2023 Escanaba Speedway LS Stock Car Rules

All general track rules and penalties apply.

1. **SAFETY EQUIPMENT:** Rules apply at all times the car is on track. Snell-rated SA2015 or SA2020 helmet required. Roll bar padding required in the driver compartment. *Recommended: Fire retardant padding*. 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 are required if using head and neck restraint system. *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 the roll cage so the latch is at the top front of the window. Maximum four inch tall visor attached to window net. Minimum two inch wide SFI-approved five point safety belt assembly required, must be mounted securely to the main roll cage. *Recommended: Safety belts no more than two years old*. Kill switch required within easy reach of driver and must be clearly marked 'OFF' and 'ON'.Electric fuel pumps required to have an oil pressure shut off switch.
2. **FRAME:**(see frame drawing)AnyAmerican OEM full body rear wheel drive passenger car, 1964 or newer, full frame or unibody. Minimum 107.5 inch wheelbase, maximum one inch difference from side to side. Frame must match body - GM to GM, Ford to Ford, Chrysler to Chrysler - AND wheelbase to wheelbase. Exceptions are: 1980 or newer Ford two door unibody may be installed on 1978-1987 GM full frame OR Ford full frame (shortened to minimum 107.5 inch wheelbase). Chrysler engine may be put in 1978-1987 GM full frame, and may use 1995 or newer two door Chrysler unibody. Rear of frame behind rear tires, no further forward than one inch behind factory seam, may be replaced in OEM location with two inch by three inch steel tubing with 0.083 inch wall thickness. Factory seam must remain visible. Unibody must tie the rear frame to the front frame. Frame may be "X" braced. No Station Wagons, Camaros, Firebirds or Mustangs.
3. **ROLL CAGE:** Main cage must consist of continuous hoops, minimum 1.75 inch O.D. tubing, with a minimum wall thickness of 0.095 inch, *low carbon or mild steel recommended*. Four-post roll cage required, front down bars and rear hoop must be welded to the OEM frame. Driver's head must not protrude outside the cage with the helmet on. Rear hoop must have an "X" brace, consisting of one full horizontal and one full diagonal bar, minimum 1.25 inch O.D. with 0.083 inch wall thickness. Front down bars must be tied together, passenger side front down bars must be maximum 11 inches in from top of door. Must be a minimum 40 inches between the outside edge of front and rear down bars at top of door panel. Maximum 76 inches from back of engine block to top front edge of rear hoop. Top halo must be minimum 40 inches across, and 29.5 inches front to rear, outside to outside. Rear hoop may be maximum 12 inches in from the bottom of opera window. Minimum one cross bar in top halo. May have maximum two horizontal bars, (in addition to bar tying front frame horns together) for radiator protection; must be behind bumper, within confines of body, no wider than stock frame horns. Required rear kickers (down bars) and engine hoop must be minimum 1.25 inch OD tubing, with 0.083 inch wall thickness. Fuel cell protection required, must be mounted frame rail to frame rail, no higher than fuel cell, inside trunk area with maximum 1.75 inch OD tubing. All bars must be inside the body. Foot protection bar required.
4. **DOOR BARS:** All door bars and uprights must be minimum 1.75 inch O.D. with 0.095 inch wall thickness. Minimum three door bars, both sides, parallel to ground, and perpendicular to driver. Minimum four uprights tied from frame to top door bar on driver side, and minimum three uprights on passenger side. Steel door plates, 18 gauge or 0.049 inch minimum thickness, must be securely welded to outside of door bars on the driver's side. Plate must cover area from top door bar to frame and from rear down post to five inches in front of seat. Must be visible for inspection.
5. **BODY:** Must be an approved, unaltered OEM or OEM replacement body and centered over wheel wells (front to rear and side to side). Body and engine make must match. May use 1988-to present GM front wheel drive, two door body, on 1978-1987 GM 108 inch wheelbase full frame. Sunroofs and T-tops must be enclosed. Metric body can use OEM appearing aftermarket fiberglass roof and A-pillars, Shell Valley part #F1015-81-88MCRW; B and C-pillars must remain OEM dimensions. OEM appearing aftermarket plastic nosepiece (minimum 8 inch ground clearance) and tailpiece allowed (*recommended to match body*). Maximum 3 inch plastic skirting allowed on nose
   and tailpiece. IMCA approved Camaro nosepiece (Performance Bodies part #45X040 and Dominator part #DOM330) and Mustang nosepiece (Performance Bodies part #46X040) are allowed with a maximum installed width of 73 inches. IMCA approved Camaro tailpiece (Performance Bodies part #45X100) is allowed. If used, must use Camaro on GM body and Mustang on Ford body. Maximum 42 inch rear height measured at top of tailpiece. All body panels may be gutted, including fenders, doors, hood, roof, quarters and trunk, but must remain original size. OEM replacement steel Camaro and Chrysler 300 type fenders allowed. Overlapping of body panels permitted. OEM or aluminum aftermarket replacement hood allowed, with maximum six inch bow, or maximum 3.5 inch tall plastic hood scoop (part #MD3040 or similar). Combination of hood scoop and bow not to exceed six inches. Air cleaner top maximum 3.5 inches above hood. Hood must have factory feature lines, be separate from fenders, in OEM location, with rear sealed off from the driver compartment with metal. Hole in the hood allowed for air cleaner clearance only. All inner wheel wells may be removed. OEM or aluminum aftermarket replacement trunk lid allowed. Quarter panels and trunk lid must slope down minimum 1 inch toward tailpiece. Rear edge of the trunk lid may be trimmed and rear tail light support removed only if aftermarket tailpiece is used.
   Hood and trunk must be securely fastened. Trunk floor must be removed over rear end housing, entire trunk floor may be removed. All windows must remain open, except opera windows may be covered with clear lexan, no decals. All roof pillars must remain OEM,

