# ADAMS COUNTY SPEEDWAY 2024 MODIFIED RULES & SPECIFICATIONS

(Updated February 21, 2024)

(New or altered rules will be red and underlined)

The rules are written to create competitive and fair racing. In the interest of competitive and fair racing, they may have to be adjusted from time to time. If the Adams County Speedway race director(s) feel the rules need to be adjusted the affected competitors will be notified with a bulletin before any adjustments or changes are made.

All drivers are required to have a NASCAR license for sanctioned events.

Raceceiver & Transponder are mandatory. Drivers without a transponder or Raceceiver are subject to fine and disqualification.

Transponders are to be at bottom <u>right</u> rear of motor plate in a transponder pouch and securely attached with the transponder facing the race track surface.

## Section 1: Safety

- A. Rules apply at all times car is on track. Any safety rule will always take precedence.
- B. Snell-rated SA2010, SA2015 or SA2020 helmet required.
- C. Roll bar padding required in driver compartment (Fire retardant recommended).
- D. SFI-approved full one or two piece fire suit required.
- E. Fire retardant gloves, shoes and neck brace (or head and neck restraint) required.
- F. 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. Maximum four inch tall visor attached to window net.
- G. Minimum two inch wide SFI-approved five point safety belt assembly required, must be mounted securely to roll cage, as prescribed by manufacturer.
- H. Recommended: Safety belts no more than 2 years old. Any safety belt or safety net deemed to be unsafe by signs of weathering, fraying, or other reason by officials or race director(s) will be illegal and unable to race.
- I. A protective screen is required on the driver's side of the windshield opening. At least 3 vertical braces for support of this screen are required. Minimum screen size is ½ by ½ inch openings and maximum of 2 by 2 inch.
- J. Battery disconnect switch required. Recommended location is in reach of the driver and 12" of gear shift levers and clearly marked "OFF" and "ON".
- K. <u>ALL</u> drivers and cars are required to pass a safety inspection and receive a sticker for passed inspection before allowed to compete.
- L. It is recommended that all safety equipment must stay on and in place until the car has exited the racing surface.
- M. Approval of a race car by inspector shall mean only that it is approved for participation in a competitive event and shall not be construed in any way to mean that it is guaranteed mechanically sound, safe, or completely legal. ACS and/or the inspector shall not be liable for any mechanical failure nor for any losses, injuries or death resulting from same.
- N. ACS recommends all competitors to follow manufacturer's recommendations for installation, usage, and replacement of all safety equipment.

#### **Section 2: Roll Cage and Frame**

- A. Roll cage must be a continuous hoop with a minimum 1.75" O.D. and a wall thickness of at least .095". Low carbon mild steel tubing recommended. Cage must be fastened to the frame in at least six places and consist of a configuration of a front, rear and top hoops connected by tubing to the sides or side hoops.
- B. Driver's head must not protrude above cage when strapped in the driver's seat.

- C. Roll cage must be securely fastened and supported and braced with a minimum of one cross bar in the top halo.
- D. Foot protection bar required.
- E. Main cage no further ahead than rear of motor, all bars forward must be below hood.
- F. DOOR BARS: Minimum of three bars required on the driver's side and must be a minimum of 1.5" O.D. and .083" thickness and must be as parallel with the ground as possible and perpendicular to the driver and welded at front and rear of cage. Passenger side (right hand side) must have minimum of one cross bar, horizontal or angled, minimum of 1.25" O.D. and .083" wall thickness and one top horizontal door bar minimum 1.5" O.D. with .083" wall thickness.
- G. Driver's side steel door plate, 18 gauge or .049" minimum thickness. Must be welded and cover area from top door bar to rocker panel and from rear down post to five inches in front of seat. Must be visible for inspection.
- H. Only factory production complete full 1964 or newer OEM perimeter American rear wheel drive passenger car frames only.
- No sports car frames allowed.
- J. Frames may only be cut at a point no further forward than 36" from the center of the rear end housing.
- K. Frame may not be widened or narrowed and must be able to support roll cage on both sides. Front cross member may be notched and boxed for radiator and/or steering clearance only.
- L. Minimum wheelbase of 108" both sides, Max 112", both sides.
- M. Maximum overall width, front and rear, will not exceed 78" from outside of tire to outside of tire. Outside of tire must be the widest part of car. No part of body can be lower than 4inches. No part of the frame can be lower than 4" or higher than 7.5 inches from the ground except front crossmember off the ground and rear underslung.
- N. Weight jack in original line of spring tower allowed. Horns may be removed ahead of steering box and notched a max of 1" at bottom for tie rod clearance. Max 7" opening in side of spring tower for removal.
- O. Max 2" wide by 4" tall frame stiffener may be welding to outside of left side frame rail, left top frame rail can be removed inside cockpit.

