

# 2024 Pro 4 Modified Rules

### VII. Bodies-

Aftermarket bodies are mandatory. They can be made of fiberglass, aluminum, or steel. Must resemble a true modified such as a NW modified, IMCA modified, Troyer modified, or modified coupes.

The Floor pan cars/Compacts are allowed if it passes the roll cage specs and must be reinforced on the driver floor board and brought up to spec.

All cars must have bodies within the spirit of conventional modified bodies, no sharp edges. All rub rails and bumpers must not have sharp edges or angles. Must have a top/roof that attaches at all 4 corners to the body.

All body panels are to be securely fastened.

All cars must have a windshield. Windshield must be minimum of 1/8" thickness. Polycarbonate full windshield are allowed. NO PLEXIGLASS!

Spoiler side panels may not extend more than 12" from rear edge.

Floor pan must be 20-gauge steel to height of transmission hump of the car.

Foot box must be made of 20-gauge steel.

Firewalls should be solid panels with no gaps, or holes or 24-gauge steel or 0.065" minimum thickness of aluminum required between driver and engine compartment, fuel cell and battery boxes. Interior trim panels beyond the firewall may be of steel or aluminum, same minimum thickness required for firewalls.

Fuel cells and battery boxes are to be made of 24-gauge steel or 0.065" aluminum.

All cars must be painted and maintained in a neat manner at all times.

Car numbers are required on the sides, roof, and a 6" tall for the front and rear numbers.

Spoilers are not to exceed 8" and may be made from steel, aluminum, and Lexan.

Minimum ground clearance is 3" measured at the left front frame rail behind the tire with the driver in car and fuel onboard.

Ride height must be a minimum of 39" from ground to highest point on the roof.

## VIII. Chassis-

All chassis frame rails must be constructed of a minimum of 2" square or round tubing 0.090" minimum wall thickness 1018 or 1020 carbon steel tubing.

Roll cage must have a minimum of 8 main attaching points.

1 1/4" diameter by 0.090" minimum can be used for diagonal supports only.

Rear clip and front clip may be made of 1 ½ square or round tubing 0.090" minimum wall thickness 1080 or 1020 carbon steel tubing.

58% left side weight is to be the maximum weight with driver and fuel onboard.

Car must have a 94"-105" wheel base.

Front wheels must be fully exposed. Right rear must be fully exposed. Left rear may be even with the body line if rub rail is on the inside of the body line for older chassis conversions. Rub rails to extend to max of tread width of the tire. Rub rails required from rear of bumper forward to the rear of the rear wheels. Rub rails cannot have any sharp edges. Minimum 1" diameter. Bumpers are required on the front and rear of the car. Front and rear bumpers must centerline at 14" from ground height give/take 1".

Chassis track width must not exceed 78" measured outside of the front tires at spindle height with tow in and tow out measurements at the front of the tire and rear of the tire averaged.

Roll cages must not be less than  $1 \frac{1}{2}$  diameter by 0.090" minimum wall thickness.

Driver accessible weight adjusters are prohibited.

Roll bar shall have at least one diagonal brace from top of hoop to bottom.

Minimum of 3 horizontal door bars are required on the driver's side of the cage. All door bars shall have vertical braces welded between them. Top left door bar may not be lower than 3" below the driver's window opening. Left door bars are not required to be plated.

One overhead bar from front to rear in the center of the halo that is out of reach of the driver's helmet when driver is strapped in, is required.

One vertical (Earnhardt Bar) is needed from the middle of the halo hoop front down to the cage front hoop at dash level.

Two braces from within 6" of the top of the main roll bar hoop down to the rear clip are required. Braces are to extend as far back as the body will allow.

Energy absorbing padding must be installed on all bars and tubes in the driver area, where contact may be made between driver extremities and bars.

Steering wheel must be padded as well.

Minimum of 2 windshield braces that must be placed behind a full windshield.

