



# 2023 Pro Late Model Specifications & Guidelines

**IMPORTANT:** Competitors **MUST READ** the "Specific Series/Track Rules" Section at the end for additional rules specific to a Track or Series.

## A. Eligible Cars and Bodies Guidelines

- All competing cars will be full-sized, stock American manufactured passenger car bodies. 2018 A-B-C Body Rules apply unless otherwise specified herein. Refer to A-B-C Rulebook and guidelines for details.
- The Five Star Next Gen body has been approved for competition. The AR Revolution body is NOT permitted at this time.
- No panels allowed extending top edge of doors.
- No under car panning outside of frame rails and no further than drivers' tub front or rear at the bottom of the frame. Maximum drivers tub length is 52 1/2" and the maximum width of frame is 53 1/2".
- All holes in body and interior not being used must be covered and remain so during the race.
- 12-inch A-pillar vent windows are mandatory with a maximum of 1-inch straight-line deflection outward. Must be smooth with no bead rolls or breaks.
- Front nose valance may only be a single layer with a maximum thickness of 3/16" and maximum height of 3". Valance cannot cover any portion of the grill screen.
- Rub rail are discouraged and may only be used if they are polycarbonate.
- At all times, for Gen 1 ABC bodies, the ABC "A" measurement must maintain a min..height of 11.5 inches. The min. height allowed for the nose, measured from the bottom, leading edge at the center of the nose, up to the hood seam is 20".
- The standard opening for the grill screen area, as approved for manufacturers production, must be maintained at all times. Only ABC manufacturers standard mesh screen may be used for the radiator opening in the nose.
- No types of under-body air deflectors are allowed.
- All air for blowers or coolers in the engine compartment must be pulled from the nose or the radiator air box.
- The duct work between the nose and the radiator may be no wider than the radiator with a maximum width of 29". Duct work may not be constructed out of carbon fiber.
- Only one naca-duct in either the left or right quarter window for helmet blower only.
- Tape may not be used anywhere on the car to control the flow of air or seal/secure seams between body panels (unless approved for repairs). Only exception is that tape may be used on the radiator grill opening and brake ducts in the nose.
- Window tint of any kind will not be allowed on windows or spoiler.
- Interiors must be steel or aluminum only.
- See minimum chassis eligibility and requirements
- Minimum Base Weight: **2800** lbs. (see "Series/Track Additional Rules" section for additional weight breaks or penalties). 58.0% Max. left side weight at all times (without refueling). For post-race total weight rules, if requested by officials, teams may be required to refuel, or officials may utilize "1 lb. per lap" burn-off.
- Minimum nose, body and frame height is 4" with a maximum of 8" while in tech for the purposes of tech inspection

## B. Engines

### Basic Engine Guidelines

- Measured from the center of #1 spark plug hole to the center of the top ball joint with in 1/4" tolerance is 4" inches
- Engines may not be offset more than one inch (1") from centerline of **frame rails**.
- Front center of crankshaft must have at least ten inches (10") of ground clearance.
- Standard steel blocks only. No Carbon Compacted blocks of any type.
- A maximum 16-inch (O.D.) air element and housing must be used.

### Engine Options

- Unaltered GM # 88958604 / 88869604 with factory seals only will receive a **75** lb. weight break.
- GM # 88958604 / 88869604 with the following updates only, GM Cam #24502586, 1.6 rocker arms, Comp Cam valve springs #941-16 (inner spring removed), Champ oil pan # CP106LTRB and Balancer.
- Ford # M06007-D347-SR with 1.5 rockers.
- McGuegill Ford # 425LM with 1.5 rockers.
- Crate engines may be refreshed but must retain all manufacturers' specifications unless specified. No reground cams.
- Maximum compression on all engines 10.0.
- Re-built engines must have seals from a re-builder on the S.E.A.L. approved list or carry a 100 lb. penalty. Seals must remain in place and be unaltered.
- Only the top five drivers finishing a race, their crew chief or owner may protest a crate engine from a driver finishing the race ahead of the protesting Driver. The protest will be limited to one car and must be made within 10 minutes after completion of the feature event with the cash only protest fee to the Tech Director. The protest fee will be \$1500 Plus \$250 Track Fee. The protest fee will not be accepted should Officials determine the protest fee has been made on someone else behalf or the fee is from more than one party. Failure to accept

protest will result in the driver being claimed forfeiting all purse and points for the event and all track points for the year. The driver must also pay a \$1,000 fine prior to being allowed to compete again.