exception is: 'B' pillar may be trimmed to minimum two-inch width and must remain within OEM location. Maximum seven-inch metal sun visor may be added to top of windshield opening. Wheel openings may be trimmed for tire clearance. No spoilers, lips or fins. Aluminum or plastic rocker skirt/flare allowed on doors and rear quarter panels (must match side to side), cannot extend outside tires, minimum 4 inch ground clearance. Car number must be minimum four inches thick and 20 inches tall and clearly visible, on both sides and roof of car; six inches tall on front and rear. No Station Wagons, Camaros, Firebirds or Mustangs.

6. **DRIVER COMPARTMENT:** Minimum of three windshield bars in front of driver. Aluminum high-back seat only, must be bolted in using minimum 0.375 inch bolts. Seat must remain inside all confines of roll cage. Maximum 70 inches from the back of the engine block to the front side of seat, measured at the shoulder harnesses. Driver must be sealed off from track, driveline, engine and fuel cell. Kick and rocker panels may be removed. Front OEM firewall may be replaced using steel fabricated full firewall, 18 gauge or minimum 0.049 inch thickness. Entire firewall can be no further back than 12 inches from the back of engine block, measured horizontally. Dash must not extend more than 24 inches back from top of firewall. Dash must be flat, extend from door to door, rear can be no higher than front, except for cowl in front of driver. OEM floor pan may be replaced using steel fabricated floor pan, 18 gauge or minimum 0.049 inch thickness, securely welded to frame. Floor pan may be replaced from front firewall to rear firewall. Inner panel on outside of passenger door bars allowed, may connect to top of door. Full rear firewall may be aluminum or steel and may be located no further forward than rear halo supports and no higher than bottom of rear opera windows. All holes in firewalls must be covered with metal. No driver-adjustable devices allowed while car is in competition except brake adjuster. No mirrors.
7. **FRONT SUSPENSION:** All components and mounts must be steel, unaltered OEM, in OEM location and match frame. Rubber, nylon or steel lower A-frame bushings only - no offset or bearing type. No sway bars. Exceptions are: conventional top mount weight jacks required in original centerline of spring tower; OEM upper A-frame mount may be moved or replaced with aftermarket steel non-adjustable mount matching upper A-frame bolt on design; OEM or OEM replacement rebuildable ball joints allowed, no screw-in ball joints; any OEM upper A-frame may be replaced using aftermarket upper A-frame, must display "IMCA approved" decal on top of rear tube of A-frame. A-frame cross shaft must be mounted inside of jack bolt. Shock must be mounted outside spring pocket on lower A-frame; maximum one, three inch wide opening on side of spring pocket for shock clearance. Non-adjustable single hole welded shock mount only. No suspension stops of any kind allowed.
8. **STEERING:** No rack and pinion. All components must be steel unaltered OEM, in OEM location and match frame. Exceptions are: tie rod adjusting sleeve may be replaced with 5" steel tube; replacement spindle with Speedway Motors raised cast - part number 91034501 (metric frame only); bolt on spindle savers allowed; OEM steering column may be replaced with steel knuckles and steel steering shafts (*collapsible recommended*), steering wheel and quick release (required) may be aluminum. Steering quickeners allowed.
9. **SHOCKS:** One steel non-adjustable unaltered shock per wheel. Maximum 7 inch stroke on front shocks and maximum 9 inch stroke on rear shocks. All shocks must completely collapse at any time. No shock can preload or pin any spring. No external or internal bumpers or stops. No coil over, air, or remote reservoir shocks. No Schrader or bladder type valve allowed. No coil over eliminators. One or all shocks may be claimed per event for $50 each, counting as one claim on card, following shock claim procedure.
