



## TCR MOD RULES 2025

### 11. TCR MODS

#### 11. Safety Equipment

- Rules apply at all times the car is on track.
- Snell-rated SA2015-SA2020 Helmet required.
- SFI approved full fire suit, gloves and shoes required.
- Right side seat head support required and head and neck restraint system.
- **Recommended:** Fire retardant head sock and underwear and collapsable steering column.
- Minimum 2" wide SFI approved, 5 point, safety belt mounted securely to main roll cage required.
- Kill switch required with in driver reach and must be clearly marked, OFF and ON.

#### 11.2. Frame.

- 1964 or newer OEM perimeter American, rear wheel drive, passenger car only.
- NO sports car frames.
- Frames must be full and complete. CAN NOT be widened or narrowed. Frames must support roll cage on both sides.
- Exceptions are: weight jack in original spring tower allowed; frame may be cut a maximum 36" forward from center of rear end housing.

- Horns may be removed in front of Steering Box and notched maximum of 1" for tie rod clearance; Front cross member may be notched and boxed for radiator and/or steering clearance; maximum 7" wide opening inside of spring tower for spring removal.
- Maximum 2" wide x 4" tall frame stiffener, may be welded directly to outside of frame rail.
- No part of race car can be lower than 4" from ground (Exemption is, front cross member, oil pan and rear underslung).
- Rear of engine (bell housing flange) must be mounted at least 72" forward of centerline of rear axle, and engine offset must be kept within 2" of centerline of front cross member.

### 11.3. Roll Cage

- Must consist of continuous hoops, minimum 1.75" O.D. with 0.095" wall thickness for main cage, frame mounted in **AT LEAST** 6 places.  
**Recommended**, low carbon or mild steel tube.
- Must consist of a configuration of front, rear and top hoops, connected by tubing on sides or side hoops. Minimum, one cross bar in top halo.
- Drivers head must not protrude outside the cage with helmet on.
- Foot Protection Bar required. Main Cage no further forward than rear of engine.
- All bars forward of the cage must be lower than the hood.

### 11.4. Door Bars

- All driver side Door Bars and uprights must be minimum 1.5" O.D. with 0.083" wall thickness
- Minimum, three driver side Door Bars, parallel to ground and perpendicular to driver. Must be welded front and rear of Roll Cage.
- Passenger side must have at least one cross Door Bar, horizontal or angled, minimum 1.25" O.D. with 0.083" wall thickness, and one horizontal top Door Bar, minimum 1.5" O.D. and 0.083" wall thickness.
- Steel Door Plate, 18 gauge or .049" minimum thickness, must be securely welded to OUTSIDE driver side Door Bars and cover area from top Door Bar to bottom Door Bar and from rear hoop down-post to five inches in front of seat.
- Must be visible for inspection.

### **11.5. Driver Compartment**

- Must have a minimum of three (3) Windshield Bars in front of the driver.
- Lexan or Aluminum cowl panel in front of driver may be no wider than the cockpit and no farther back than the steering wheel.
- Minimum 0.125" aluminum or 0.060" steel, complete Floor Pan required.
- Aluminum high back only, with minimum right side head support, must be bolted in with 0.375" bolts, next to left side frame rail and ahead of rear tires.
- Bottom of seat can be no lower than the bottom of the frame rail.
- Driver must be sealed off from track, driveline, fuel cell, canisters and pumps.
- NO driver-adjustable devices allowed while car is in competition, except Brake Adjuster.
- NO mirrors of any kind.
- Quick release Steering Wheel required. Aluminum steering wheels allowed.

### **11.6. Bumpers**

- Center of Bumper, front and rear, must be 18" +/-2" from the ground.
- Steel Bumpers must be used both front and rear at all times and securely mounted with minimum .375" bolts.
- Must be made of a minimum 1.25" O.D. tubing 0.065 wall thickness Front Bumper, and 0.095" wall thickness Rear Bumper, and must be able to support the car if lifted by the wrecker
- Two Bar Front Bumpers must be mounted, frame end to frame end, no wider than the width of the material outside of the frame horn, with the bottom loop parallel to the ground. Top bar must be directly above bottom bar, minimum 6.5" apart measured, center to center.
- Rear Bumper must resemble one of three setups in IMCA diagram.

2025 IMCA rules, [www.IMCA.com](http://www.IMCA.com)

### **11.7. Weight**

- Minimum weight limit of 2,500lbs, no tolerance, after race with driver in the car.

- NO Ballast and/or loose objects in the driver compartment, above the interior deck or outside the body.
- Ballast must be securely mounted to the frame or roll cage and painted white with car number on it.
- Must be attached with AT LEAST two ½" bolts.
- No titanium, magnesium, carbon fiber or tungsten products.
- Exceptions are: carbon fiber rock guard and hood scoop.
- Solid steel fasters only.

