



**CENTRAL MISSOURI SPEEDWAY (CMS)  
2025  
PURE STOCK RULES**

The spirit and intent of these rules is to maintain the integrity of “stock” car racing. Help us keep the integrity of the rules by conforming and abiding by the rules in keeping with the intent of maintaining the future of the class. Do not read between the lines. If something is found and determined to not meet the intent and the integrity of a Pure Stock, it will be deemed illegal, and the car will be disqualified. Do not assume you can make things up on your own. Ask questions and get clarification if you are unsure of anything. The assigned Technical Inspector has the final say in rules clarification. “I didn’t know” is not an excuse.

Feature win teardown rule: All cars are subject to technical inspection at any point in time while on speedway grounds before or after a racing event. This may include up to the removal of an intake head. The engine bore, stroke and head will be inspected. If any item fails inspection, the driver will lose all points and winnings for that event and a \$100 fine will be assessed and must be paid prior to returning to race. Any car that is found illegal will have to go through a pre-race inspection to make sure the infraction has been repaired before it can compete in the next race. All cars are subject to technical inspection at any point in time while on speedway grounds before or after a racing event.

**Do not read between the lines, if something is not in this rule book; do not assume you can make things up on your own, ask questions and clarifications if you are unsure of anything. The assigned CMS Technical Inspector has the final say in rules clarification. Although these rules were designed around already existing “like” car classes in the general area, there are differences, read carefully, “I didn’t know” is not an excuse at CMS!**

***Items changed since the last version are in bold, italic, red font.***

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**1) BODY AND FRAME:**

- 1) American made year 1955 or later rear-wheel drive, front-engine car, with 107.5-inch minimum wheelbase. ½” tolerance per side. 1” total tolerance. The wheelbase must match OEM specs of the chassis being utilized. All measurements will be taken with the driver in the car.
- 2) Sports cars not allowed. Example, Corvette or fiberglass-bodied cars.
- 3) Bodies must be steel OEM steel panels or steel OEM stock-appearing panels and meet OEM measurements only. Sunroofs must be closed in, using a steel panel, and welded. T-top cars are not allowed. Fenders may not have more than three (3) inches of drop from the “A-pillar” to where they attach to the nose.
- 4) Body must match frame and must remain stock appearing and unaltered in stock location. OEM appearing aftermarket fiberglass roof and A-pillars, Shell Valley part #F1015-81-88MCRW, allowed; B- and C-pillars must remain OEM dimensions. If rust damage exists, you may cut the frame at a point no farther forward than the vertical center line of the rear-end housing and replace frame rails with 2” x 3” x .095 rectangular steel tubing (minimum).
- 5) Year 1970-1981 Camaro may be used; however, you must use a 2” x 2” sub-frame connector under the car only to connect front and rear sub-frames. You cannot under-sling the rear end of the car. All rear suspension mounting points must remain in stock location.
- 6) Rear firewall must be installed in stock location to close off trunk area from driver’s compartment completely. You may use a minimum of .035 sheet aluminum or sheet steel.

7) Front OEM firewall may be replaced using steel fabricated full firewall, 18-gauge or minimum 0.049-inch thickness. The front firewall may be no further back than the rear of oval frame hole and must be vertical and 24-26 inches tall. All holes in firewalls and floor must be covered. OEM floor may be replaced from OEM front firewall to OEM rear firewall using steel fabricated floor pan, 18-gauge or minimum 0.049-inch thickness, and securely welded to frame. Must remain flat, OEM appearing from frame rail to frame rail, no higher or lower than frame rail. Exception is maximum eight (8)-inch tall.

8) Interior decking other than stock location and angle is not allowed. No decking behind driver's seat or anywhere else in the cockpit area.

9) All glass, chrome, exterior trim, and fiberglass body parts must be removed.

10) Excessive gutting not permitted; however, you may gut the hood, trunk lid, doors, and fenders for reasonable tire clearance, and under fuel cell for fuel escape. Aluminum may be added to the outside of the right front roll cage area to keep mud out.

11) Plastic nose pieces are allowed. Wedge noses are NOT allowed.

12) Spoilers, wings, and anything that tampers with normal airflow is NOT allowed! May cut hole in hood for air cleaner.