## C. Carburetor/Spacer/ Air Cleaner:

- Holly 650 HP 4150-80541 (zinc or cast aluminum) four-barrel with no alterations allowed.
- Body of carburetor - no polishing, grinding, or drilling of holes permitted. No paint or any other type of coating other than from carburetor manufacturer allowed inside or outside of carburetor.
- Any attempt to pull outside air other than down through venturis is not permitted.
- A minimum of two return springs is required. Throttle stops recommended.
- ALL** GM # 88958604 / 88869604 may use a maximum height 1" aluminum open, (4) hole type or tapered spacer only with 1 paper gasket per side not to exceed .065" in thickness. **For engines are not allowed any spacer only one paper gasket not to exceed .065 in thickness.**
- No heat shields or any other type of hot air deflection device or airflow deflection device allowed in engine compartment.

## D. Fuel System

- See entry forms for specific spec fuel information. Fuel samples may be taken at any time and tested. Alcohol, nitromethane, nitrous oxide, other oxygenating agents, other additives and/or fuels that contain masking agents or oxygen are not permitted. Street-use pump gas is not allowed. Use of such substances or additives will result in immediate disqualification.
- No electric fuel pumps or forced induction of any kind are permitted.
- No icing or cooling of fuel system.
- A fuel cell will be mandatory with a 22-gallon (U.S.) maximum. Fuel cell must have a minimum of eight inches (8") ground clearance. **(Will be 10" beginning January 1, 2024)** Fuel cell must be equipped with at least two (2) protective straps completely around the cell. Fuel cell must be mounted securely behind the rear axle of the car. **A reinforcement plate of not less than 11 gage steel or aluminum (.125" thick) (Steel will be mandatory beginning January 1, 2024) flat plate must be installed in front and behind the fuel cell container and be securely welded in place or bolted (minimum 3/16" diameter bolts) with two (2) bolts on each side.** All cars must have safety bar at the rear of the fuel cell. At a minimum, all fuel cell configurations must include a rubber type cell in a steel container. No "U" Shaped Fuel Cells or non-standard-shaped fuel cells.
- The front side of cell is to be no closer than 10" to the back of the rear end tube.

## E. Exhaust

- If exhaust exits through the door, installation must include an exhaust flange that is mounted flush to the door **and cannot go past door seam**. Maximum 1/2" gap around the exhaust pipe. **Maximum dimension of 13" x 8" with no more than a 1/2" flare along the trailing edge.** Pipe must not protrude through door.
- A muffler must be used and installed in a configuration that will suppress exhaust noise to a maximum of **95db's** at 100 feet. The series will conduct random testing of exhaust noise, a penalty of 10lb's for every point above **95db's** will be enforced. Any car that is consistently tested above **95db's** will receive additional penalties up to disqualification. **Spec mufflers will be required starting July 1, 2023 and will be announced soon.**

