2012 B-MODIFIED RULES

The spirit and intent of these rules are to keep down the cost of racing. Any attempt to circumvent this intent will not be tolerated. ***JUST BECAUSE IT DOESN'T SAY IT, DOESN'T MEAN YOU CAN.*** Speedway officials will have the final word on all matters of the rules. Officials may restrict any car from competing at any time.

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 recommended in driver compartment (Fire retardant recommended). SFI-approved full fire suit required. Fire retardant gloves, shoes and neck brace (or head and neck restraint) required. Right and left seat head supports recommended if using head restraint system with no neck collar. Recommended: Fire retardant head sock and underwear; collapsible steering shaft. Driver-side window net required, minimum 16 inch by 20 inch ribbon or mesh style, and must be mounted to roll cage so latch is at top front of window. Minimum three inch (two-inch with head restraint system) wide SFI-approved five point safety belt assembly required (Y-type 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'

CHASSIS

Factory production 1964 or newer complete full American passenger frames only. No sports cars. Frame rails must extend to a point beyond the base of the driver's seat. Rear clip may be fabricated out of tubing.

The wheelbase must be between 108 and 112 inches.

Frame may not be widened, narrowed or altered and must be able to support roll cage on both sides.
Frames may be cut in the rear only at a point no further forward than 36 inches from the center
of the rear end housing. Frames must maintain a minimum 4 inches of ground clearance with an exception of the cross member.

Front cross member must remain in the stock location but may be may be notched for radiator
or steering clearance only. Frame horns may be removed in front of steering box. The right side
frame in front of the spring may be cut for tie rod clearance.

Overall width, measured at the wheels cannot exceed 78 inches outside to outside of tire.

Steel bumpers must be used front and rear. Front bumper must be mounted on frame end and be of a semicircle configuration with the bottom loop parallel to the ground. Front bumper must be ten inches high from bottom bar to top bar. Material must be 1.25 inch O.D. minimum and 2.0 inch O.D. maximum steel pipe. Rear bumpers may be constructed of pipe or square tubing, but must not have sharp edges. Bumper must have a drag loop extending below the bottom of the fuel cell. Rear bumpers and nerf bars must not extend beyond width of rear tire. Bumpers must be able to support car when lifted.

Seat and steering wheel may be located to suit driver's preference, but must be kept on the left side of the car. No center steering. Seat must be mounted to the roll cage with a minimum of 3/8” grade 8 bolts.

BODY

Body must be made of aluminum except the roof which may be aluminum or fiberglass. Maximum body width at top deck is 68 inches. Maximum body width is 72 inches at bottom of body including all skirts/flairs.

Cowl panel in front of the driver can be no wider than the cockpit and shall not extend furtherback than the steering wheel.

Firewall and floorboards are mandatory and shall consist of .125 inch aluminum, 16 gauge or .060 inch steel. A complete floor is required.

Bodies may not extend further forward than the back of the engine block.
No panels in front of right door to engine compartment. No engine side panels. No inner panels. No dished roofs. No belly pans.

No more than 6 inches of rake front to rear on top deck, deck must remain flat. No dished or lowered top decks allowed.

Roof must be rounded in all directions, no flat tops. Roof may not have more than 5 inches of rake front to rear.

A rear bumper to deck lid enclosure is optional. If enclosed it should be solid panel at least eight (8) inches high.

Driver and passenger side windows must have at least a twelve inch vertical opening at the shortest measurable point.

No wings or any other type of air/ground effects are allowed anywhere inside or outside of the car. No protruding objects allowed.

Rear spoiler may be a maximum of five inches in material height and 68 inches wide. Spoiler may have rear stiffener. Must be one inch or more down from top. Maximum three spoiler braces allowed. Spoiler must be mounted within confines of spoiler braces. No fins, lips or wings allowed. Spoiler brace dimensions are maximum length of 14.5 inches, maximum height of 6 inches at tallest point. Spoiler brace must taper forward to a maximum height of 3.5 inches.

WEIGHT

Minimum weight is 2500 lbs including the driver. Track scales are final.