13) Aftermarket bumpers are allowed. After-market or home-built bumpers must stay within quarters of the body, must have two tethers attached to rear bumper. Bumper edges must be rounded and smooth. Rounding hoops above and below rear bumper are allowed to help protect the fuel cell in trunk. Tubing can be no larger than 1.5 inches (1 ½ inches).

14) Deck lids and hoods must be secured using quick-release pins only (nuts or bolts not allowed). Deck lids and hoods can be made of aluminum with original body lines.

15) All cars must have a minimum 5/16" chain on front and rear of car and easily accessible for towing purposes. If your car is discovered not to be equipped with a tow chain, you will be immediately disqualified for the night and not permitted to compete until a tow chain is added to your car, NO EXCEPTIONS.

*16) Side skirts are permitted. Skirts must maintain five (5) inches of ground clearance at the lowest point. Skirts cannot exceed no more than five (5) inches in width of material. Note: This area may be reviewed on a per car basis due to the mounting of newer bodies on G-body frames with the intent of staying as close as possible to the 5-inch rule.*

17) All cars must be clearly marked with numbers on the driver's side, passenger side, roof, front, and rear. Side and roof numbers shall be a minimum of 18" tall and contrast car color. Mirrored or excessively shiny numbers are not permitted! Front and rear numbers must be a minimum of 5" tall and contrast from car color.

18) Car with driver must weigh a minimum of 3,000 lbs. after race. Weights added to car must be attached by weight clamps and will be white in color with the assigned car number visibly painted on. Weights will be attached by a minimum of two 1/2" bolts and weight clamps. Bolts will not be welded to bars or frames. Weight will be mounted inside trunk and in no way mounted high on the roll cage.

19) Rear of body must be covered quarter to quarter, from top of decking down to the rear bumper mounts. Mounts must remain in stock location.

## **2) STEERING AND CHASSIS:**

1) Must have OEM/STOCK Steering parts or OEM aftermarket replaceable steering parts. All suspension pieces must be in stock locations. All suspension parts must be stock for the car being used. 3-piece spindle w/long arm ok. Lower A-Arms must match car being used as built by the manufacturer. Nova A-Arms, Camaro A-Arms or any others cannot be used on any chassis other than what they are designed for. Only shaft-type steering quickeners are allowed. No Sweet or aftermarket quick-steer type gear boxes allowed. Exception: 1978-1987 GM midsize metric frames and 1970-1981 Camaro/Firebird may use stock length Tubular Upper control arms. These must be stock dimensions and use only stock bolt in replacement ball joints. NO Screw in ball joints. Shafts may be steel or aluminum. Neoprene bushings are allowed. Eight (8)-inch right and 8 ½ inch left tubular upper A-arms may be used on all year 1978 to 1987 midsize Metric frames.

2) No Weight jacks of any type allowed.

- 3) Independent rear suspensions are NOT allowed.
- 4) Trailing arms must be OEM or aftermarket stock length, and in stock location, per car make and model, offset bushings not allowed. If using a 9" Ford rear end, all mounting points must match all mounting points on the rear end being removed. Rear trailing arm bushings must be Rubber OEM type or neoprene. No Medieval type bushings or ball type bushings allowed, and they cannot be drilled out for softening or altered in any way. Same applies for front A-Arm Bushings, altering of any kind is not permitted, must remain OEM. Trailing arm bolts must always remain tight, play in the bolt, bushing and mount is not allowed.
- 5) Racing shocks are allowed. Shocks will be mounted in stock location with stock mounts (screw on mounts ok). Shock must be non-rebuildable and non-adjustable. Shocks Allowed are: One unaltered steel, nonadjustable shock per wheel. All shocks must completely collapse and must completely extend at any time, no shock can pre-load or pin any spring. No external or internal bumpers or stops. No bulb-type, threaded body, coil-over, air, or remote reservoir shocks. No Schrader or bladder type valve shocks allowed. No coil-over eliminators. Rear OEM shock location is 4.5 inches from bottom of housing to center of bolt hole and centered on control arm bracket.
- 6) If caught altering shocks in any way driver will be disqualified for the night, subject to the track negative points system, and all points and monies will be forfeited for the night.
- 7) Racing springs are okay, springs must be mounted and tethered in stock OEM location and mounted only, maximum of 14-inch rear springs on both sides. It is required to run the same length on both sides. Rear spring perches must be solid and may be no more than one (1) inch tall, must be the same on both sides and must be centered on the rear end housing.
- 8) Weight jacking devices, spring spacers, or spring rubbers of any kind not allowed.
- 9) Adjustable lowering blocks are not allowed.
- 10) If utilizing sway bar, it must remain stock, stock length bolts and spacer (same length) on both sides of the front end.
- 11) Adjustable spring spacer is not allowed on the front and rear. You may cut-to-fit on front only. If spacer blocks are used on the front springs, they must be the same height and size left and right.

