Lafayette County Speedway
DARLINGTON, WI
Friday Night Dirt Track Racing

2011 Stock-Mods (E Mods) Rules

1. SAFETY EQUIPMENT: Rules apply at all times car is on track. Snell-rated SA2000, SA2005 or SFI 31.1/2005 helmet required. Roll bar padding required in driver compartment (Fire retardant recommended). SFI-approved full fire suit required. Fire retardant neck brace, gloves and shoes required. Recommended: Fire retardant head sock and underwear; head and neck restraints; collapsible steering shaft. Driver-side window net required, minimum 16 inch by 20 inch ribbon or mesh style, and must be mounted so latch is at top front of window. Minimum three inch wide SFI-approved five point safety belt assembly required (Ytype shoulder harness not allowed), must be mounted securely to roll cage, recommended to be no more than one year old. Kill switch required within easy reach of driver and must be clearly marked ‘OFF’ and ‘ON’.

2. FRAME: 1964 or newer OEM perimeter American rear-wheel drive passenger car frame only. No sports car frames. Frame must be full and complete, cannot be widened or narrowed, and must be able to support roll cage on both sides, exceptions are: weight jack in original center line of spring tower allowed; frame may be cut a maximum 36 inches forward from center of rear end housing; horns may be removed in front of steering box; front crossmember may be notched and boxed for radiator and/or steering clearance; maximum seven inch wide opening in side of spring tower for spring removal. Maximum two inch wide by four inch tall frame stiffener may be welded directly to outside of left side frame rail. Minimum wheelbase 108 inches, maximum 112 inches, both sides. Maximum overall width shall not exceed 78 inches. For cars using OEM rear suspension design, rear of frame behind rear tires no further forward than one inch behind factory seam, may be replaced with two inch by three inch steel tubing with 0.095 inch wall thickness. No part of frame can be lower than four inches from ground except front crossmember.

3. ROLL CAGE: Must consist of continuous hoops, minimum 1.75 inch O.D. tubing, with minimum wall thickness of 0.095 inch for main cage, frame-mounted in at least six places, low carbon or mild steel recommended. Must consist of a configuration of front, rear and top hoops connected by tubing on sides or side hoops. Driver’s head must not protrude outside cage with helmet on. Roll cage must be securely supported and braced with minimum one cross bar in top halo. Foot protection bar required. Main cage no further forward than rear of engine. All bars forward of cage must be lower than hood.

4. DOOR BARS: All driver side door bars and uprights must be minimum 1.5 inch O.D. with 0.083 inch wall thickness. Minimum three driver side door bars, parallel to ground and perpendicular to driver, and welded to front and rear of roll cage. Passenger side must have at least one cross door bar, horizontal or angled, minimum 1.25 inch O.D. with 0.083 inch wall thickness, and one top door bar, minimum 1.5 inch O.D. with 0.083 inch wall thickness. Steel door plate, 18 gauge or 0.049 inch minimum thickness, must be securely welded to outside of driver side door bars and cover area from top door bar to bottom door bar and from rear hoop down-post to five inches in front of seat. Must be visible for inspection.

5. BODY: Cooling holes allowed. Nose panel may be no wider, or lower than two inches outside of front frame horns. Nose panel must remain within confines of front bumper. Engine compartment must remain open (no side panels). Hood must be enclosed at rear. No panel in front of right door to engine compartment. No inner panels. No car covers. Must have front and rear window support posts. May use lexan in window side panels. No spoilers

6. DRIVER COMPARTMENT: Must have minimum three windshield bars in front of driver. Lexan or aluminum cowl panel in front of driver can be no wider than cockpit and no farther back than steering wheel. Minimum 0.125 inch aluminum, or 0.060 inch steel, complete floor pan required. Aluminum high-back seat only and must be bolted in, using minimum 0.375 inch bolts, next to left side frame rail and ahead of rear tires. Bottom of seat can be no lower than bottom of frame rail. Driver must be sealed off from track, driveline, engine, fuel cell, cannisters and pumps. Oil coolers must not protrude above interior. Accumulators cannot be mounted between driver and left-side door bars. No driver-adjustable devices allowed while car is in competition except brake adjuster. No mirrors of any kind.