ROLL CAGE

Roll cage must be constructed of a minimum 1.75 inch O.D. and .095 inch wall thickness, and be built using continuous hoops and be mounted to frame in a minimum of six points. And must have a cross bar in the halo area.

A minimum of three windshield bars must be installed in front of the driver.

Minimum of three door bars on the driver's side. Minimum tubing size of 1.50 inch O.D. and .083 inch wall thickness. Driver's side door bars must be plated with 18 gauge steel. Plated area must be full height of door bars and extend from rear main cage down tube to a minimum of five inches in front of drivers seat. One cross bar is required on the right side made of 1.25 inch O.D. by .083 inch tubing. Main cage cannot be further forward than engine plate. No brace bars forward of main cage may be higher than hood height. Roll bar padding recommended in drivers compartment.

FUEL & FUEL CELL

Pump gas, racing gas or E85 only. No additives or fuel scents of any kind.
The fuel cell capacity is 32 gal. maximum. The fuel cell must be enclosed in an approved metal container of no less than 20 gauge steel or .125 inch aluminum. Fuel cell must be mounted between the frame rails as far forward as possible using four, two inch by .125 inch metal straps, two in each direction. Tip over valve and tank flapper valve required. Fuel cells must not extend below the rear end housing. Fuel pickup line must be mounted in top of fuel cell. No cool cans allowed.

A mechanical fuel pump is required and must be mounted in stock location on engine block.

ENGINE

American V-8 engine only, must be OEM cast iron block and heads. The rear of engine (bell housing flange) must be at least 72 inches forward from the centerline of the rear axle. The center of the crankshaft must be within two inches of the centerline of the car. Engine casting numbers cannot be altered.

Maximum Displacement;
GM: 361 c.i. Ford: 363 c.i. Chrysler: 370 c.i. Maximum of 9.0 to1 compression.

No Aluminum, titanium or carbon fiber components allowed. Must have OEM or OEM replacement steel crankshaft and rods, cannot be lightened.
Stroker motors are prohibited.

The allowable crankshaft strokes are:

GM Ford Chrysler

302 CID – 3.00" 289 CID – 2.87" 318 CID – 3.31"
305 CID – 3.48" 302 CID – 3.00" 340 CID – 3.31"
307 CID – 3.25" 351 CID – 3.50" 360 CID – 3.58"
327 CID – 3.25"
350 CID – 3.48"

Extra capacity oil pans are permitted. The oil pan must have a one inch inspection hole on eitherside with a screw in plug. Dry sumps are prohibited. The oil pump must mount in the stocklocation.

Any collector type header allowed. No step down headers allowed. All tubes must enter the collector at the same point. Exhaust must be directed away from areas of possible fuel spillage.

The starter must be functional and in the stock location.

OEM blocks allowed:

GM 3892657 3914660 3914678 3932388 3932386 3956618 3970000 3970006 3970010 3970014 10036033 10054727 10066036 10243880 14010207 14010209 14010287 14016376 14016379 14088528 14088548 14088552 14093638 14101148

FORD – Any OEM production block.

CHRYSLER – Any OEM production block.

Pistons must be flat top or dished. No drilling of the second or third rod throws on the crankshaft.

OEM type rods only. 5.7 or 6 inch rods allowed, cap screw rods allowed.
H-BEAM RODS ALLOWED FOR 2010 SEASON ONLY

Flat tappet cam and lifters only. No mushroom, roller lifters or roller hydraulic cams allowed. Lifter bores may not be altered. Oil restrictors permitted.

CYLINDER HEADS

GM - OEM cast iron cylinder heads only. Stamped steel roller tip rockers arms only. Poly locks Guide plates, screw in shoulder studs (0.375 inch max) allowed. No stud girdles allowed. NO PORTING, POLISHING OR ALTERATIONS ALLOWED.

Maximum 2.02 inch intake valve and 1.60 inch exhaust valve. GM 1.250 inch O.D. valve spring only on GM OEM heads. GM crate engine valve springs will be as spec rule. No bee hive valve springs allowed.