10. **SPRINGS:** One steel, non-progressive closed end spring per wheel only. All coil springs must be minimum 4.5 inches O.D. Front coil springs must be 9.5 inch free height with 0.5 inch tolerance. Rear coil springs must be 11-16 inch free height with 0.5 inch tolerance. No spring rubbers allowed.
11. **REAR SUSPENSION:** All components and mounts must be steel, unaltered OEM or OEM replacement, in OEM location, and match frame. No independent rear suspension. OEM appearing one piece full rubber or nylon control arm bushings only, no offset or bearing type. Exceptions are: weight jacks allowed, coil springs may be moved – front to back, but center line of axle tube can be no further forward than the front of spring, or no further back than rear of spring, but spring must remain vertical left to right; rear end lower control arm mounts maximum 7.5 inches long, may have maximum five holes for adjustment. Shocks may be moved, and may use adjustable upper shock mount, but must remain behind housing and have minimum 4.5 inches of extension travel at ride height during inspection. Lower spring perch must be welded to axle tube. Upper control arm mounts on rear end must be level with each other. No sway/panhard bars. No suspension stops of any kind allowed.
12. **REAR END:** Any steel approved OEM passenger car or truck rear end allowed (housing and carrier) with steel spool (full or mini). Safety hubs (floater) allowed.All additional components must be steel, except lowering blocks, axle caps, U-joint caps, and one piece drive flange. One inch inspection hole in housing required. No quick change devices. No adjustable lowering blocks. No scalloped ring gears, cambered rear ends, heavyweight axle tubes(max .250" wall) or housing braces.
13. **BUMPERS/RUB RAILS:** Maximum one inch wide by two inch tall steel or lexan rub rails allowed - bolted flush to body. Front and rear tow hooks mandatory. All front bumpers must be mounted minimum six inches from front frame horns. Steel bumper mounts only. No sharp edges allowed on bumpers, rub rails or bolts. One of two bumper options must be used and must be OEM height: OEM: Bumpers not covered by plastic nose or tailpiece must be complete, unaltered OEM, capped to fender with steel, welded or bolted. No bars past outside edge of body other than rub rails. Aftermarket: Fabricated tubular bumpers allowed, but must be covered by plastic nose or tailpiece and bent to fit with rounded ends. Front bumper bar must be minimum 1.5 inch O.D. (maximum two inch) with 0.083 inch (maximum 0.125 inch) wall thickness. Rear bumper must be minimum 1.75 inch O.D. with 0.120 inch wall thickness.
14. **TIRES/WHEELS:** Must use unaltered Hoosier Race tire, G60-15 with IMCA stamped on sidewall. No chemical softening or conditioning of tires. Tires may be ground, straight siped or grooved. No re-caps. All wheels must be unaltered and display white "IMCA approved" decal and wheel manufacturer decal. Spacer or offset wheel, or a combination of the two allowed, but cannot exceed two inches total offset per wheel. Aluminum wheel spacers only. May use IMCA approved bead lock, on right rear only. External, steel bead lock only and it cannot make wheel any narrower than eight inches and no wider than 8.75 inches. Steel bolts only. Foam type or securely bolted plastic outer mud cover allowed on right side wheels. Outer mud cover mounting tabs and rings must be integral to the wheel or bead lock or be securely welded to wheel.Aluminum inner mud cover allowed on left rear only. No bleeder valves. Steel lug nuts only.
15. **BRAKES:** Steel, unaltered OEM, or unaltered OEM replacement, operative four wheel, drum or disc allowed. Front components must

match frame and maintain minimum OEM dimensions for hubs/rotors and calipers, cannot be lightened. OEM diameter caliper pistons only. Bolt pattern may be changed. Larger studs allowed. Vented solid surface rotors only, no scalloped or ceramic coated rotors. Rear rotors may be aftermarket 0.810 inch thick (new). No floating brakes. No brake shut-off or pressure sensitive devices. One front to rear proportioning device allowed. Brake lines must be visible. Aftermarket pedal assembly allowed.