7. FRONT SUSPENSION: All components must be steel, unaltered OEM, in OEM location, and replaceable by OEM parts, exceptions are: tube-type upper A-frames with or without aluminum or steel cross shaft, and mounts can be moved; OEM replacement stamped steel lower A-frames; rubber, nylon or steel lower A-frame bushings, no offset or bearing type; welded or bolted shock mount on lower A-frame; OEM or OEM replacement ball joints allowed. Lower A-frames must be right and left, and of same design. Lower A-frame mounts and bolt holes on frame must be in OEM location. OEM ball joints only.

8. STEERING: No rack and pinion. All components must be steel, unaltered OEM, in OEM location, exceptions are: outer tie rod end and adjustment sleeve may be replaced by a minimum 0.625 inch steel rod end and steel tube; spindles can be ground for brake caliper clearance only; bolt on spindle savers allowed; steel steering shafts and knuckles only driver compartment steering may be modified, must be kept on left side. Spindles must be right and left, and of same design. Quick release required - steering quickener and steering wheel may be aluminum. Idler arm, pitman arm, and center link must match frame.

9. SHOCKS: One steel, nonadjustable, unaltered shock per wheel only. All shock mounts, including screw jack type, must be welded. No external or internal bumpers or stops. No air, or remote reservoir shocks. No Schrader valves or bladder type valve allowed. Front half of any shock may be shielded. 5” coil over only.

10. SPRINGS: One steel coil, mono-leaf (rear) spring, or multi-leaf (rear) springs per wheel only. Minimum 4.5 inches O.D., non-progressive coils only. No torsion bars, air bags or inner liners.

11. REAR SUSPENSION: All components must be steel. All mounts and brackets must be welded or bolted solid. Rear shocks cannot be mounted on control arms. Must utilize one of the following designs:

(A) Aftermarket three link design requirements: Must use one upper control arm, solid tube only, located at top center of rear end housing and remain centered on housing over drive shaft. Straight bar and J bars allowed. Lower spring perch must be welded to rear-end housing. Must use steel upper weight jack. No floating rear spring perches/cups allowed.

(B) Leaf spring design requirements: Must use steel leaf springs with no additional suspension components besides one shock per wheel. Adjustable aluminum lowering blocks allowed. No Fiberglass Leaf Springs allowed

(C) OEM stock design requirements: Rear crossmember, control arm mounts and bolt holes on frame must be in stock location. All components must be unaltered, approved OEM, and match frame. Control arms cannot be altered in any way. Steel, rubber or nylon control arm bushings only. Springs must remain in stock location. Lower spring perch must be welded to rear-end housing. Must use steel upper weight jack.

12. REAR END: Any steel approved OEM passenger car or truck non-cambered rear end (housing and carrier) allowed, must be centered in chassis. All components must be steel, except lowering blocks, axle cap, and drive flange. Safety hubs (floater) allowed. No quick change devices. Inspection hole in housing required. Mini-spools only. Ring gear, center section and yoke cannot be lightened. Solid steel axles and one piece drive flanges only.

13. BUMPERS: Steel bumpers must be on front and rear at all times and welded, or mounted with minimum .375 inch bolts. Rear bumper must be constructed of solid square, or minimum 1.25 inch O.D. tubing with 0.095 wall thickness, and – similar to diagram - no wider than five inches outside of rear frame rails. If wider than five inches outside rear frame rails, must be capped and bent forward 90 degrees, or constructed in a loop design.