GM cylinder heads allowed:
330862 333882 376445 468642 3928454 3932441 3932454 3951598
3876487 3970126 3973487 3973487x 3973493 3986336 3986339
3986339x 3986388 3998920 3998991 3998993 3998997 14079267

Head Option: IMCA EQ head part #CH350I. Head must remain stock, valve sizes cannot be changed, no porting or polishing. Guide plates, screw in shoulder studs (0.375 inch max).

FORD – Any cast iron OEM production head with inline valves. No SVO or canted-valve heads allowed. Maximum 2.04 inch intake valve and 1.70 inch exhaust valve. No aftermarket heads. Non shouldered rocker studs allowed. No guide plates or stud girdles allowed. Stamped steel roller tip rocker arms only. Poly locks allowed. NO PORTING, POLISHING

OR ALTERATIONS ALLOWED.

CHRYSLER – Any cast iron OEM production head with in-line valves. No Canted valves. No W-2 heads. Maximum 2.04 inch intake valve and 1.70 exhaust valve. No aftermarket heads. OEM rocker arm bar allowed. NO PORTING, POLISHING OR ALTERATIONS ALLOWED.

ENGINE OPTION: Unaltered, sealed GM crate engine #88958602 or #19258602. Crate engine must use original HEI distributor with MSD #8728 rev-control and 6200 rpm chip (must be out of driver's reach.) All wires must be visible. Any altered or missing GM seal bolts will result in
disqualification.

CARBURETOR & INTAKE

The stock Holley 4412 500 CFM carburetor is required. Throttle bore must not exceed 1.6875inch. Must meet go no go gauges. OEM Rochester 2 barrel (booster ID may be machined to 0.25 inch, venturi ID machined to 1.375 inch and throttle bore ID machined to 1.6875 inch) allowed and must meet go no go gauges.

No adjustable metering blocks. Choke horn must be intact. Choke butterfly must be removed.

The intake manifold must be one of the following:
Edlebrock performance intake – GM 2101, Weiand IMCA stamped #7547-1, Edelbrock GM 2701
Ford 2121, 7121, 7181, 7183, 7515, 7516, 8023.
Chrysler 2915, 2176, 7545.

Any one inch carb spacer is permitted. Carburetor must be mounted in stock position, no sideways mounted carbs. No cockpit air limiting adjustable spacers. No top flow air cleaners. Maximum 0.100 inch thick carb gasket only. No throttle bore adjustable carb spacers.

GM crate engine may use any Holley 4 barrel, subject to exchange claim, with Moroso carb spacer #64940.

Aerosol-style carburetors are prohibited.

Carburetor claim is $100 with exchange. Carburetors may be exchanged, style for style only.

BATTERY & IGNITION

Electrical system must be 12 volt only. All batteries must be mounted in a secure manner.

HEI distributor required. OEM firing order cannot be changed. Ignition rotor, cap, coil and module must remain OEM appearing. No ignition boxes, remote coil or accessories. All wiring must be visible for inspection.

The only gauges allowed are analog oil pressure, fuel pressure, oil temperature, brake bias, and water temperature and analog tachometer (memory recall allowed). No electronic traction control allowed.

REAR END

Any OEM passenger car or truck non-cambered rear end permitted and must be centered in the chassis.

All components must be steel, except lowering blocks, axle cap, and drive flange.

A two inch inspection hole in housing required.

Mini-spools or full spools allowed. No scalloped spools allowed. Ring gear, center section and yoke can be lightened. Solid steel axles and one piece drive flanges only. Safety hubs (floater) allowed. No quick change devices.

The drive shaft must be a minimum of two inches in diameter. It must be painted white and have the car number on it.

A driveshaft loop made of 2 inch by ¼ inch steel or one inch tubing is required at a point six inches behind the front U-joint. Slip yokes must be steel.

FRONT SUSPENSION & STEERING

Front suspension must match the frame and be in stock location. Parts must be from stock OEM type parts from the same type suspension except the upper A-frame and A-frame mount. Steel tube type upper A-frame may be used. Fabricated A-frame mount may be used. Lower Aframe cannot be altered.

Stock passenger car spindles only; no fabricated spindles.

Adjustable sway bars are permitted.

One shock absorber per wheel, must be steel. Coil over shocks prohibited.