16. **EXHAUST:** Round tube headers or Over the top headers for built chassis are allowed. All primary header tubes must enter directly into one collector at same point at end of header. Collector and turn down length maximum nineteen inches total. Must remain dual exhaust, no crossover or "Y" pipes. No exhaust through body panels or fenders. Schoenfeld mufflers, stamped IMCA609, IMCA 930, or IMCA935 must be used if track has noise reduction rule of 98 dB or more (exception is California). All exhaust must go through mufflers, two per car, one per header. Pan-evac system allowed. No anti reversion headers or mufflers, exhaust sensors, merge collectors, extensions, inserts, cones or balance tubes.
17. **FUEL SYSTEM:** Racing fuel cell required, maximum 22 gallon (*12 gallon recommended*), must be in minimum 20 gauge steel container. Must be securely fastened in trunk above top of rear frame rails, behind rear tires, no further forward than factory seam where rear frame rail can be replaced, with minimum one inch square tubing or two solid steel straps around entire cell, two inches wide and 0.125 inch thick. No fuel cells allowed over rear end housing. Metal firewall must be between driver and fuel cell.All cell mounts must be steel,securely welded to frame/cage. No adjustable fuel cell mounts. 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. Fuel lines through driver compartment must run through metal pipe or metal conduit. One fuel filter only, cannot be in driver's compartment.No cool cans.Air cleaner top,stud and base cannot direct air into carburetor. No top flow housings, air cleaner inserts, cold air boxes or duct work. *Fuel shut-off recommended.*

    CARBURETOR Holley carburetor components only. Air bleeds cannot be removed, .076 inch maximum diameter. Engine must use unaltered 500 c.f.m. Holley - part no. 0-4412, 0-4412SA, Ultra xp4412, may be modified to Holley HP Dorton part no. 0-80583-1 specs only. All float bowls must face forward. Carburetor adapter/spacer allowed, maximum 1.20 inches thick.
18. **FUEL:** Gasoline only. Racing fuel allowed. No E85. No performance enhancing or scented additives. Fuel must pass both dielectric meter and chemical tests
19. **WEIGHT:** Minimum weight limit of 2,950 pounds, no tolerance, after race with driver in car. No ballast and/or loose objects in driver compartment or outside body and must not be visible. Ballast must be securely mounted to frame or roll cage and painted white with car number on it. Must be attached with at least two 0.5 inch bolts. No titanium, magnesium, carbon fiber or tungsten products. No gun-drilled, tubular, hollow bolts or studs. Steel fasteners only.
20. **BATTERY/STARTER:** One 12 volt battery only. No lithium batteries. Must be securely mounted between and above top of frame rails, and positive terminal must be covered. Battery must be in Marine type case if mounted in driver compartment. Starter must bolt in OEM location. Car must have capability of starting without being pushed or pulled. Car must leave initial staging area on demand, unaided, or go to rear of that race.
21. **GAUGES/ELECTRONICS:** Scoring transponder must be mounted to bottom right side of firewall. No cell phones, unapproved cameras, transmitting or listening devices (exception is one way Race Receiver radio by officials), timing retard controls, or digital gauges (including tach). No electronic monitoring computer devices capable of storing or transmitting information except memory recall analog tach. One 12 volt, unaltered, non adjustable, ignition box allowed. Only change allowed to ignition box is one high-end rev-limiter or an internal setting inside box. All 500 cfm carburetor engines MUST use max 7,400 rpm rev limiter. This may be accomplished using an ignition box with one high-end rev-limiter setting or an internal setting inside box. No electronic advance curve ignitions allowed. No additional ignition accessories allowed. All components must be out of reach of driver, but accessible for inspection with rev limiter facing upward. No magnetos or crank triggers. OEM type alternator with internal regulator allowed. No electronic traction control devices. Msd 6014ct or ford distributor and msd 8727ct
22. **TRANSMISSION/DRIVE SHAFT:** Must have at least two forward gears and one reverse, plus a neutral position. With engine running and car in still position, must be able to engage car in gear and move forward, then backward.OEM production type or IMCA approved aftermarket transmissions allowed - two-speed, three-speed, four-speed and automatic. No five speed (or more) transmissions, 'in and out' boxes, or quick change devices allowed. Functioning shift levers must be in OEM location on all OEM production type transmissions. Flexplates must be full, steel, unaltered OEM, or OEM replacement. Flywheel/flexplate must bolt to engine between clutch assembly and crankshaft and all driveline components within bellhousing must rotate while car is in any gear. Transmission must be one of the following designs:

