

2012 BEDFORD- THUNDER VALLEY SEMI LATE RULES 3/6/12

1. GENERAL

- A. Limited to any 1965 to date, domestic, rear wheel drive, complete bodied car.
- B. No Jeeps, 4wd, Station Wagons, compacts, convertibles, sports cars, sunroofs, t-tops, or trucks permitted.
- C. Must remain stock wheelbase, minimum 108”.
- D. Cars must remain stock except for modifications listed below.

2. APPEARANCE

- A. Officials reserve the right to request body or sheet metal to be replaced if it has sharp edges or is deemed not presentable.
- B. Numbering must be legible, highly visible and in a color contrasting to the car. Numbers must be located on both doors and on the roof.
- C. Numbers must be minimum 18” high and any letters must be 9” high
- D. It is recommended that numbers also be located on the front windshield and rear taillight area.

3. FRAME/CHASSIS

- A. Frame must match manufacture of body. No altering or mismatching of frames.
- B. Front cross member may be altered for fuel pump.
- C. No fabricated frames except for uni-body cars. If the car is manufactured without a full frame then front and rear sections must be tied together.
- D. Frame rails must match the stock contours of the production model; on uni-bodied cars fabricated frame rails must have minimum 53” separation through the center of the car.
- E. On uni-bodied cars only, frame may be constructed using steel rectangular tubing only, must be at least 2” (horiz.)x 3”(vertical) x .120” thick.
 - 1. Must start at the rear of the front stock OEM sub-frame and continue all the way to the front of the OEM rear sub-frame.
 - 2. Springs and locating bars for rear must retain stock specifications.
 - 3. Minimum wheelbase for uni-body cars is 110”.
- F. Frame behind rear suspension may be replaced with at least 2”x3”x .095” box.

4. EXTERIOR BODIES

- A. All glass lights, lenses, chrome, emblems and grills must be removed.
- B. Body must be **complete stock or stock appearing**, all lines and bends must match OEM body. Absolutely no slab sides. **Body must be steel.**
- C. Stock appearing plastic nose and tail piece is permitted, must match manufacture.
- D. Hood must be secured using hood pins.
- E. Doors must be welded shut.
- F. No spoilers permitted.
- G. No rub rails, outside bracing or any sharp edges are permitted.
- H. Must have front and rear tow hook capable of supporting the weight of the car. (\$25 fine if car has to be towed and tow hook is missing.)
- I. Bodies must be completely identifiable and stock appearing to their production model.

5. INTERIOR

- A. Cars must be gutted of all flammable material, no boxing permitted.
- B. No radiators, tanks or fluid reservoirs in driver's compartment.
- C. Stock appearing firewall is required, floor pan must be stock appearing, and must be steel.
- D. No drivers adjustable weight jacks or traction control devices.
- E. No mirrors or reflective devices, no radios or two way communications.
- F. Pedals, Steering Column, and seat must be in the stock location.
- G. No batteries in driver's compartment, batteries must be securely mounted ahead of the rear axle.

6. WEIGHT

- A. Cars running a 358ci motor or smaller: 3000lb minimum weight. Cars running over a 358ci: 3300lb minimum, with driver after the race.
- B. Cars can be weighed at any time at the discretion of officials.
- C. Track scales are official; it is the responsibility of the participant to ensure that car makes proper weight.
- D. Any added weight must be clearly marked and secured and may be no higher than 10" from the lowest part of the frame.

7. ROLL CAGE

- A. Must have a full four point design (preferably built by one of the areas chassis shops).
- B. Cage must be welded 360 degrees and gusseted. Cage must be securely mounted to the frame.
- C. Driver's side door must have minimum of four horizontal bars and passenger side must have minimum of three horizontal bars, gusseted and attached to the vertical door bars.
- D. Seamless tubing with a minimum thickness of .095" and a minimum diameter of 1 1/2" are required.
- E. Cage must be padded in all areas where the driver may come into contact.
- F. No screwed type pipe fittings. Driver must have minimum 2" clearance above helmet.
- G. Front bars must follow the contour of the windshield; rear bar must be behind driver.
- H. Must have two bars from top of cage anchored to the frame in the rear.
- I. No offset or set back cages.