### **3) ROLL CAGE AND DRIVER COMPARTMENT:**

- 1) A minimum of a six-point roll cage is required with a minimum of 3 driver's door bars and two passenger side door bars. The roll cage must be welded to the frame of car (Camaro's must weld the roll cage to a 6" x 6" x 3/16" steel plate. Plates must be fully welded to the floor pan, then drilled and bolted to a 6" x 6" x 3/16" steel plate below the floor pan). Front and rear hoops are allowed.
- 2) Roll cage must be fabricated from minimum 1 1/2" x .095 wall tubing. Roll-bar padding is highly recommended on any part of the cockpit the driver's body can come into contact with during impact.
- 3) IMCA and USRA type roll cages are okay. A maximum of seventy-six (76) inches from the back of the engine to front edge of rear hoop is permitted.
- 4) Must be a minimum of three (3) bars in front of driver fabricated with a minimum 3/8" steel rod. It is highly recommended that the driver's door bars are plated with not less than 3/32" steel plate and cover not less than 80% of the door area.
- 5) Aluminum racing seats only. Seat must be bolted to roll cage only using no less than 3/8" grade eight bolts with flat washers top and bottom of bolts with lock nuts.
- 6) 5- or 6-point safety belts with a crotch belt is mandatory. Safety belts must be bolted to roll cage with a minimum of 3/8" grade eight bolts and lock nuts.  
Note: Safety belt can be no older than two-three (2-3) years old. See your tracks Safety Rules.
- 7) Ribbon type window nets required; nets must be bolted in on the bottom with a release at the top.
- 8) Fire extinguishers are recommended and must be within reach of the driver.
- 9) A master disconnect switch is required and must be mounted behind the driver's seat and clearly marked on and off and be easily reached from outside of car. Second master switch may be added to the driver's cockpit.
- 10) Steering column must be in stock location. Quick-release steering wheel is okay.
- 11) OEM floor may be repaired or replaced with 0.049-inch steel but must remain OEM dimensions.

12) Seat can be moved to fit roll cage location.

#### **4) REAR-END, BRAKES, AND DRIVE SHAFT:**

1) All components and mounts must be steel, unaltered OEM or OEM replacement, in OEM location and match frame. OEM rubber or neoprene control arm bushings only. Center of GM rear lower control arm bolt hole 3.5 inches maximum from bottom of housing. Same on both sides. Upper control arm mounting bolt holes must be 2.0 to 2.5 inches to center of bolt hole from top of housing. No independent rear

suspension. No rear sway bar, Pan-hard bars, spring spacers, extensions. No suspension stops of any kind allowed. Safety chains allowed but cannot pre-load springs. Nine (9)-inch rear ends are allowed with stock drum or disc brakes only. Mounting points must match all mounting points on the rear end being removed.

2) Floater rear ends allowed. Solid steel axles, or gun drilled axles allowed, all mounting points must match mounting points on the rear end of being removed. Hubs and drive flanges must remain at stock angles.

3) Gears may be locked, no limited slip, spools permitted.

4) OEM factory original type brakes only. Brake pads must be OEM, cannot be lightened, and must be the same on both sides.

5) Rear disc brakes are allowed. Calipers must be steel, rear rotors must be vented.

6) All 4 brakes must lock up on inspection.

7) Aftermarket pedals allowed and can be moved to fit driver position. Pedal extensions allowed.

8) Steel or carbon fiber drive shafts only. No aluminum. Drive shaft must be painted white with car number clearly marked. A drive shaft loop is mandatory and must be fabricated from a minimum of ¼" x 2" steel strap around the drive shaft no further back than six inches from the back of the transmission.

9) Dual master cylinders allowed. Brake bias adjustable only front to rear only. Left to right is not allowed.