## F. Ignition

- Battery powered ignition required. Vehicle MUST start under own power.
- Max.16-volt battery. Must be securely mounted outside the driver's compartment. Car must be able to start with a 12-volt battery. No Mags.
- The Quick Car part number #50-2053 spec wiring harness is mandatory. All wiring must be sealed. No unplugged wiring. All ignition boxes must be mounted on the passenger side, in plain view, and out of reach of the driver...and...all wires to the distributor must be run separately and not part of a bigger loom or wiring harness.
- One Crane/Fast Ignition part # 6000-6701 or JMS - Daytona Sensors' part # 6000-6701K ignition box only as produced on original plate. Mounted on right side of car with dials pointed out the passenger side window **or MSD 6427 6CT Ignition Box**. The mag positive & negative shall be a maximum length of 62 inches. Officials reserve the right to exchange boxes at any time. Mandatory 6300-RPM for all Ford options and 6500-RPM for both Chevy options. \*RPM limits may be changed in future. This set up may be swapped out by officials at any time.
- No Traction Control Devices of any kind - If any 'traction control' device is found, the driver and owner will be disqualified from the event, the car will be confiscated until a \$15,000 fine is paid. Additionally, the driver/owner may receive a lifetime ban.

## G. Suspension

1. No fifth (5th) coil or lift bar suspensions will be permitted. No birdcage set-ups of any kind (3 or 4 link). Trailing arms must mount to rear end in a solid fashion (heim allowed) and no part of the trailing arm mounting may freely rotate around the rear end.
2. All parts of rear suspension must be solid, one-piece construction with no moving parts, with one heim at each end. All mounts for trailing arms, third links and track bars must also be solid and may not have the ability to move.
3. Minimum wheelbase of 101" with maximum of 105". The difference from left to right may not exceed ½ inch.
4. 66-inch maximum tread width for all cars.
5. No in car driver adjustments other than one adjuster for brakes.
6. Coil Springs and Spindles must be Steel. (Exception: approved Coleman Spindle)
7. One shock per wheel. Shocks must be only mechanical in nature and no part of the suspension or shocks may utilize electricity. **No in-erter-style dampers, aka "J damper" shocks allowed.**
8. Maximum one coil spring and one bump spring associated with each wheel.
9. No hollowed-out or gun drilled bolts of any kind allowed on suspension components.

## H. Wheels and Tires

1. Wheel max width is 10". Wheels, lug nuts and studs must be steel.
2. Bleeders are not allowed. Hidden bleeders will be checked for!!!
3. Cars must start the feature on the same tires on which they qualified. Cars running the last chance race may change tires prior to that race but must return to the qualifying tire for the feature. Cars that run the last chance race on qualifying tires will be allowed to change tires prior to the feature.
4. Use of tire softening or altering agents will not be permitted. Use of such substances will result in immediate disqualification, loss of points and money.
5. Air may not be blown or forced onto the tire or bead.

## I. Transmission, Driveshaft, Rear End

1. Must have transmission with at least two forward and one reverse working gear. Jerico type transmissions permitted. Winters Aluminum Raptor Part # 60200 or Magnus / Integrity Transmissions "Muncie Style" 2 Speed part #13100 transmissions will receive a 25-pound weight break. Both transmissions will only be allowed low gear ratio options between 1.35 to 1.73 (no modifications, lighting or polishing allowed).
2. Multi-disc clutches will be permitted. No direct drives. Conventional clutch mounted to fly wheel only will be permitted. Any transmission that does not meet these guidelines may be assessed a minimum 25 lbs. penalty.
3. No carbon fiber or nonstandard material clutches. The minimum clutch diameter is 5.5". No "slipper" or "centrifugal" clutches allowed.
4. Driveshaft must be painted white and equipped with a minimum of **two (2)** safety straps. Drive shafts must be made of Aluminum or Steel only, no other materials permitted (i.e., carbon fiber, etc.).
5. Standard Winters or equal type/brand of quick-change rear end with spur gears out the back cover only.
6. Cars must utilize a working locked rear end (i.e., a spool or similar). No part of the spool may move or twist. Minimum 8" ring gear

## J. Brakes

1. Vehicle must be equipped with four-wheel hydraulic brakes.
2. No carbon fiber or titanium rotors. Only steel rotors are allowed.
3. Brake fluid circulators permitted. Liquid or gas cooling not permitted.
4. Two brake hoses per side with a maximum diameter of 3" each are permitted. Must attach to nose or airbox and to a spindle mounted duct only.
5. Fans, ducts or hoses to the rear brakes will not be permitted.