## IX. Bumpers and Nerf Bars-

Front and rear bumpers are required.

Front bumpers are to be a minimum of  $1 \frac{1}{2} \times 0.065^{7}$  wall thickness and will consist of 2 horizontal bars not to exceed 3" wider than each side of front frame horns. Both horizontal bars must connect with two vertical bars with a minimum of 4" spacing.

Rear bumpers are to be the same width of the body and may be made of 4" aluminum "C" channel or 2 horizontal bars of minimum  $1 \frac{1}{4}$  x 0.065" steel tubing.

Nerf bars are required and will consist of 2 horizontal bars in the door area constructed with 1 1/4" x 0.065" steel tubing with a minimum of 4" spacing between the bars or a single 1 1/2" x 0.065" steel tubing.

Nerf bars behind rear tires are permitted and must match the dimensions of the side nerf bars.

All nerf bars and bumpers must be of a 15" contact center.

X. Wheels & Tires-

Wheels must be steel safely approved 13" diameter racing wheel not to exceed 10" width. NO ALUMINUM WHEELS.

All cars will run on class approved tire.

NO TIRE SOAKING OR PREPPING ALLOWED.

## XI. Battery-

All batteries must be located inside of the main frame rail and must be a minimum of 10" away from the fuel cell. Battery must be securely fastened in a tray and the tray must be securely fastened to the frame or chassis. (**RECOMMENDED** locations for the battery & battery box: Left rear of the car in front of the rear axle).

Battery must be separated from the driver by a firewall.

No batteries are to be installed inside driver compartment.

## XII. Driveline-

All steel drivelines must have at least one safety hoop that is made of 1" flat/round tubing, must be located 12" behind the transmission tail shaft. I Composite drive shafts are prohibited.

All drivelines are to be painted white and have the car number on it.

## XIII. Brakes-

All cars should have brakes on all four wheels and they must be operable at all times.

Adjustable brake biasing equipment is permitted.

## **XIV. Fuel Cell-**

Fuel cells are mandatory. Fuel cells must be a minimum of an 8-gallon tank to a maximum of a 12 gallon. It must be securely mounted in a steel box with at least 2 top and 2 bottom rigid straps. The bottom of the fuel cell at its lowest point must be at least 8" from ground level. Fuel cell must be at least 12" in front of the rigid bumper. Fuel cell must be completely sealed away from the driver compartment and battery.

If the rear of the fuel cell is exposed there must be a fuel cell loop from the rear of the frame to the frame rail and as low as the lowest part of the fuel cell. There must be a fuel cell hoop that supports from the fuel cell hoop to each side of the frame rail.

Electrical fuel pumps must be wired with an oil pressure operated shutoff switch in the electricity supply line. A momentary override switch may be used when starting the motor.

Fuel lines that are passing through the driver compartment must be encased in a metal tube or protected by woven stainless steel wire mesh that is covering on the outside of the fuel hose.

Fuel cell may be electrically grounded to the chassis.

Fuel cell filler cap shall be tethered to the fuel cell or fuel cell containment straps with a short length of light gauge safety cable or ball chain.

## V. Common Technical Rules-

No traction control devices, electronic or otherwise will be permitted. Use of traction control will be cause for immediate disqualifications and suspension from future racing events. No driver adjustments other than brakes.

No Tungsten or similar weight allowed!

## VI. Penalties-

Penalties for violations of the rules are determined by the gravity of the violation and determined by a competition board for review.

## **VII. Official Decisions-**

Any situation not specifically covered in these rules will be acted upon by the official or the officials in charge at the time, whose decision will be final and binding on all participants.

Any disagreement over technical questions or operations will be resolved by the competition committee. When their decision is rendered, such decision is final and binding.

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, and/or added to at the discretion of the officials to promote competition.