## **Section 3: Front Suspension**

- A. 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; stamped steel OEM replacement lower A-frames; rubber, nylon or steel lower A-frame bushings, no offset or bearing type; one welded shock mount on lower A-frame; no screw jack type shock mounts; OEM or OEM replacement rebuildable ball joints allowed. No screw-in lower ball joints.
- B. Lower A-frames must be right and left, and of same design. Lower A-frame mounts and bolt holes on frame must be within OEM specifications.
- C. No sway bar.
- D. Front drop chains allowed, mounted frame rail to lower A-frame and must have slack during inspection. No unapproved suspension stops of any kind allowed.

## **Section 4: Steering**

- A. No rack and pinion.
- B. 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; unaltered, OEM or OEM replacement Pinto spindles; replacement spindle with Speedway Motors raised cast part numbers 91034501 and 91034511; bolt on spindle savers allowed; steel steering shafts and knuckles only; driver compartment steering may be modified, must be kept on left side.
- C. Spindles must be right and left, and of same design. Quick release required steering quickener and steering wheel may be aluminum.
- D. Idler arm, pitman arm, and center link must match frame.

# Section 5: Shocks

- A. One steel, nonadjustable, unaltered shock per wheel only.
- B. Maximum 7 inch stroke on front shocks and maximum 9 inch stroke on rear shocks.
- C. All shocks must be completely collapsible at any time.
- D. No shock can pre-load or pin any spring.

- E. One additional shock allowed in pull-bar area.
- F. No external or internal bumpers or stops.
- G. No threaded body, front coil-over, air or remote reservoir shocks.
- H. No Schrader valves or bladder type valve allowed.
- I. Front half may be shielded.
- J. One or all shocks may be claimed per event for \$50 each, counting as one claim and following shock claim procedures.

## **Section 6: Springs**

- A. One steel, non-progressive closed end coil spring per wheel only. One additional spring allowed on pull bar, may be progressive.
- B. All coil springs must be at least 4.5 inches O.D. Front coil springs must be 9.5 inch free height with 0.5 inch tolerance.
- C. No torsion bars, air bags, inner liners or spring rubbers allowed.
- D. Steel or composite leaf spring allowed.

# **Section 7: Rear Suspension**

- A. Rear of frame may be altered to accept leaf or coil springs. Rear coil springs must be 11-16 inch free height with 0.5 inch tolerance.
- B. All components must be steel.
- C. All trailing arms/link bars must be solid tubing. One mechanical traction pull bar allowed.
- D. Rubber bumpers allowed on pull bar or panhard bar only. Minimum 19 inch long panhard bar measured straight center to center.
- E. One bracket mounted solid to axle tube with lower link OR one floating birdcage with upper and lower links allowed per side. Additional shock/coil-over eliminator clamp bracket solidly mounted to axle tube is allowed per side.
- F. Steel coil-over eliminators, or steel or aluminum coil-over kits allowed. Must conform to shock and spring rules.
- G. Shocks and coil-over eliminators must be mounted to birdcage or bracket below bottom of axle tube and to upper frame rail. Spring using jack bolt may be mounted directly to top of axle housing.
- H. Solid safety chains securely mounted from upper frame rail directly to axle tube allowed (cannot be mounted to any floating device, must have slack during inspection).
- I. No independent rear suspension.
- J. No covers on any suspension components. No lift, brake or sway bars. No suspension stops or adjustable underslung of any kind.