### **11.8. Suspension and Steering**

- Lower Control Arm may be replaced with re-manufactured OEM or OEM style tubular arms.
- Frame Side Mounts must be in factory location.
- Weight jack must be in original, centerline of spring.
- Stock or stock type replacement spindles only. No fabricated spindles. Spindles can be ground for brake caliper clearance.
- Tubular type Upper Control Arms allowed, frame mounts can be moved.
- Suspension, Steering and all Control Arm parts must be steel.
- Steering Box only, must be steel, approved OEM style and must remain within the original bolt pattern for type of frame used. NO Rack and Pinion allowed. Aftermarket Quick Ratio allowed.
- Steel steering shafts and knuckles only. In cockpit, steering may be modified to suit driver's taste but must be kept on left side of cockpit. NO center steering allowed.
- Any Rear Suspension design may be utilized including, 3 link, 4 link, leaf spring or stock OEM style.
- One steel, non-progressive, closed end, minimum 4.5" O.D. coil spring per wheel only.
- One, nonadjustable, non-coil over, OEM style, sealed type, shock per wheel.
- Maximum 7" stroke front shocks and maximum 9" stroke rear shocks.
- NO shocks allowed on screw jacks.
- NO Torsion Bars
- One additional spring allowed on pull bar or lift bar, may be progressive. NO Air Shock or Air Bags allowed.

### **11.9. Rear End**

- Any OEM passenger, car or truck, Rear End, Housing and Carrier or Quick-Change Rear End are allowed.
- Spools allowed.
- Safety Hubs (floater) allowed.
- Solid steel Axles ONLY.
- All additional components must be steel except Lowering Blocks, Axel Caps, U Joint Caps and one-piece Drive Flange.
- NO chamber Rear Ends. One piece Drive Flange only. NO electronic or mechanical Traction Control devices allowed.

#### **11.10. Brakes**

- MUST have working brakes on all four wheels when inspected.
- Vented, solid surface rotors only. NO scalloped or lightened rotors.
- NO pressure sensitive devices allowed.
- Proportioning device is allowed, front and rear only.
- NO oil bath front hubs.

#### **11.11. Tires and Wheels**

- Car must be Open Wheel front with maximum 8" wide tires and wheels as marked by the manufacturer.
- May use bead lock. Foam type or plastic mud cap allowed.
- Aluminum or steel spacers allowed.
- Must use minimum 1" O.D. steel lug nut.
- All wheels must be unaltered.
- NO chemical softening or conditioning, NO recaps, NO "Compact Spares".
- NO Bleeder Valves.

#### **11.12. Gauges and Electronics.**

- NO electronic computer devices capable of storing or transmitting information except tachometers and one-way Race Receivers connected to officials.

- One 12 Volt, non-adjustable, ignition box and coil is allowed and must be out of drivers reach. Internal and external rev limiter chip/adjuster allowed.
- NO electronic traction control devices allowed.
- Only gauges allowed are: Oil Pressure, Fuel Pressure, Brake Bias, Water Temp, and Tachometer.

#### **11.13. Battery and Starter**

- One 12 Volt battery only.
- Must be securely mounted and shielded.
- No Lithium batteries.
- Starter mounted in OEM location or racing transmission reverse mount.
- car must start without push assistance

#### **11.14. Fuel and Fuel System**

- Racing Fuel Cells required. Must be mounted by at least two (2) solid steel straps, 2" wide.
- Fuel cells must be enclosed in minimum 20 gauge steel container.
- Must be mounted behind rear axle, and between rear tires. Minimum 4" in front of rear bumper, and minimum 10" above ground.
- Protective tubing must cover the rear and extend past both sides of the cell.
- Fuel cell vents, including cap vents, must have check valves.
- Maximum 32 US GAL capacity.
- Fuel pickup must be on top or right side of cell.
- One fuel filter allowed.
- 100 octane max, gasoline or aviation gasoline ONLY.
- If equipped with electric fuel pump, must have oil pressure cut off switch.
- One single 500 CFM 2 barrel or maximum 650 CFM 4 barrel, single fuel inlet, vacuum secondary, carburetor allowed. NO DOUBLE PUMPERS.
- Maximum 1" spacer allowed.
- No fuel injection of any kind.

#### **11.15. Exhaust**

- Exhaust system must be mounted in such a way as to direct spent gases away from the cockpit area and away from areas of possible fuel spillage.
- No cross-over tubes, inserts, cones or balance tubes.
- Same side primary tubes must end into same collector.