8. ENGINE

- A. Engine size shall not exceed 412ci.
- B. Engine must match manufacturer of car.
- C. Block must be a standard factory production block and naturally aspirated. No aluminum blocks. All factory ID letters and numbers must be present on blocks. No CNC lightening of blocks.
- D. Number one or first spark plug must be in line with upper ball joint.
- E. No sliding motor mounts. Solid motor mounts permitted.
- F. Flat top or inverted dome pistons only. Pistons must be at zero deck height or below the deck at top dead center.
- G. Crankshaft stroke must remain stock. Connecting rod length may be 5.7 or 6.0 inches. All other connecting rod dimensions must remain stock.

GM block #10066034 with casting # 10051182 is acceptable.

H. Car must have a stock starter and be able to start under its own power.

9. HEADS

- A. Stock OEM type cast iron heads with no altering.
- B. No angle plug or high performance heads.
- C. Roller rockers permitted, no stud girdles.
- D. The following World Products S/R Torquer heads are permitted: GM #I-052, Ford casting # I-056. No Iron Eagle heads.
- E. No altering of heads is permitted. No angle milling.
- F. Minimum combustion chamber volume is 60cc's. Port matching on the head intake runner is acceptable up to a maximum depth of ¼" in from the intake manifold interface. No additional port work permitted.
- G. No GM angle plug heads or aftermarket high performance heads permitted.
- H. GM Vortec heads are allowed as long as they are in stock form and were used on a production vehicle. GM Vortec pn. 25534371 and 25534351 will not be permitted.

10. CAMSHAFT

- A. Any make flat tappet camshaft permitted.
- B. No roller type or mushroom lifters permitted.
- C. Lifters must retain OEM diameter for that block.

11. CARBURETOR AND INTAKE

- A. Limited to a stock OEM two barrel, with no modifications except with possible removal of the choke plate. (Not to exceed 500cfm)
- B. Stock Holley carburetor (500 cfm model 4412) is permitted. Venturi and booster dimensions will be checked with a go, no-go gauge. Throttle bore diameter may be no greater than 1.6875"
- C. Must have stock fuel pump in stock position, No electric fuel pumps.
- D. Any OEM manufactured manifold of dual plane design will be permitted.
- E. The only aftermarket intake that will be permitted are the following Edelbrock Performer models: **Chevy-** 2101, 2116, 7101, 7516, **Ford-** 2181, 7581, **Chrysler-** 2176, 7177
- F. 358 ci. or smaller can use any intake manifold except tunnel ram.
- G. No polishing, grinding, cutting or porting to intake manifolds.

12. IGNITION

- A. Ignition must be stock OEM distributor and coil only.
- B. No trigger systems, No Accel, MSD or Mallory ignitions permitted.
- C. HEI ignitions: coil must remain in distributor.
- D. Points ignitions: coil must be stock.
- E. Only one ignition per car.

13. TRANSMISSION, CLUTCH, REAR END

- A. Factory stock transmission with all working gears. Automatics must use a stock operational torque converter.
- B. No direct drive, Bert or Brinn transmissions allowed.
- C. No aluminum drive shafts. Drive shafts must be painted white and have a safety hoop. Safety hoop must measure minimum 6" diameter x ¼" thickness x 1" width
- D. Clutch must be stock or triple disk only, no smaller than 7.25 inch diameter and must be all steel.
- E. Approved 360-degree scatter shield bell housing of at least ¼" thick steel is mandatory.
- F. Any stock type production rear end acceptable. Ford 9" rear ends permitted.
- G. No quick change rear ends allowed.
- H. Rear ends must be locked.
- I. No internal traction control devices.

14. EXHAUST

- A. Stock manifolds or headers. Headers must have three 2" collectors for each side.
- B. Header mufflers are required and must be easily seen by the tech inspector.
- C. All exhaust must exit outside the car or behind the driver's seat.
- D. All exhaust must be outside of the cars interior. Exhaust is not permitted to be directed towards the ground. Exhaust must be parallel to the ground. No 180-degree headers.