# Section 8: Rear end

- A. Any steel approved OEM approved passenger car or truck rear end allowed (housing and carrier).
- B. OEM rear end must use steel spool (full or mini).
- C. Standard weight steel axle tube, quick change allowed.
- D. Quick change must use 10" ring gear with aluminum or steel spool and one inch wide spur gears and bolt on rear cover.
- E. Safety hubs (floater) allowed.
- F. Steel axles only.
- G. Any additional components must be steel, except lowering blocks, axle caps, U-joint caps and one piece drive flange.
- H. One inch inspection hole required in housings.
- No torque dividing differentials, scalloped ring gears or cambered rear ends, crowned drive plate or axles. heavyweight axle tubes (max .250" wall) or housing braces.

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#### **Section 9: Tires and Wheels**

- A. Only Hoosier G60-15 tires with IMCA stamped on the sidewall allowed.
- B. No softening or conditioning of tires allowed.
- C. Tires may be ground, straight siped or grooved.
- D. Rim mounted bleeder valves allowed.
- E. Steel, reinforced 15" X 8" wheels only. No wide five wheels allowed.

- F. Bead lock allowed on right rear wheel only. External bead lock only, cannot make wheel any narrower than 8" or wider than 8 3/4". Steel lug nuts only.
- G. Aluminum spacer between hub and wheel allowed.
- H. Mud cover allowed, 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.

#### Section 10: Transmissions and Drive train

- A. OEM production type transmissions including 2, 3, 4, speeds and automatics allowed. No 5 speeds, or quick change devices allowed.
- B. Must have at least two (2) working forward gears and reverse, plus a neutral. No "in & out" boxes.
- C. Driver must be able to engage transmission in a forward and reverse gear and move the car backwards and forward.
- D. Flexplates must be full, steel, unaltered OEM, or OEM replacement. Flywheel/flexplate must bolt to engine between crankshaft & clutch assembly. All driveline components within bellhousing must rotate while car is in any gear.
- E. Transmission must be follow one of the following options:

Clutch type transmissions: Must be equipped with explosion proof steel bell housing. Bellhousing can have only a hole for throwout bearing lever or hose, must be 270 degrees around top of clutch and flywheel area. Standard or reverse mount starter allowed, must directly engage flywheel. Must use a standard OEM case and working disc type clutch or approved cone or disctype coupler. One flywheel only, minimum 8.5 inch diameter. 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.

**Automatic transmissions**: 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. Must have approved scatter shield. Scatter shield must be constructed of minimum of .125 inch by three inch steel, 270 degrees around flexplate.

**Aftermarket manual transmissions**: Must bolt to explosion proof scatter shield, and use full steel unaltered OEM or OEM replacement flexplate with starter mounted in OEM location. No paint or coatings allowed on transmission case. Approved aftermarket internal clutch transmissions utilizing aluminum case include Bert # LMZ, Bert generation II models 1300 and 1400, Brinn # 70001, Brinn Predator # 70600, Falcon # 60100, Jerico # JER0021, RaceGator # 140002 or Mitchell Machine Bullet Internal Clutch. Use of a non-approved transmission will result in disqualification.

- F. Steel driveshaft (Minimum 2" Diameter) and yokes only, must be painted white.
- G. A 360 degree drive shaft loop is required and must be constructed of at least 1/4" X 2" steel strap or 1" tubing mounted 6" behind the front u-joint.
- H. KSE style rear mount pumps allowed.
- I. No Ball-Spline transmissions.