#### **11.16. Transmission**

- Must have at least one forward and one reverse gear and neutral gear position.
- Driver must be able to engage car into gear and move forward and reverse from “standstill”.
- OEM automatic 2 and 3 speed transmissions and 3 and 4 speed manual transmissions.
- NO “in and out” boxes or quick change devices allowed.
- Bert, Brin or Falcon style race transmissions allowed.
- Must use “Explosion Proof” steel bell housing, if running a flywheel clutch.
- Minimum clutch diameter 7.25”
- Steel flywheels only.
- Minimum 2” diameter white steel drive shafts.
- Minimum, one (1) drive shaft hoop, 360 deg. encompass, 6” back from front u-joint.

#### **11.17. Cylinder Head**

- Unaltered OEM or aftermarket stock replacement cylinder heads only.
- Steel valves only.
- Stainless steel valves are allowed.
- No titanium parts of any kind.
- Stock GM cast iron Vortec heads are allowed.
- Any cast iron or cast aluminum dual plane non air gap intake manifold allowed. part numbers visible, gasket match porting 1” inside allowed.
- Cylinder heads must reflect casting numbers in original form.
- Maximum 2.02 intake valves and 1.60 exhaust valves allowed.
- Stock replacement heads are allowed.
- Bare head part numbers are provided below.
- You can use the comparable “assembled” head.
  - Manufacturer Part # Description Intake Port Intake Valve Exhaust Valve

- o Engine Quest CH350H Vortec 180cc 1.94 1.50
- o Engine Quest CH350A Angle Spark Plug 178cc 1.94 1.50
- o Engine Quest CH350G Vortec 180cc 1.94 1.50
- o Engine Quest CH350G Vortec 180cc 1.94 1.50
- o Engine Quest CH350C Straight Spark Plug 170cc 1.94 1.60
- o World Products 043600 Iron 23 Degree 170cc 1.94 1.50
- o World Products 042660 S/R Torquer 170cc 2.02 1.60
- o Dart Iron Eagle 10120010 Iron Eagle 180cc 2.02 1.60
- o Dart Iron Eagle 10024270 Iron Vortec 170cc 1.94 1.50
- o Summit Racing 152123 Summit Racing 165cc 2.02 1.60
- o Summit Racing 151124 Summit Racing 175cc 1.94 1.50
- Unaltered means that other than gasket matching, the intake and exhaust ports shall remain untouched.
- Valve jobs, guide repair, machining for guide plates, and resurfacing are allowed.
- If the cylinder head needs some other kind of repair, please contact the tech person or a board member to see if the repair will be allowed.

#### **11.18. Engines**

- Factory engines, location, and components.
- May not exceed 180 PSI maximum compression and must run on automotive grade pump -
- fuel or Avgas only.
- Octane rating of 100 maximum.
- Aftermarket OEM style cast iron blocks are allowed.
- Maximum cylinder bore size annotated below:
- Make Maximum Cylinder Bore Size Remarks
- Chevy 350 4.060 NO 400CID ALLOWED
- Ford 351 4.060 400M ALLOWED
- Dodge 360 4.060
- No porting or polishing allowed.
- No pup-up, dome, or hemi pistons allowed.
- Flat top or dished pistons only.
- No mechanical cams/ solid lifters or stamped roller rockers.
- Hydraulic roller cams and lifters, and roller rockers with girdles allowed
- Max lift of .550 is allowed, measured at valve tip.



- Aftermarket stock length replacement pressed pin connecting rods and stock stroke, replacement cast crankshafts may be used.
- Connecting rods shall be identical to a scat stock replacement forged “I” beam – Part #3ICR5700P.
- Crankshafts shall be identical to a scat pro stock cast crankshaft or a scat 9000-series – crankshaft (part #9-103750 or part #9-350-3480-5700).
- Stroke must match the block.
- No polishing of rods.
- No floating rods or pistons.
- Stock replacement rods and cranks only.
- Chain and sprocket style timing chain only.
- Mechanical or electric fuel pumps are allowed.
- Electric pumps must have a low oil pressure shut off switch.

#### **11.19. Bodies**

- IMCA style Modified body, must be fender less. All cars will run with all body panels unless damaged during the same race day.
- See IMCA body rules at [www.IMCA.com](http://www.IMCA.com) 2025 body rules will be followed.
- Spoiler height will be 6” maximum from deck.
- Right front inner mud panel allowed.
- Plastic or composite door and quarter panels allowed.
- Car number must be 18” overall height and clearly visible on both sides and roof of the car. 6” tall front and rear.
- Passenger side of body must be no farther forward than rear of engine block. top of drivers door no farther forward than rear of engine block.