Must have at least one upright, minimum 1.25 inch with 0.065 wall thickness, from bumper to fuel cell guard. Two-bar front bumper must be minimum 1.25 inch O.D. tubing with minimum 0.065 wall thickness (maximum 0.095 inch) mounted frame-end to frame-end, no wider than width of material outside frame horns and with bottom loop parallel to ground. Top bar must be directly above bottom bar, minimum 6.5 inches apart, measured center to center.

14. TIRES/WHEELS: May use G60 or Superchain link tires, must be mounted on steel 8 inch wheel, may run a beadlock on the right rear only. Grooving/siping allowed. No Recaps, No Bleadervalves. One foam type mud plug allowed on right rear only. Inner mud cover allowed on left rear only. Must use minimum one inch O.D. lug nuts.

15. BRAKES: Must be steel approved OEM, operative four wheel, drum or disc. Must maintain minimum OEM dimensions for hubs/rotors and calipers, cannot be lightened. Bolt pattern may be changed. Larger studs allowed. Rear rotors may be aftermarket 0.81 inch thickness (new). Vented rotors only, no scalloped or ceramic coated rotors. One proportioning device allowed (one-to-one ratio), front to rear only. Brake lines must be visible and must connect directly from master cylinder to calipers with no devices in between.

Rear caliper brackets must be welded or bolted solid to rear-end housing.

16. EXHAUST: Round tube headers or manifolds allowed. All primary header tubes must enter directly into one collector, at same point, at end of header. Turn down allowed. Non-stepped, painted headers only. No exhaust sensors, merge collectors, cross-overs, extensions, or balance tubes.

17. FUEL SYSTEM: Racing fuel cell required, maximum 32 gallon capacity (12 gallon recommended), must be in minimum 20 gauge steel container. Cell must be securely mounted behind rear axle, between rear tires, minimum four inches ahead of bumper, minimum 10 inches above ground. Must mount with minimum two solid steel straps around entire cell, two inches wide and 0.125 inch thick. All cell mounts must be steel, securely welded to frame/cage. Protective tubing must cover rear and extend past both sides of cell. No part of cell shall be lower than protective tubing. Fuel cell vents, including cap vent, must have check valves. If fuel cell does not have aircraft style positive seal filler neck/cap system - a flapper, spring or ball type filler rollover valve is required. Pick-up must be on top or right side of cell. No cool cans. Air cleaner top/stud cannot direct air into carburetor. No top flow

air cleaner housings. Maximum 3 inch tall by 14 inch diameter element only. Mechanical OEM type push rod fuel pumps only.

18. FUEL: Gasoline, racing fuel, and E85 allowed. Pump grade recommended. No performance enhancing or scented additives. No nitrous. No Methanol/Alcohol.

19. WEIGHT: Minimum weight limit of 2,500 pounds, no tolerance, after race with driver in car. Weights must not be used in driver compartment or outside body. All weights must be securely mounted with at least two 0.5 inch bolts, painted white with car number on it. No titanium, magnesium, stainless steel or carbon fiber components. Solid steel fasteners only.

20. BATTERY/STARTER: One 12 volt battery only, must be securely mounted between frame rails, and positive terminal must be covered. Starter must bolt on block in OEM location and directly engage flexplate. Car must have capability of starting. Car must leave initial staging area on demand, and unaided.

21. GAUGES/ELECTRONICS: No unapproved cameras, transmitting or listening devices. 12 volt ignition system only. OEM HEI distributor only (no Billet). Ignition rotor, cap, coil and module must remain OEM, no MSD parts. No ignition boxes, remote coil or accessories. All wiring must be visible for inspection. Only gauges allowed are analog oil pressure, fuel pressure, brake bias, water temperature and analog tachometer (memory recall allowed). No electronic traction control devices.

22. TRANSMISSION/DRIVE SHAFT: All forward and reverse gears must be operational, plus a neutral position. With engine running and car in still position, driver must be able to engage car in gear and move forward, then backward. Only OEM production transmissions allowed. No ‘in and out’ boxes or quick change devices allowed. Functioning shift levers must be in OEM location. One OEM style/size flexplate allowed, must be bolted directly to end of crankshaft.