#### Section 11: Brakes

- A. Must operate on all four wheels, drum or disc. Must be steel approved OEM.
- B. No shut off valves or pressure sensitive devices allowed.
- C. One proportioning device allowed, front to rear only.
- D. All brake lines must be visible. Single link brake caliper floater allowed on rear, one per side.
- E. Must maintain minimum OEM dimensions for hubs/rotors and calipers cannot be lightened.
- F. Steel calipers only.
- G. Rotors may be re-drilled for a different bolt pattern or larger studs.
- H. Vented solid surface rotors only. No scalloped or ceramic coated rotors.
- I. Rear rotors may be aftermarket 0.81" thickness (new).

# **Section 12: Crate Engine**

- A. All cars utilizing a GM604 crate engine must clearly display on both front roof posts the word CRATE.
- B. Must be contrasting in color from body, minimum two inches tall. Markers not acceptable.
- C. CRATE ENGINE: Must use unaltered sealed GM #88958604 or #19318604 crate engine with additional

- IMCA Cable-Lok system. NO EXCEPTIONS.
- D. Upon inspection, any different, altered or missing GM seal bolts will result in disqualification, loss of all ACS points for the season and a \$1,000 fine and suspension of 30 days from ACS events.
- E. GM seal bolt exception is ACS approved Cable-Lok repair system.
- F. Oil pan may be replaced by an ACS approved repair center with Champ pan #CP100LTRB and Champ pick-up #100SB or with Kevko pan IMCA92 and Kevko pick-up #1005-3/4.
- G. \$250 fine and disqualification for any crate engine not using required pushrods, valve springs, rocker arms, carb spacer or unaltered harmonic balancer. \$1,000 fine and disqualification for utilizing altered rev-limiter components. Any driver using crate engine cannot claim engine or have engine claimed.
- H. During same season, no driver is allowed to claim an engine after competing with a crate.
- I. If a driver switches to a crate after claiming an engine, the crate engine is then claimable.
- J. Crate engine must use maximum **6,800 rpm** rev-limiter and may use 2-inch spoiler as outlined in **Section 17.**
- K. This may be accomplished using one, non-adjustable, 12 volt ignition box with one high-end rev-limiter, an external setting, or an internal preset. No electronic advance curve ignitions allowed.
- L. See also section 21: Engine Compartment

# **Section 13: Claim Engine**

- A. Any American make steel engine block allowed. Aftermarket and OEM performance blocks allowed.
- B. Cast iron or aluminum intake manifolds only.
- C. Steel cylinder heads and oil pan only.
- D. Flat tappet cam/lifters and stud-mounted rocker arms only. Magnetic steel retainers only. No shaft, pedestal, or offset rocker arms, titanium engine components, stud girdles or mushroom lifters. Lifter diameter and configuration must match OEM passenger block. OEM firing order cannot be changed (GM: 1-8-4-3-6-5-7-2).
- E. All engines must be able to be used in conventional passenger car without alterations. Engine mounts cannot be removed or altered. Castings and fittings must not be changed. No machine work on outside of engine (no lightweight engine blocks). All belt driven accessories must be on front of engine. 'Wet' sump oiling system only. External oil pumps go with engine if claimed.
- F. Claim engines must use maximum 7,800 rpm rev-limiter with NO spoiler. (See Section 17: Body, Item "K")
- G. This may be accomplished using one, non-adjustable, 12 volt ignition box with one high-end rev-limiter, an external setting, or an internal preset. No electronic advance curve ignitions allowed.
- H. Rear mount starter, rear mount fuel pump or aluminum bell housing are allowed. (if running 1 or all 3 you must bolt 20 lbs. total weight directly to motor plate)
- I. See also section 21: Engine Compartment

## **Section 14: Headers and Mufflers**

- A. Round tube headers only. All primary header tubes must enter directly into one collector at same point at end of header. Right side header must be directed toward rear of car.
- B. Turn down allowed. Collector & turn down length maximum 19" total.
- C. Valve covers and headers may be modified for pan-evac system.
- D. No anti-reversion headers or mufflers, exhaust sensors, merge collectors, extensions, inserts, cones or balance tubes.
- E. Mufflers recommended.

