

2018 2019 Super Stocks

SECTION – 7 SUPER STOCK DIVISION

Open to two-wheel drive American automobiles provided they comply with, and adhere to, specifications as outlined for this division. NOTICE ALL EQUIPMENT IS SUBJECT TO THE APPROVAL OF FRRC OFFICIALS. NO EQUIPMENT WILL BE CONSIDERED AS HAVING BEEN APPROVED BY REASON OF HAVING PASSED THRU INSPECTION UNNOTICED. EFFORTS TO TAKE ADVANTAGE OF “LOOP HOLES” IN THESE RULES. WILL NOT BE TOLERATED. ALL RACE CARS WILL BE SUBJECT TO INSPECTION BY TRACK OFFICIALS AT ANY TIME.

7.1 COMPETING MODELS AS APPROVED BY FRRC

FRRC Super Stock races are open to approved 1950 to 2013 models of American made passenger cars. Cars must have full frame. Unibody style cars are prohibited. Convertibles are prohibited. Station Wagons and Steel Body Trucks are allowed. All cars must maintain a minimum wheelbase of 107.0 inches at all times. Possible wheel offset rule if tire sticks out too far from body.

7.1.1 Mandatory Information Report to Tech Inspector

ALL Competitors MUST report PRIOR to competition, their cars Engine Cubic Inch; Carburetor; Headers. The tech inspector will be keeping a confidential tally card of each competitor's equipment complete with their legal min weight. If a competitor FAILS to report any changes to the tech inspector prior to competition that evening and the inspector finds a difference from the tally card, that competitor is DQ'ed from the ENTIRE nights events forfeiting all points and pay for the event. The competitor is also suspended with no points and money for the following week.

7.1.2 Other Approved Models

Other models may be approved, provided they are of the same body configuration and meet the spirit and intent of competitive racing. Figure 8 cars may compete in the Super Stock Division as long as the car is in compliance with all Super Stock Division rules, meets the Super Stock Division appearance rules and competes only in the Super Stock Division that night. Grand National Cars are allowed to compete a maximum of three times per season They must use a 2 barrel carb. Weekly competitors who own a super stock car are not allowed to switch to a grand national for 3 races.

7.1.3 Identification and Marking

FRRC reserves the right to assign car numbers, and to assign or restrict the display of graphics and advertising on race cars. Offensive graphics or slogans are not permitted. All Competitors agree to accept FRRC's decision in this matter. Officially issued numbers must be at least 16 inches high by 3 inches wide and neatly applied (paint or decals) to both doors. Numbers, as large as possible and in contrasting colors to the body, must be applied to the front headlight cover, rear taillight cover, and upper right corner of windshield. Where required, participating sponsor's emblems, or decals will be placed in the position designated by FRRC Officials.

7.2 GENERAL CAR WEIGHT REQUIREMENTS

7.2.1 Overall Car Weight

The specific minimum weights for all cars are listed below. All weights are with the driver, after competition. Weights may be adjusted by the FRRC technical inspectors throughout the season as needed to improve competition. Car Type Total Weight Any engine being 363ci or more w/4bbl 3275 lbs. Any engine being 363 or more with a 4412 2bbl 3200 lbs. Any engine being 362ci or less with 3150 lbs. can run a 2bbl or 4bbl Quadrajet. All Vortec Headed motors must have a 4412 2bbl 3150 lbs. FRRC Sealed Crate Engine Car 3000 lbs. Area Sportsman cars are allowed to run weekly and have to follow 100% the rules in place for Area Sportsman cars. The following weight adjustments will be made to individual cars: Penalty as follows: 1 to 25 lbs light = loss of points and money for that event. 26 lbs or more underweight = loss of points and money for that event and 1-week suspension.

7.2.2 Added Weight

Any weight (ballast) added to the car must be secured by no less than two ½-inch bolts. The maximum spacing between bolts is 10 inches. Loose weights are prohibited. No weights may be added outside the body. Weights added behind the rear end shall be no less than 11 inches above ground. The front weight must be angled at 45 degrees. Added weights must be painted a bright color (safety orange preferred) and have car number on weight.