## K. Additional Rules

1. Titanium, Inconel or exotic metal are not allowed for use on the race car unless specified.
2. No Data Acquisition equipment/wiring is allowed in the car on officially recognized race or practice days.
3. No digital dashes allowed.
4. Cellphones, smart watches or Bluetooth devices will not be allowed in racecar at any time during qualifying or race, this is an automatic disqualification.
5. Scoring transponders must be placed in the series designated location.
6. No cool down units, pumps, exotic fans allowed.
7. All cars must go through technical inspection prior to car taking to the track for practice. Cars will be weighed with driver and may be done prior to or after qualifying and prior to or after the feature. Reading of designated scales will be official. Issues discovered in pre-

practice tech that are not fixed to satisfaction by pre-qualifying tech will result in the slowest of the two qualifying laps be used for qualifying time.

## L. Safety

1. Radio communication to the drivers is mandatory, with a minimum of one (1) spotter for each team. Spotter must have scanner to monitor race control. No digital car radios allowed.
2. Approved seat belts with double shoulder harness and crotch strap will be required, Maximum age of five (5) years.
3. A capable form of head & neck restraint must be used. A strap-type neck restraint is mandatory (No Neck Collars). Drivers will not be allowed on the racetrack at any time without proper neck restraints in place.
4. Helmet must be 2010 Snell standard or better (2015 Recommended) and have sticker visible for inspection. Full-face helmets required. Only Snell S. A. helmets will be allowed (No "M" rated helmets).
5. Professionally manufactured aluminum racing seats and the Kenny's Components JL1 seats if bolted in 6 locations with a minimum of 3/8 bolts are approved. **An SFI 39.2 rating is highly recommended for all seats.** All other carbon fiber seats must have prior approval and may be required to have a minimum SFI rating of 39.2.
6. Clean, full driving suit and approved gloves for fire protection are mandatory.
7. Side plate for driver's door will be mandatory. Must be 12 inches (12") high post-to-post, 1/16" minimum thickness steel or and must be fastened with a minimum of six (6) half-inch bolts or securely welded to series' approval.
8. Driver's window must be equipped with safety net with quick release-latch. String window nets will not be permitted. The minimum net size must be 22" wide and 16" high. When latched, the window net must fit and pull tight.
9. Resilient padding designed for roll bar use must be installed on any roll cage member which can be reached by any extremity of the driver while driver is normally seated with restraints fastened. Steering wheel must be padded.
10. All lead weights must be painted white, with the car number painted on each individual piece. All weights must be securely fastened. No Tungsten or similar weight allowed!
11. Lead Inspection will be part of **pre- and** post-race tech moving forward. If a piece of lead is not properly painted white with car number in red or black marked on all sides the team **will receive one warning annually during pre-race tech only. Future pre-race and any post-race issues the team will receive** a \$1500.00 fine on 1st offense with an automatic disqualification on the 2nd offense. Any lost weight will now result in a \$25.00 per pound fine to the team.
12. All competing teams must possess a minimum 10 lb. Aluminum working fire extinguisher while in attendance in pits, and this item must be presented at inspection. Car number must be painted on fire extinguisher.
13. Master ON-OFF switch is recommended to be located in the center of the car, clearly marked and within easy access of driver as well as access from outside both window openings. At minimum, it must be clearly marked and easily accessible to safety crews.
14. Numbers must be a minimum of 21" in height, with body of each character a minimum of 3" in width and must be professionally placed on each door. A number will be required on top, readable from the infield.
15. A car number at least six inches (6") in height must be placed in the upper right-hand corner of the windshield.
16. No part of any cooling system may be located in driver's compartment.
17. A working Fire Suppression system or driver accessible fire extinguisher is required.
18. All cars must have an OBERG, SRI or other Series approved Vacuum Style fuel shut off placed at the point the fuel exits the cell.