# Section 15: Fuel

- A. Mechanical or belt driven fuel pump only, mounted at front of engine.
- B. Gasoline, racing gasoline or 99.9% pure methanol allowed. No E85 allowed. No performance enhancing additives allowed. No oxygen bearing additives. No nitrous oxide allowed. Upper cylinder lube allowed.
- C. Racing fuel cells required and must be mounted with minimum one inch square tubing or two solid steel straps 2" wide and .125" thick around fuel cell.
- D. Fuel cell must be enclosed in a steel container and must be mounted behind the rear axle and between the rear frame rails, minimum 4" ahead of bumper, no lower than 10" off the ground, protected by roll cage tubing.

- E. Protective tubing must cover the rear and extend past both ends of the fuel cell. No part of cell shall be lower than protective tubing.
- F. All lines must come out of the top of the fuel cell and all vent and return lines must have check valves to prevent leakage in the case of a rollover.
- G. 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.
- H. One fuel filter allowed. No cool cans.
- I. Fuel cells will be limited to 32 gallon maximum capacity. Fuel cell must be mounted in 20 gauge steel container.
- J. Fuel sample may be taken at any time from any car
- K. No top flow air cleaner housings or cold air boxes. Air cleaner top/stud can not direct air into carburetor. One naturally aspirated two or four barrel carburetor only with Holley OEM or OEM replacement booster. Aerosol carburetor is allowed. No ICT type boosters allowed.

Claim Engine: One carburetor spacer/adapter allowed, maximum 2.20 inches thick, including gaskets. No adjustable throttle bore or sleeve-type carburetor spacers.

GM Crate Engine: If carburetor spacer is used on crate, must use Speedway Motors part #545-64940 or Moroso part #64940 carburetor spacer.

# **Section 16: Weight Rule**

- A. Minimum weight of 2450 pounds minimum after race with driver. No tolerance.
- B. No weights or loose objects in drivers compartment, outside body, or above interior deck.
- C. All weight must be in block form of no less than 5# blocks.
- D. All weight must be securely fastened to frame with at least two grade 5 or better 1/2" bolts. No redi-rod. Bolt on clamps highly recommended.
- E. All weights are to be painted white with car number on them.
- F. No titanium, magnesium, carbon fiber or tungsten products. Exceptions are: carbon fiber rock guard, hood scoop, and magnesium quick change center section. Solid steel fasteners only.

## Section 17: Body

- A. All bodies are subject to tech official approval.
- B. Bodies must conform to IMCA Modified type racecars unless stated otherwise.
- C. All sheet metal seams shall have the lip on the underside leaving a smooth top.
- D. Body and interior deck must be same width, front and rear, and parallel to the frame.
- E. Engine compartment must remain open, no side panels. Hood must be enclosed at rear. Air cleaner top maximum six inches above hood.
- F. Both door panels must be even with rear of block at top of door but no more than 6" from rear of block on bottom of door.
- G. No panel in front of right door to engine compartment. No inner panels. No car covers.
- H. Must have front windshield and rear window support post.
- I. Both right and left side windows must have at least 12" wide opening at its narrowest point and 18" maximum.
- J. Roofs must be fiberglass or aluminum, full size and rounded down in all directions, and mounted within 0.5 inch of <a href="main hoop">main hoop</a>. No dish roofs allowed. Driver roof hatch allowed. Maximum 1.5 inch rolled down rock guard allowed on roof front. Maximum four inch roof sides, <a href="two:inches minimum">two:inches minimum</a>, allowed. Maximum one inch ridge down sides of roof. Maximum one inch rear roof stiffener (must face down).
- K. Rear spoiler with a maximum two inches in material allowed with GM 604 crate engine using **6,800 rpm** rev-limiter or with claim engine running maximum **7,200 rpm** rev-limiter. Spoiler may have one inch rear stiffener, minimum one inch down from top. Spoiler must be attached to rear of sail panels, with one optional two inch by five inch triangular center support. One piece spoiler allowed. (*Claim engines also see Section 13: Claim Engines, letter F*).
- L. Maximum 2.250 inch side fins allowed on aluminum nose. (nose panel must be flat not dished) MD3 plastic nosepiece, part#020-410 allowed. Nose piece must remain inside confines of front bumper (exception is plastic valance), same width front to back, and be no lower than four inches below frame horns.
- M. No fins, lips, wings or vortex generators allowed.
- N. Maximum four inch plastic skirting allowed on bottom of doors, quarters, and nose.

