Neksgen, etc are all eligible models. A foam neck brace does not constitute as a head and neck restraint system.
- C. **Fire suits:** Full 1 or 2 piece single layer minimum driving suit is required. Racing gloves and shoes are required.
- D. **Helmets:** All drivers will be required to present a motorsports accepted racing helmet every season and after every wall impact. Any helmets deemed to be unsafe will need to be exchanged before the driver is allowed to take the track. **Helmets must be SA rated with a 2005 date code or newer.**
- E. **Steering Shaft:** Aftermarket steering shaft recommended. Must have quick release steering wheel. Steering wheel can be made out of steel or aluminum.
- F. **Harness:** Five Point racing harness required, date must be within 3 years. Harness installation will be inspected. Drivers will not be able to race if the harnesses are installed against manufacturer suggestions.
- G. **Window Net:** Window net required may be ribbon or mesh. Latch must be visibly marked with an arrow in case of emergency. Latch can be spring, buckle, or latch type. Window net must be dated within 3 years of the current race season.
- H. **Battery:** It is suggested that the battery not be mounted within the engine compartment.
- I. **Fuel Cell:** Fuel cell **Highly Suggested** max 12 gallon capacity. Fuel Cell area must be separate from driving compartment. Fuel lines are not permitted to be run through the driver's compartment. Firewall cannot be made from aluminum.
- J. **Fuel Pump:** Electric fuel pump must have switch clearly marked. Electrical on off switch must be located within reach from outside of car. Cars running fuel injection will require an oil pressure shut off switch.
- K. **Certification:** Chassis will need to receive SEMST certification before any track time will be given at first event.
- L. **Chassis:** All cars that compete in SEMST on tracks over 1/2 mile in length will be required to have roll cage piping in front of the front struts and beyond rear firewall.

Disclaimer;

These rules were created to help provide equal competition among a diverse field of cars, drivers, and teams. These rules may be revised by SEMST during the race season should it be deemed *necessary*. When a rule change is deemed necessary, an E-Mail alert will be sent to all teams listed on our contact list. Changes will also be listed on our website. These changes will be effective one week after they are posted. Any cars found to be non-compliant may be assessed penalties which may include fines, loss of laps, loss of purse, (partial or full) and loss of series points.

Questions can be forwarded to:

Bob Guptill
207-577-2681
158 South Ave
Lewiston, ME 04240
neminstocktour@yahoo.com
<http://www.northeastministocktour.com>