15. BRAKES, WHEELS AND TIRES

- A. All four wheels must have working brakes.
 - B. Calipers and rotors must be stock OEM steel.
 - C. Cannot be driver adjustable.
 - D. Right side beadlocks permitted.
 - E. Steel wheels only. Width not to exceed 10" diameter.
 - F. Oversize lugs are recommended.
 - G. Maximum tire size: circumference- 93", cross section- 16 ¾
 - H. Tire size and information must be clearly visible on tire.
 - I. American Racer 44, Hoosier 15/ 1300 or harder compound allowed. Nothing softer.
- All tires must meet a minimum durometer reading of 32 at any time. The track durometer is the official measuring device.

16. FUEL CELL

- A. An approved racing cell, 32 gallon maximum, mounted securely in the trunk of car.
- B. Securely mounted in a 20 gauge steel box supported by two 1/8" x 2" steel straps top and bottom to safely secure fuel cell.
- C. No fuel lines inside the car unless they are encased and sealed at both ends.
- D. No copper or rubber fuel line. Steel only.
- E. Fuel cell vent line should have one way inline check valve to prevent spillage.
- F. Racing gasoline only. No nitrous.
- G. No additives of any kinds.
- H. Fuel may be tested at any time.

17. SUSPENSION

- A. No modifications on any suspension parts.
- B. All suspension parts must remain stock for make and model of the car. Only these exceptions permitted: Non-adjustable steel racing shocks and non-adjustable racing springs with a minimum 5" diameter are permitted.
- C. Shocks may be relocated from inside of springs, limited to one shock per wheel.
- D. Aftermarket panhard bars are not permitted.
- E. Weight jacks are permitted.
- F. Rear leaf spring cars will be permitted as long as the body style matches the chassis. (Ex. Camaro body style on Camaro chassis etc.) Leaf spring design may be GM or Chrysler multi-leaf. Sliders and adjustable lowering blocks will not be allowed.
- G. Other than brake bias, no other cockpit adjustable devices will be allowed.
- H. On rear coil spring cars, the centerline of the spring must be within 6", fore or aft of the centerline of the rear axle tube.
- I. Tubular upper A arms permitted. Stock length for Chevy Metric frame is 8", +or - 1/2".

18. SAFETY

- A. Aluminum, high backed racing seat is required. Seat must be securely fastened to rollcage or frame.
- B. Five point racing harness mounted according to manufacture specifications, must no be older than three years.
- C. Approved racing firesuit is mandatory. Fireproof gloves, hood, socks, shoes and underwear are recommended.
- D. Full face helmet with lexan shield- snell 95 or newer is mandatory.
- E. Removable steering wheel required, racing style window net recommended.
- F. Cars must contain shock resistant roll bar padding on all bars within 18" of driver's body.
- G. Windshield screen, with at least three steel support bars is required.
- H. Fire extinguisher, within reach of the driver and safely mounted is recommended.

19. PENALTIES

The technical rules contained here have been assembled with great concern toward maximizing competition and minimizing costs. Rule violations will not be tolerated. Major violations will result in disqualification, loss of points, and prize money earned. Depending on the severity and the intent of the violation, there could be a suspension from future racing activity at the speedway. Minor violations will be considered major if they are not corrected in the grace period allowed by the tech team. Any car must be presented for the scrutiny of the tech man at our request, and results will not be considered official until we are satisfied. If at any time the conduct of any team member, driver or associate becomes a discredit to the speedway, the sport, or himself, they will be removed from all racing activity at the track. Owners/ drivers are responsible for the behavior of all individuals associated with the car and may suffer similarly. These rules have been designed to facilitate the orderly conduct of and establish minimum or maximum requirements for the events. No express or implied warranty of safety shall result from publication or compliance with these regulations. Management is empowered to, at their discretion, deviate from specifications described herein. Management reserves the

right to update these regulations at their discretion, in the interest of cost, safety, or fairness. Management's interpretation of these regulations will always be considered final.

Management has the right to confiscate any part deemed to be in violation of the technical rules. Any driver/ car found to be in violation of any technical/ procedural rules can have their racing privileges revoked for any length of time deemed appropriate by management.