## OFFICIAL DECISIONS

1. Any situation not specifically covered in these rules will be acted upon by the official or officials in charge at the time, whose decision will be final and binding.
2. Any disagreement over technical questions or operations will be resolved by series officials. When decision is rendered, decision is final and binding
3. Continuous developments in racing may necessitate changes which cannot be anticipated at the time rules are formulated. If necessary, rules may be updated, changed, deleted or added to at the discretion of the officials.
4. At certain events, to encourage participation of local competitors, the officials may alter the rules for those cars to try and create a level playing field for cars that might fall outside of the normal rules. Official's decisions are final.

### Specific FFS Rules Section

1. All Competitors must read general rules section on pages 1-3.

# SUPER AND PRO LATE MODEL NATIONAL MINIMUM CHASSIS ELIGIBILITY AND REQUIREMENT



## **A. Frame:**

1. All chassis components must be made of magnetic steel and welded. The chassis must consist of a front and a rear sub-frame connected to the main frame on which the roll cage is welded and have a minimum overall height of 39". Holes and/or other modifications that, in the judgment of the officials, were made with the intent of weight reduction will not be permitted.
2. Main Frame - The main frame must consist of two (2) side rails of magnetic steel box tubing minimum 2" x 3", with a minimum wall thickness of .083" (recommended .120"). All frame rails must be parallel. The maximum distance from outside to outside of frame rails is 53 1/4", and 50" minimum. Weight containers may be welded to the outside of the frame rails and must not exceed six inches in width measured from the inside edge of the frame rail to the outside edge of the weight container and must not exceed the length of the frame rail.
3. Front sub-frame rails must be a minimum of 2" x 2" by .065" on the front clip from the front of the A-frame forward.
4. Rear sub-frame rails must be a minimum of 2" x 2" by .065" and must extend around the fuel cell.

## **B. Roll Bars:**

1. At a minimum, all cars are required to have the basic and typical roll cage. Unless otherwise specified below, all roll bars listed must be made from round steel DOM tubing 1-3/4" by .090" (.000 tolerance) minimum wall thickness. Holes and/or other modifications that, in the judgment of the officials, were made with the intent of weight reduction will not be permitted.

## **C. Basic Roll Cage:**

1. The main roll bar must be made from round steel DOM tubing 1-3/4" by .090" (.000 tolerance) minimum wall thickness and must be a continuous length of tubing with one end welded perpendicular to the top of the right frame rail and one end welded perpendicular to the top of the left frame rail.
2. The distance from the center of each of the front roll bar legs to the center of the main roll bar must not measure less than 40-1/2". Each of the front roll bar legs must be made from round steel DOM tubing 1-3/4" by .090" (.000 tolerance) minimum wall thickness and must be constructed from a continuous length of tubing.
3. The halo must be made from round steel DOM tubing 1-3/4" by .090" (.000 tolerance) minimum wall thickness and must be a continuous length and remain parallel within 1-inch to the main frame rails with a minimum height of 38". The outside-to-outside width of the halo must be a minimum of 28" front to rear and a minimum of 25" from side to side.
4. The main roll bar diagonal bar must be made from a minimum of round steel DOM tubing 1-1/2" by .090" (.000 tolerance) minimum wall thickness and must form a straight line, with no bends and must begin near the upper left and or right bend of the main roll bar and after intersecting the horizontal shoulder bar, should be supported from that point down to the main sub frame.
5. The dash panel bar must be made from round steel DOM tubing 1-3/4" by .090" (.000 tolerance) minimum wall thickness and must be a continuous bar, with no bends, welded beneath the dash panel between the two (2) front roll bar legs at a minimum height of 16-1/2" above the main frame rail.
6. The door bars must be made from round steel DOM tubing 1-3/4" by .090" (.000 tolerance) minimum wall thickness on the left side, must have a minimum of three (3) bars (Design A) or minimum of four (4) bars (Design B) equally spaced from top to bottom that must be welded horizontally between the vertical uprights of the main roll bar (#1) and the front roll bar legs. The top left side door bar minimum height must be a minimum vertical height of 18-7/8 inches from the top of the main frame rails. Left side door bars must be convex in shape and convex outward past the main frame rail. The left side door bars must have a minimum of six (6) vertical supports with two (2) equally spaced between each door bar. These supports must be made from a minimum of 1-3/4" by .090" (.000 tolerance) minimum wall thickness magnetic steel seamless round tubing. All door bars must be plated from the top door bar to the frame rails.