10) No weights are allowed on rear-end housing.

11) No rotating weights allowed (ballast).

#### **5) TIRES AND WHEELS:**

1) American Racer G-60 KK704 or Hoosier G60 tires mounted on steel wheels only. 8" tire and wheel only. No 10-inch tires/wheels! Hoosier or American Racer 8-inch Asphalt Takeoffs permitted. No mixing of tire combinations. Tire grooving, siping, and grinding permitted.

2) Bead lock permitted on right side only.

3) All tires must meet a durometer of no less than 50 at technical inspector's discretion. NO SOFTENING OR CONDITIONING OF TIRES OTHER THAN MENTIONED IN THESE RULES. Tires will be checked by tire durometer on the Outside and/or inside of the tire. Over siping, needling, or grinding can and may alter the compound, this will not be an excuse if the tire does not meet the durometer rule. The lowest tire number point is fifty (50). NO ALTERING TIRE COMPOUND!

4) No aluminum wheels. Minimum 1" OD lug nuts. Wheels must be 8" wide and made of steel. Wide-five adapters are prohibited.

#### **6) ELECTRICAL AND IGNITION SYSTEMS:**

1) Battery may be moved and must be securely mounted. If relocated to the driver's compartment, must be totally encased. 12-volt battery only.

2) No voltage-enhancing devices allowed.

3) All wiring shall be neatly bundled and secured to chassis, all wires passing thru holes shall have a Rubber grommet to prevent wires from shorting to chassis ground (rubber nose is not a grommet).

4) Stock OEM HEI or Stock OEM point distributors only with one stock 12-volt coil. No after-market performance parts allowed except for plug wires.

- 5) No timing retard, voltage reduction, or traction control devices of any kind allowed. Discovery of any of the aforementioned or like devices found connected to the ignition will result in immediate disqualification and forfeiture of points and monies earned for that night.
- 6) All cars must utilize a soft-touch rev control box MSD part #8727CT with RPM Maximum limit set to the rpm setting for engine package being utilized. Ground wire must be ground by itself in visible site for inspection. Plug must remain and cannot be removed. MSD box must be mounted in front of the driver under a hatch in the dash and must be easily accessible.

## 7) FUEL SYSTEMS:

- 1) Pump gas only. No racing fuels. No alcohol. No fuel scents. Fuel must be gold or clear in color and not exceed 93 octane. E-85 or other like alcohol fuel is not permitted. 91 octane alcohol-free is permitted.
- 2) Fuel cells are mandatory; maximum of 22 gallons. **New style with screw-on lid and flapper is highly recommended.** Fuel cells must be encased in an approved metal container of no less than 20-gauge steel. Fuel cell must be mounted in trunk area of car only using a minimum of two 1 ½ x 1/8" steel straps wrapped completely around cell and mounted to chassis of the car. Bottom of fuel cell must be set in car no lower than bottom of frame rail.
- 3) All fuel lines must be routed neatly under the car and always kept above the bottom of the frame rails or through the interior of the car, if so; lines must run through steel tube. Fuel cell must have a flapper valve.
- 4) All fuel pumps shall be mechanically driven and bolted directly to engine block in stock location. No electric, belt drive, or rear drive fuel pumps allowed.
- 5) No pressurized fuel systems allowed.
- 6) Fuel pressure gauge lines may not enter driver's compartment; isolation system must be used.
- 7) Fuel additives or scents are not permitted.
- 8) A Fuel test reading of "0" will be used, and fuel with a positive test number will result in disqualification.

## 8) ENGINE OPTION A – CRATE:

- 1) Must be unaltered sealed GM 602 crate engine with additional IMCA Cable-Lok system, POWRi, or USRA seals, no exemptions. Upon inspection, any different, altered, or missing seals will be a penalty of 1 week suspension and a \$500 fine.
- 2) Legal oil pans are Champ pan #CP100LTRB and Champ pickup #100sb or Kevko pan IMCA92 and Kevko pickup #1005-3/4.
- 3) 602 crate engine must run a **6000-rpm** setting.
- 4) Engine must pull a minimum 15" of vacuum at 1000rpm.
- 5) Engine can be bored a maximum of .030 but must be resealed by POWRi. Only oversized pistons allowed are 423MPS or H423DCP.  
Bored 602 GM crate must run a **5800-rpm** setting.