    OEM Manual: Must have OEM or OEM replacement case and working disc-type clutch inside an explosion-proof steel bellhousing. Diameter of clutch disc must be a minimum of 5.5 inches. Clutch assembly must be steel, except housing, which must be steel and/or aluminum. Bellhousing can have only a hole for throwout bearing lever or hose, must be 270 degrees around top of clutch and flywheel area.

    Automatic: Must remain in OEM or OEM replacement case, with a functioning OEM appearing pump. Aluminum OEM bellhousing may be replaced with aftermarket explosion-proof steel or aluminum bellhousing. Original OEM bellhousing must have approved scattershield constructed of minimum 0.125 inch by three inch steel, (1) 270 degrees around flexplate.

    Aftermarket Manual: Must be IMCA approved, aluminum case, with internal clutch. Refer to www.imca.com for approved transmissions. Must bolt to explosion-proof steel bellhousing, and use full, steel, unaltered OEM or OEM replacement flexplate with starter mounted in OEM location. No coatings or paint allowed on transmission case. No ball-spline transmissions.

    Drive Shaft: Minimum two inch diameter steel drive shaft, must be painted white. 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:** Engine must be OEM appearing, must be able to be used in conventional passenger car. Engine mount holes cannot be removed or altered on block. Aftermarket engine mounts allowed, including mid-plate. Radiator must be mounted in front of engine. Cooling system may be modified. Overflow tubes must be directed to ground. No vacuum pumps. oil coolers, remote oil filters or external oil lines Allowed
24. **ENGINE OPTIONS AND SPECIFICATIONS:** Any 4.8,5.3,6.0 engine allowed.Aluminum heads, cast iron block. No titanium engine components.OEM passenger vehicle production block only.Castings and fittings cannot be changed, no machine work on outside of

engine.

OEM firing order cannot be changed (GM:1-8-7-2-6-5-4-3). Steel or aluminum water pumps allowed. No electric water pumps allowed. 'Wet'sump oiling system only. Accumulator allowed. **INTAKE:** Only aftermarket aluminum intakes allowed are: GM 88958675, Holley 300-132, Edelbrock 29087. No porting, polishing or milling allowed on any intake. Disqualification, loss of points, and $250 fine if any unapproved alterations are found to intake.

(A) 500 cfm CARBURETOR ENGINE: Maximum 371 cubic inches (GM); 371 4.8, 5.3, 6.0, Stroke must match block. Violation of cubic inch limit must be verified by removal of head and will result in disqualification, loss of all points for the season, $1,000 fine and 30-day suspension. Maximum compression ratio is 10.8 to 1, no tolerance. Flat top or dished pistons only. OEM or OEM appearing replacement steel crankshaft only - cannot be lightened. No aerowing, bullnose, knife edge, undercut or drilling of second or third rod throws. OEM or OEM cast appearing replacement steel rods only Cap screw allowed. Additional approved rods include SCAT Pro Series and Eagle FSI. No splayed main caps. Cannot alter lifter bores. Mandatory one inch inspection hole in all pans – no obstructions to crank and rods. **CYLINDER HEADS:**Aluminum only. Must be unaltered approved OEM. Only GM OEM approved head numbers are: 241,243,799,823,706,862,895,317,035,806,933 Maximum size valves on these heads are 2.02 inch intake and 1.60. Max cam lift of .600 at the valve retainer.

The class must have a minimum of 8 LS Cars pre-registered each week to be part of the show. The current unified street stocks can run the class as a bump up class. The class will be run as a trial to see if the class will be able to show that there is enough interest. For the 2024 season it will go in front of the board and be determined if the class has enough interest.

To help with the car count in this class the drivers of this class voted on 04/13/2023 to allow the Sands Speedway Fuel Injected Class as well as IMCA Stock Cars to run with them for the 2023 season.