- O. No unapproved composite or plastic body panels allowed. Approved composite doors, rear quarters, (FMVSS302 burn rating), rock guard, and hood scoop allowed. (MD3 or Stakt Products body panels)
- P. Rules pertaining to spoiler height can be adjusted at the discretion of technical director or race director(s) to assure and maintain a level balance between the crate and claim engine options.

# **Section 18: Drivers Compartment**

- A. Complete floor pan required (minimum .125" aluminum or .060" steel).
- B. Aluminum high back seats only and must be bolted next to the left side frame rail and ahead of rear tires using minimum .375" bolts. Bottom of seat can be no lower than the bottom of the frame rail.
- C. Driver must be completely sealed off from racetrack, driveline, engine, fuel cell, canisters and pumps. Oil coolers cannot protrude above interior.
- D. Accumulators cannot be mounted between driver and left side door bars.
- E. No mirrors allowed.
- F. No driver-adjustable devices allowed while car is in competition except brake adjuster.
- G. Lexan or aluminum cowl panel in front of driver may be no wider than cockpit and no further back than steering wheel.

## **Section 19: Bumpers**

- A. Steel bumpers must be used on front and rear of car at all times. Bumpers must be mounted with 3/8" or larger hardware and must be made of min. 1.25 "O.D. tubing with Minimum .065" wall thicknesses on front (.095" max.) and .095" wall thickness on rear.
- B. Two bar front bumpers must be mounted frame end to frame end, no wider than the width of material outside frame horns. Bottom loop must be parallel to ground. Top bar must be directly above bottom bar, at least 6.5" apart. (Measured center to center).
- C. Rear bumpers to be mounted maximum 6" beyond rear deck and no wider than 5" outside of rear frame rails. Must be capped.

#### Section 20: Electrical

- A. No unapproved cameras, transmitting or listening devices (except the required Raceceiver), timing retard controls, digital gauges (including tach) or cell phones.
- B. No electronic monitoring computer devices capable of storing or transmitting information except memory recall analog tach.
- C. Crate engine must use maximum **6,800 rpm** rev-limiter with spoiler. Claim engines must use maximum **7,800 rpm** rev-limiter without spoiler or maximum **7,200 rpm** rev-limiter with spoiler per Section 17. This may be accomplished using one unaltered, non-adjustable, 12 volt ignition box with one high-end rev-limiter, and external setting, or an internal preset.
- D. Automatic \$1,000 fine for altered rev-limiter components.
- E. No adjustable ignition control boxes.
- F. One 12 volt battery allowed. Battery must be securely mounted inside frame rails, ahead of the rear of the fuel cell and shielded. Sealed batteries are recommended and NO lithium batteries.
- G. No electronic advance curve ignitions allowed.
- H. No unapproved or additional ignition accessories allowed.
- I. All components must be out of reach of driver, but with rev control easily accessible facing up or out for inspection.
- J. All wiring must be visible for inspection. No magnetos or crank triggers.
- K. Car must be able to start under its own power, without being pulled or pushed.
- L. No electronic traction control devices allowed.
- M. Rules pertaining to spoiler height can be adjusted at the discretion of technical director or race director(s) to assure and maintain a level balance between the crate and claim engine options.

## **Section 21: Engine Compartment**

- A. Rear of engine (bellhousing flange) must be mounted at least 72" forward from centerline of rear axle.
- B. Engine offset must be kept within two inches of centerline of front crossmember with engine level.
- C. Minimum 11 inch engine height from ground to center of crankshaft.
- D. Radiator must be mounted in front of engine.
- E. Cooling system may be modified. Overflow tubes must be directed to ground between frame rails.
- F. No vacuum pumps.