## 9) ENGINE OPTION B:

- 1) All engine parts must be Ford to Ford, Chrysler to Chrysler, GM to GM (no mix or match). Engine must match chassis (GM to Gm, Ford to Ford, Chrysler to Chrysler)
- 2) MAXIMUM Size of engine block: 350 gm .060 max. 351 Windsor ford .060 max. 360 chry. .060 max.
- 3) Smaller engine allowed. No stroker engines allowed.
- 4) OEM firing orders cannot be changed.
- 5) No B Hive or high-performance valve springs allowed.
- 6) 9 to 1 compression max.
- 7) The 602-crate engine block and crankshaft can be used. No other crate components can be used.
- 8) NO 400 blocks or parts will be allowed.
- 9) Fuel pump must be 1 ¾ inches in-front of the cross member measured at the frame.

10) TRACK HAS THE OPTION TO ENFORCE THESE RESTRICTIONS WITH A CUBIC INCH PUMP GAUGE OR BY VISIBLY CHECKING PARTS AND PART NUMBERS.

11) Engine mid-plate may be used to mount engine.

#### **10) HEADS (ENGINE OPTION B):**

1) 72 c.c. min., stock, No performance heads. No double humps. No 292, 041 castings. No LT1, No bowtie. No center bolt valve cover. No Vor-Tec. No porting or polishing.

2) 3/8-ths shouldered screw in studs allowed. Guide plates allowed.

3) GM maximum valve size 1.94 intake and 1.60 exhaust valve maximum. NO 202/160 allowed.

4) 305 heads on 305 only.

5) Ford maximum valve size: 1.84 intake and 1.60 exhaust.

6) No angle milling of cylinder heads.

7) No aluminum heads. No high performance and no boss heads. No titanium parts of any kind.

8) GM approved castings: 14079267, 3986336, 3986339, 3986339x, 3986388, 3932441, 376445, 3928454, 3932454, 393493, 3876487, 3973487, 3973487x, 3973493, 3951598, 468642, 330862, 333882, 3998920, 3998991, 3998993, 3998997, and 3970126. Dart# 10024360 and EQ# CH3501 World product #043600

#### **11) CAMSHAFT (OPTION B):**

1) Hydraulic camshafts and lifters only. **All lifters must be pre-loaded to a minimum of ½ turn.**

2) .456 maximum lift at the valve, A 1.52 ratio rocker max no tolerance. Aluminum or steel roller rocker allowed. Steel Roller Tip Rocker Arms are allowed. Maximum lift at the cam lobe is .300 only no tolerance. Ford Max lift at the cam is .285 and are allowed a 1.6 ratio Rocker Arm.

3) Stock diameter valve springs only.

#### **12) CRANKSHAFT and RODS (OPTION B):**

1) Stock OEM crankshafts. Aftermarket Crankshaft may have holes in the front and rear rod throws only. The two center rod throws must be solid, there can be no holes in the two center rod throws.

2) No lightweight crankshafts. Rear flange on the crank must look like an OEM crankshaft.

3) No h-beam rods or lightened rods of any kind are allowed.

4) Stroke must match block. 3.48 for GM, 3.50 for Ford, 3.31 or 3.58 for Chrysler. Stock OEM rod lengths only for the engine being used. Changing rod lengths is not allowed. Example G.M 350 5.7 rod only.

5) Minimum weight on crankshaft is 50 pounds.

#### **13) PISTONS (OPTION B):**

1) Any flat top, 4 valve, 2 valve, unbrow, or dish piston allowed.

2) NOT allowed: domed pistons of any kind, lightweight pistons, or gas ported pistons.

#### **14) BALANCER (OPTION B):**

1) No Modifying of Harmonic Balancer.

2) Harmonic balancer on G.M. min-6 ¾" diameter (1 inch thick).

#### **15) OIL PANS (OPTION B):**

1) Extra capacity oil pans are permitted. No dry sumps allowed.

2) Oil pump must mount in stock position.

3) MUST HAVE ONE (1)-INCH INSPECTOIN HOLE ABOVE OIL LEVELFOR INSPECTION.

4) Inspection Hole must be installed in a manner where tech official can see crankshaft and rods for proper inspection. If not, the pan will be removed for inspection. Track will not replace gaskets or seals if no one (1)-inch inspection hole exists.