7.2.3 Car Weights After Race

All race winners must weigh in immediately after the race. Any weight that falls off a car during competition cannot be returned to the car for determining weight after a race. A fine of \$1.00 per pound of weight lost will be charged to car.

7.3 GENERAL CAR REQUIREMENTS

Body and frame swaps are permitted as long as the wheel base of the body is \pm 2 inches of the wheel base of the frame.

7.3.1 Car Bodies

The car body must meet the following requirements. Standard approved bodies may compete with an approved V-8 engine equipped with an approved carburetor. Cars must be neat appearing. All cars must have complete bodies, hoods, fenders, and an approved front and rear bumper. Bodies, trunk lid, must be OEM steel. The hood may be replaced with fiberglass. NO CARBON FIBER! After market bodies are prohibited. (with the exception on the hood). Fabricated steel doors are permitted as long as they have the same thickness, contours, and shape of the original doors. Fabricated steel fenders and quarter panels, to within 2-inches of the top of the body, are permitted as long as they have the same thickness, contours, and wheel openings of the original panels. Plastic front fenders are allowed as a replacement for steel factory fenders.

A 2-inch high, enclosed, hood scoop is permitted. Wheel wells must have a rolled edge. Cutup bodies, chopped tops, removed door posts are prohibited. The front of the cowl must seal to the back of the hood. Rear of car between bumper and deck lid must be enclosed. All body panels must be fastened in an approved manner. Body panels damaged during an event must be repaired or replaced in a reasonable period of time. Cars with unrepaired or unpainted body panels may not be allowed to compete. Cars competing with "homemade" or aftermarket panels may be subject to an additional weight penalty. The decision of FRRC Officials about appearance is final. All glass (windows, headlights, taillights, etc.), exterior body moldings (chrome, trim, mirrors, door handles, etc.), combustible material (headliner, seats, insulation, etc.) must be removed. Stock hood and trunk latches must be removed and replaced with clip type hood pins. Spin-off hood pins are prohibited. Stock grills must be replaced with expanded metal or screen. The inner support structure of the hood, roof, doors, front fenders, and quarter panels may be removed. The front and rear inner wheel wells may be removed. Front bumpers must be OEM and mount in the original location. Bumpers may not be reinforced or have jagged edges. Rear bumpers can be made with square tubing no larger than 2" x 4" and cannot extend beyond the outside of the body. Cars with molded rubber or plastic front and/or rear bumper covers may use a round steel tubing bumper, no larger than 1¾ inches in diameter, extending 6, or more, inches beyond the frame. For safety, a crush zone must be present on the front of the cars during a crash. Bumper bracing in front of the upper control arms is prohibited. Bracing above the bumper is prohibited. Large bumper bracing measuring larger than 1.5 inch angle or 1 inch round w/.125 wall is prohibited. Radiator and rear protector hoop, the same color as car, permitted. Radiator protector hoop no larger than 1½-inches by 0.095 wall thickness may be added to the front bumper, but must be no higher than the hood and stay between the frame horns. Radiator hoop must conform to, the stock grill opening. Rear hoop no larger than 1½-inches by 0.095 wall thickness may be added to the rear bumper, and must be no higher than the trunk. Fabricated foot boxes are permitted. If firewall is used, firewall must be stock, drivers side to center of tunnel, (plus or minus 4" from stock location). All openings in the firewall, and factory seams, must be closed with steel and sealed with caulk. The area between the rear seat and

trunk must be closed with steel and sealed with caulk. Rusted floor panels may be replaced with stock production floor panels or steel panels of the same gauge installed in the same location. Aluminum dash permitted. A 22 gauge, or heavier, steel, fabricated, interior is permitted. The fabricated interior can start at floor area to the right of the seat, raise to the top of the drive shaft tunnel, extend up at an angle to the top right-side door bar, and seal off below the right window opening. Aluminum interior panels are permitted. A full windshield of Lexan, or plastic, is recommended. A minimum of three stiffeners must be installed inside the windshield. The stiffeners must be attached to the roof panel or roll bar and dash panel in an approved manner. Stiffeners must be installed so as not to obstruct the driver's vision. A reinforced, ½-inch wire mesh windshield is permitted. A minimum of three reinforcements must be installed behind the wire mesh. The reinforcements must be attached to the roof panel or roll bar and dash panel in an approved manner. Reinforcements must be installed so as not to obstruct the driver's vision. Side door windows are not allowed. A 10-inch side vent window is permitted. Back side of vent window must be at right angle to top of door. Side window shelves are prohibited. Rub rails may be no larger than 1" x 2" and have a maximum wall thickness of 0.125 inches. Rub rails must have the ends cut at a 45-degree angle and be capped. Rub rails must be flush with body and must be bolted (carriage bolts recommended) or welded to the roll cage. Rub rails must match the color of the body. Rear spoiler on all other cars must not exceed 5 inches in height or 60 inches in width. No rudders or forward mounting brackets are allowed.