Design A (3 door bars) - minimum 0.090" solid steel doorplate's must be welded or bolted to the roll cage using a minimum of six (6) each 3/8" (.375-inch) aircraft quality bolts and washers.

Design B (4 door bars) - minimum 0.062" (1/16") steel doorplate's must be welded or bolted to the roll cage using a minimum of six (6) each 3/8" (.375-inch) aircraft quality bolts and washers.

7. Right side door bars must be made from round steel tubing with a minimum of, one top bar of 1-3/4" by .090" (.000 tolerance) with a minimum height of 15", maximum of 20 1/2" and one diagonal bar of 1-1/2" x .065".
8. The left side vertical vent window bar must be made from a minimum of round steel DOM tubing 1-1/2" by .065" (.000 tolerance) minimum wall thickness and must be welded from the upper surface of the top door bars on the left side to the front roll bar legs.
9. The two rear down support bars must be made from round steel DOM tubing 1-1/2" by .065" (.000 tolerance) minimum wall thickness and must be lengths of tubing welded to the left and the right backside of the main roll bar near the roof panel at the top and connects with the sub frame.

## **D. Driver's box and foot box:**

1. The floor pan of driver's box must be a minimum of 12-gauge (.100") thickness steel plate and welded in.
2. The left side of driver's foot box must be plated with a minimum plate of 9" high by 12" long and a minimum .090" thickness steel plate and welded in place to protect the driver's feet.
3. Behind the driver's seat must be plated with a minimum .090" thickness steel plate, at minimum 10" tall by 12" wide and welded in place.

## **E. Fuel and Fuel Cell:**

1. Fuel cell must be mounted in a minimum structure of 1"x 1" square steel tubing with a minimum thickness of .065" (.000 tolerance).
2. The fuel cell must be encased in a container of not less than 22 gauge (0.031" thick) magnetic sheet steel.
3. If the fuel cell container has a bolt on top, it must be bolted together with minimum 3/16" diameter bolts.
4. The bottom support frame must be constructed using a minimum of two (2) straps, 1 1/2" x 0.125" minimum thick magnetic steel or 1"x 1" square steel tubing with a minimum thickness of .065" (.000 tolerance). These supports must be welded to the fuel cell front and rear cross members. The support straps must extend down the front and rear equally spaced and under the fuel cell container.
5. A reinforcement plate of not less than 11 gage **steel or aluminum** (.125" thick) **(Steel will be required beginning January 1, 2024)** flat plate must be installed in front and behind the fuel cell container. The plates must extend the entire height and width of the full cell container and be securely welded in place or bolted (minimum 3/16" diameter bolts) with two (2) bolts on each side.

## **F. Bumpers:**

1. Nose/front bumper, tail/rear bumper cover must be a minimum 1.250" x .065" OD steel tubing. All supporting substructures must be constructed of a minimum 3/4" x .065" wall round or square steel stock. If aluminum tubing is being utilized, minimum wall thickness must be .083" **(Aluminum tubing will not be allowed beginning January 1, 2024)**

## **G. Chassis Right Side Body Bars:**

1. Chassis right side door bars commonly called the outrigger or the kick-up bar supporting structures must be a minimum 1.250" x .065" OD steel tubing only. All supporting substructures must be constructed of a minimum 3/4" x .065" wall round or square steel stock.

## **H. Engine Placement:**

1. Measured from the center of #1 spark plug hole to the center of the top ball joint with in 1/4" tolerance is 4" inches.
2. Engine must be in center of frame rails with 1" tolerance.
3. Center of crankshaft to ground clearance 10".