#### **16) INTAKES (OPTION B):**

- 1) Only intakes allowed:
  - GM 2101, 2701.
  - b. FORD 2121 or 2181.
  - c. CHRYSLER 2176 or 3776 / intake must be unaltered.
- 2) Two (2)-barrel cast low rise unaltered intake allowed.
- 3) Total maximum thickness of the spacer and gaskets cannot exceed 1 3/16.”
- 4) Any cast iron OEM manifold is allowed.
- 5) Intake cannot be altered in any way.

#### **17) CARBURETOR (OPTION A & B):**

- 1) 4412 HOLLEY ONLY. No HP Carbs. Must pass Go/No Go Gauge.
- 2) NO MODIFICATIONS EXCEPT JETS AND BUTTERFLY CAN BE REMOVED.
- 3) NO ELECTRIC FUEL PUMPS / MANUAL ONLY.
- 4) A 1” spacer plate is allowed. Spacer plate holes must go straight through and cannot be tapered on the bottom side of spacer.
- 5) Spacer can be aluminum or phenolic.
- 6) No cold air boxes.

#### **18) EXHAUST (OPTION A & B):**

Headers are allowed, and all tubes must go into the same collector. Tube diameter 1 5/8” maximum diameter and no step headers. Headers must remain inside the frame rail left and right, no fender exit headers and no cones are allowed. **Stock car over the midpalate headers 1 5/8” allowed.** No torque tubes. Evac to exhaust system is okay.

#### **19) TRANSMISSION:**

1) Transmission must remain completely stock. OEM Transmissions cannot be altered in any way. No after-market racing transmissions of any kind allowed. Anyone caught using a racing transmission of any kind will be immediately disqualified for that night and will forfeit all points and monies earned. Discrepancies found will be subject to reinspection upon returning to on-track competition.

2) Standard must have all working gears and stock OEM clutch, minimum 10 and a 1/2-inch flywheel and pressure 5-plate. Cast iron bell housing or explosion-proof bell housing are highly recommended. Automatic transmissions must have all working gears with OEM working torque converter. No converters smaller than Ten (10) inches.

3) No aluminum or Corvette components. Flywheel must be stock type OEM only, no Lightened Flywheels or Flex Plates allowed. Hydraulic clutch slave cylinders and aftermarket clutch master cylinders are allowed.

4) Automatic transmissions must have all working gears and OEM only, full size OEM stock torque converters only. Stall type torque converters of any type are not allowed. Torque converters must have a drain plug and hold a minimum of 3 quarts of fluid.

#### **20) ENGINE PROTEST (TRACK’S DISCRETION TO ALLOW OR NOT ALLOW PROTEST RULE):**

1. Any driver that finishes on the lead lap may file an engine protest.
2. The protesting driver must go directly to the tech area at the conclusion of the A-feature race.
3. The protesting driver must have in writing the car number being protested and have the protest fee of \$300 cash. The protesting driver has five (5) minutes after the conclusion of the feature to file the protest with the head tech official.
4. After the teardown, if the engine is found to be legal as per the rules the car being protested will receive \$300 dollars cash. If the engine is found to not meet the rules the protesting driver will get the \$300 protest fee back. The car found to be illegal will be disqualified and the driver will lose all points

and monies for that event. If an engine is found to be illegal, it must go thru a pre-tech before it will be allowed to race the next event. \*The tear down will consist of removing the intake manifold and one cylinder head. It will also consist of a lower engine inspection with a bore scope. If the crankshaft, rods, and bottom side of piston can be seen, then oil pan removal will not be required. If those parts cannot be viewed, you may be required to remove the oil pan. All parts will be checked to see if they meet the rules as written along with bore, stroke, lifter inspection and a head inspection.

5. Anyone refusing the protest teardown will be disqualified and all points earned for the year will be lost, and 15 negative points will be issued, which means the driver is barred from racing at CMS the remainder of the season.

6. Only two (2) people will be allowed in the tech area to do the tear down for inspection. Thirty (30) minutes will be allotted to start the tear down and one (1) hour total to complete the inspection.

Purposefully delaying the tear-down process or taking longer than needed to complete the tear down will have the same penalty as a refusal.