No gas adjustable or schrader valve shock allowed. No re-buildable shocks allowed.

No bump stop shocks allowed.

The steering box must be stock and mounted in stock location. Rack and pinion steering is prohibited.

Steering quickners allowed.

Outer tie rod and adjustable sleeve may be replaced by a minimum .625 inch steel rod end and steel tube.

REAR SUSPENSION

The rear suspension must conform to one of two options, aftermarket three link or multi-leaf spring design. All components must be steel. All mounts and brackets must be welded or bolted solid.

One shock absorber per wheel, must be steel. Coil over shocks prohibited. No gas adjust-

able or schrader valve shock allowed. No re-buildable shocks allowed. No bump stop shocks allowed.

Three link design requirements: must use minimum 16 inch and 24 inch maximum length lower control arms.

Must use one upper control arm, solid tube only, (no pull bar spring to biscuit assembly), located at the top center of rear end housing. Pull bar must run parallel with drive shafts close to center of drive shaft as possible. (Interior configuration will be considered on this ruling).

May use minimum 23 inch long pan hard bar located behind rear end housing or minimum 19 inch long j bar mounted to a steel pinion bracket. Measurements are from center of heim joint to center of heim joint.

May mount rear spring directly over axle housing or use coil over eliminators(sliders). Lower spring perch or coil over mount must be welded to rear end housing. No birdcages or floating mounts allowed. Must use steel upper weight jack if spring are mounted over axle housing. Shocks and or springs/sliders may not be mounted to control links.

All mounts must be welded or bolted solid to rearend housing.

Multi-leaf spring design requirements: Must use steel multi-leaf springs with no additional suspension components besides one shock per wheel. Adjustable lowering blocks allowed.

TRANSMISSION/CLUTCH/FLYWHEEL

Only OEM production transmissions allowed.
No 'in and out' boxes or quick change devices allowed. No Berts, Brinns, Falcons or Layne transmissions. Tonganoxie type transmissions are allowed.

Manual transmissions must be either 3 or 4 speed and use an OEM production case. Second gear cluster can be removed.

With engine running and car in still position, driver must be able to engage car in gear and move forward, then backward. Functioning shift levers must be in OEM location.

One steel or aluminum flywheel allowed and must be bolted directly to end of crankshaft. OEM size and style flex plate or flywheel only.

Any clutch or mini clutch is permitted. It must rotate consistent with the engine rpm when the car is in any gear.

Explosion-proof steel bell housing is required. One hole for the throw out bearing lever or hose is permitted. The bell housing must be 270 degrees around the top of the clutch and flywheel.

Automatic transmission must be unaltered, two or three speed, OEM production case with a functioning stock appearing pump. Splined drive flange coupler with internal pressure relief device, gate valve, or torque converter. Hydraulic lines may not extend in to cockpit. Automatics must have an approved scatter shield constructed of .125 inch by three inch

steel, 270 degrees around top of flex plate.

WHEELS & TIRES

All cars must use either the American Racer G-60 or Hoosier G60.

No softening, conditioning or siping of the tires allowed. Tire grinding allowed to knock off glaze but may not penetrate tire to form sipes. No nail type grinders. All tires must durometer a minimum of 50 on the tread.

Tires may be grooved in the original tread lines only. Grooving is not permitted in the small grooves outside of the outermost and innermost zigzag lines.

Wheels must be 8” wide and made of steel. Bead locks are permitted on the right side only. Aluminum or steel wheel spacers allowed. Wide-five adapters are prohibited. No pressure relief devices allowed.

BRAKES

Disc or drum brakes may be used front and rear. No aluminum disc or brake calipers allowed.

One brake bias adjuster allowed and must operate front to rear only. Brakes must be operational on all four wheels and must lock up all four (4) wheels during inspection. Brake shut off devices are prohibited.

Rear brake rotors may be aftermarket with minimum 0.81 inches thickness new. Vented rotors only. No scalloped or ceramic coated rotors allowed. OEM brake calipers only and must be steel.

All brake lines must be visible and connect directly from the brake master cylinder to the brake caliper. Brake bias gauges allowed.