Automatic: Must be unaltered automatic transmission, OEM production case with a functioning OEM pump. Aluminum OEM bellhousing may be replaced with aftermarket explosion-proof aluminum bellhousing. Original OEM bellhousing must have approved scattershield constructed of minimum 0.125 inch by three inch steel, 270 degrees around flexplate. Only external lines allowed are for transmission cooler. Torque converter (10 inch minimum) OEM only.

No manual transmissions allowed.

No Powerglides

Drive Shaft: Minimum two inch diameter, white, steel drive shaft. Steel slip-yokes only. 360-degree drive shaft loop required and must be constructed of at least 0.25 inch by two inch steel, or one inch tubing, mounted six inches back from front U-joint.

23. ENGINE COMPARTMENT: Rear of engine (bellhousing flange) must be mounted at least 72 inches forward from centerline of rear axle. Engine offset must be kept within two inches of centerline of front crossmember with engine level. Minimum 11 inch engine height from ground to center of crankshaft. V-belt aluminum or steel pulleys only. Copper/brass or aluminum radiator only and must be mounted in front of engine.

24. ENGINE: with following specs: All engines must be able to be used in conventional passenger car without alterations. External engine casting and threaded holes cannot be altered.

BLOCK: Must use OEM steel passenger vehicle production block only. No GM Bowtie, Ford SVO or Chrysler W components allowed. Maximum 361 cubic inches (GM); 363 (Ford); 370 (Chrysler). Maximum compression ratio is 9.0 to 1, no tolerance. Compression ratio checked using Whistler and cubic inches checked using pump, OR by visual inspection of part and/or casting numbers, pistons, etc (track option which method is used).Cast Flat top four valve relief or dished pistons only, no gas-ported pistons. OEM cast or steel crankshaft and OEM rods only - cannot be lightened. Conventional hydraulic flat tappet cam and lifters only, no exceptions Maximum .450 lift at Valve. Cannot alter lifter bores. OEM firing order cannot be changed. 'Wet' sump oiling system only. Steel OEM type oil pans only! Racing oil pans not allowed. One inch inspection hole mandatory in all oil pans. With no obstructions to crank and rods visually.

CYLINDER HEADS: No porting, polishing or unapproved alterations allowed to ANY cylinder head. No guide plates, screw-in studs or polylocks allowed. No stud girdles. Steel roller tip rocker arms not allowed OEM stock stamp steel rocker arms only. No beehive valve springs allowed.

NO VORTEC, BOWTIES, DOUBLEHUMPS (camel back), OR ANY AFTERMARKET HEADS ALLOWED!

INTAKE: Unaltered, approved OEM cast iron low rise, two- or four-barrel Only unaltered (no porting, polishing, or cooling lines) No aluminum or marine intakes. OEM type unaltered harmonic balancer only.

OEM type water pumps only.

Any Stock Unaltered Carburetor allowed but must have choke plate with air horn. No billett carburetor accessories. May use adapter to put holly carb on GM engine.

25. ENGINE PROTEST RULE

The protester must pay the race director or the tech official $80.00 cash before the feature race begins. The driver must specify the car # that he/she is protesting

To qualify to protest: you must finish the feature in the top five places. The car being protested must also finish in the top five places.

A. Engine Tear Down

If you refuse the engine tear down, and or; to be inspected, then you will be terminated from the Lafayette County Speedway the rest of the season with no winnings. The driver and/or the pit crew members of the car being protested must be the one to tear down the engine. The intake manifold and one head must be removed for anyone to see. It will then be verified by the race director or tech official and the protester.

If found illegal: The protester will be refunded the $80.00 cash.

First Offense: You, the driver/car (#) will lose your points and winnings for the race of that night.

Second Offense: In the same racing season, you, the driver/car (#) will be terminated from the Lafayette County Speedway for the rest of the season.

If Found Legal: If you are found legal, then you will receive the $80.00 cash.

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