Officials may use weight penalties for any infractions of these rules to make a car eligible to compete while building car count for the class on a visitor/trial basis. If a car is of a compact or is a car that is built below the Pro 4 Mod class rules and wants to race with the class, then a vote from the entire class that is racing that night will take place. There will be a conversation between the driver and the class promoter to decide what should be done. (Whether or not they would like to continue to race with the class).

## VIII. Engine Combinations-

Inline 4 cylinder foreign or domestic engines are permitted.

Any transmission with at least two forward gears and reverse are to be used in all cars. Any transmission adapter may be used. Tech approval is required.

No limited production engines, such as aluminum blocks, etc.... Substitution of production cast iron block with aftermarket aluminum block is prohibited.

Starter and clutch assembly must be operable. Cars must start under their own power.

Suspension type is open. Titanium or magnesium components are prohibited.

Any style disc clutch, 5.5" minimum. Pressure plate, throw out bearings, and flywheels are to be used.

Aluminum flywheels are allowed.

Scatter shields are required and must be located between transmission bell housing and floor pan. Minimum material is 5/16" nylon web or 1/8" steel plate.

Commercial scatter shields are recommended. Racing approved bell housings are recommended.

Cars using open stock style clutch must use scatter shield minimum 180° on driver's side of the bell housing; 270° or 360° are recommended. Minimum steel thickness is 3/16". Minimum aluminum thickness is 1/4". Tech approval is required.

Exhaust noise level shall meet track requirements. All cars must use a muffler and meet 90 dbas @ 100ft. This is a requirement set forth by most race tracks.

Any type of rear end may be used. Any non-independent suspension rear end including quick change, may be used.

Wet sump oil systems only. Radiators shall remain inside the body shell. Cooling fans (if used), engine driven or electrical, must be enclosed within the shroud. Tech approval is required.

Separate overflow containers with 1-quart minimum capacity required for radiator and crankcase/ dry sump ventilation system. Crankcase/ dry sump overflow container must be metal or plastic. Tech approval is required.

All weight added to the car must be painted white and have the car number on it and be bolted in place with at least 2 bolts. 1/2" diameter.

No exotic fuels such as alcohol, methanol, polypropylene, nitro propane, and nitrous.

No radio and/or other communication devices can be used at any time.

Mirrors are permitted. They should be on the left outer side and a rearview mirror is recommended.

No adjustable shocks. Steel and aluminum bodied shocks are permitted.

If there is a valve on the shock, then it is not allowed.

Any conduct detrimental to the series, drivers, crews or fans on and off the track will be subject to penalties.

All the tracks general engines rules will also apply.

# Safety:

# All safety equipment needs to be properly installed and maintained to ensure the competitors safety.

# I. Driver Safety Equipment-

Drivers must wear SFI approved fire suits, gloves, and a Snell 2010 or newer approved racing helmet (i.e. No older than 10 years) (2010-2020). Neck collars, head and neck restraints, and driving shoes are required. HANS or HUTCHINS neck and head restraints or similar restraint devices are strongly recommended.

## II. Fire Extinguishers-

All cars are required to have a 2.5LB minimum or bigger fire extinguisher in the car and must always be easily accessible.

The extinguisher can be carbon dioxide or dry powder. They must be fully charged and have a gauge. Fire extinguishers must be securely mounted in the car.

An onboard Halon Fire Suppression System is highly recommended, but not required. If you wish to have one, it must have a minimum of one nozzle in each of the stated areas; the engine bay and the driver's area. (Safety Note: Position the nozzle and aim it away from the driver and in the direction of any anticipated flame sources. BEWARE that the Halon can cause frost bite!)

Each car must have a 5LB minimum fire extinguisher with current inspection tag ready and accessible in your pit area.

Fire extinguisher must be placed with the nozzles away from the driver and have the butts of the canister facing the dash area (front of the car).

## III. Master Electrical Safety Switch-

A master electrical shut off switch must be installed in the center of the dash area within easy reach of both the driver and safety personnel.

The master switch must be clearly marked with an orange or yellow 4" circle around the switch.

## IV. Safety Belts-

Race approved seat belts must be used and consists of a 3" wide minimum lap belt and 3" wide shoulder harness.

The double straps need to attach separately to the roll cage by metal brockets that are part of the roll cage. "Y" belt shoulder harnesses with single point attachment to the roll cage are **NOT ALLOWED!** Tech approval is required.

Seat belts shall have metal connectors and be firmly attached to the roll cage by steel brackets of sufficient strength. Tech approval is required.

The belts must be in good condition with NO rips, tears, fraying, or melting. (i.e. No older than 3 years) (i.e. 2017-2020). A crotch strap will be required.

V. Window Net-

Window nets are mandatory and must be mounted to the roll cage.

Safety window net of either mesh or web construction are required in driver's side window. (i.e. No older than 5 years) (i.e. 2015-2020).

Must be fastened securely with a quick release type of latch that can be activated from either inside or outside the car. When the net is securely fastened, it must fit and be pulled tight.

String window nets will not be permitted.

#### VI. Driver's Seat-

Driver's seat must be a commonly accepted aluminum race seat with a head rest behind the driver's head with his/her helmet on.

Right side head restraints are required. Left side head restraints are recommended.

Seats must be securely fastened to the roll cage in an upright position.

Fiberglass seats are not allowed!

If it doesn't say you can then you can't! 8

### **XV. Fuel Rules-**

Commercially purchased racing fuel; Aviation fuel or pump fuel with off the shelf octane boost only is permitted. NO nitro, or exotic mixed additives allowed.

### XVI. Engine Rules- Minimum

weight is 2100lbs.

Inline 4 cylinder foreign or domestic engines. NO ALUMINUM BLOCKS.

Stock OEM production heads may be ported and polished.

No aftermarket heads are allowed. (Exception of the Esslinger cast iron stock D port head).

Roller cams and Roller rockers are permitted but will be **required** to add an additional 50lbs to the center of the car.

Two valves per cylinder.

1 spark plug per cylinder.

Wet sump oil systems only. NO DRY SUMPS.

Aftermarket intake manifolds are permitted. No adapters or spacers are allowed between the head and the intake manifold.

Carburetor adapters and spacers are optional, but with a 2" maximum is allowed.

One single 500 CFM or smaller 2-barrel carburetor only. Carburetor base plate holes are not to exceed 1.680". (i.e. Holly 7748 and 4412 series with choke horn. Demon carb speedway part # 910-12005). (Those not allowed are: Holly Keith Dorton Signature series & External modifications are NOT ALLOWED ON ANY CARBURETOR.

Dual Webber Side Drafts and 4 Mikkuni Slide/Side Draft carburetors are prohibited.

No down drafts, predator carbs or 4-barrel carbs allowed. Any coil type ignition may be used.

Mufflers are required on all cars and must meet a maximum noise level of 95dba @ 100ft.

Maximum engine displacement with no added weight is to not exceed 2360cc.

#### XVII. Weights-

Minimum weight on all cars competing shall be with the driver in the car and fuel on board.

Minimum weight is to be 2100lbs on all cars.

Roller cam & Roller rocker combo will result in a single 50lb weight penalty that will be added to the center of the car.

All weight rules are subject to change and if you are given a weight penalty, the weight will be put in the center of each car.

All cars over 2360cc will need to add 100lb to the center of their car. For each 100lbs but not to exceed 2500cc.

Ram couplers are allowed but come with an additional added 25lb added to the center of the car.

All lead weights must be painted white, with the car number on each individual piece and must be visible from the top. All lead weights must be securely fastened. Any lost weight will result in a **\$5/lb. fine.** 

# IF THE RULES DON'T SAY YOU CAN THEN YOU CANT. PLEASE BUILD TO THE RULES AND NOT AROUND THEM. TECH OFFICIALS MAY ADJUST RULES AS NEEDED IN CREATE CLOSE COMPETITION.