7.3.2 Body Ground Clearance Requirements

Front air dam and rocker panel clearance shall be no less than 5 inches. Frame clearance shall be no less than 6 inches. Minimum height of quarter panels, behind rear tire, shall be 10 inches. All measurements are with driver in car.

7.4 FRAME AND ROLL CAGE

All frames and roll cages must be acceptable to FRRRC Officials. The frame and roll cage must meet the requirements described in the following paragraphs. All chassis' must be equipped with a fuel cell protector bar that extends below the bottom of the fuel cell and is adequately braced.

7.4.1 Frame

All frames must be stock passenger car frames. Drilling or hole sawing of frame is prohibited. Chopping, channeling, or sectioning of the frame in either length or width is prohibited. Plating of stock frame for strength or rust repair is permitted. All frames must have "x" brace (1" x 2" square, or 1½" round), and the frame rails plated with 1/8 inch steel (welded) 7.4.2 Roll Cage Roll cage installation and workmanship must be acceptable to FRRRC Officials. Offset roll cages are prohibited. Laid-back roll cages are prohibited. The roll cage must be a four-post design consisting, in general, of: a vertical main hoop; roof or top hoop; and left and right front post. All right angles must be gusseted. The main hoop must connect to the left and right frame rails, behind the driver, and be diagonally braced. The main hoop may be located no further back than the rear body mount by the frame kick-up. The main hoop must have a horizontal bar at the midpoint. All bars in the main hoop must be round steel tubing no less than 1¾ inches in diameter and have a minimum wall thickness of 0.095 inches. The top hoop must attach to the main hoop, and left and right front posts. The left and right front posts must be connected by a horizontal "dash" bar. All bars in the top hoop, left and right front posts, and dash bar must be round steel tubing no less than 1¾ inches in diameter and have a minimum wall thickness of 0.095 inches. "A" pillar supports mandatory. The top "halo" must have a center bar connecting the front and rear portions of the "halo". Must be steel tubing no less than 1¾ inches in diameter and have a minimum wall thickness of 0.095 inches. The driver's side front post must be connected to the main hoop by four, or more, equally spaced, horizontal bars, mounted flush with the outer door skin. The door bars must be connected by two, or more, equally spaced vertical braces and must attach to the main frame by two, or more, equally spaced vertical braces. A foot protector bar is mandatory. All driver side door bars and braces must be round steel tubing no less than 1¾-inches in diameter and have a minimum wall

thickness of 0.095 inches. A 1/8 inch steel plate must be mounted between the driver's side door bars and the door skin. The plate must cover the entire door bar area. The passenger side front post must be connected to the main hoop by three, equally spaced, horizontal bars. The bars must be connected by two, or more, equally spaced vertical braces. All passenger side door bars and braces must be round steel tubing no less than 1¾-inches in diameter and have a minimum wall thickness of 0.095 inches. The jack posts must be guarded, or inside the body. All roll bars exposed to the driver, and left side door bars, must be padded.

7.5 SUSPENSION

Lower A frames must be OEM, and of the same make and model as the frame. Upper A frame can be OEM for make and model. After market upper A frame allowed as long as it stays within the following guidelines. • Steel Construction Only (Aluminum pivot shafts allowed) • One-piece style allowed (adjustable heim style is prohibited) • Conventional style bolt on ball joints allowed (screw in style prohibited) • Bushing style pivot shafts allowed (Ball bearing pivots prohibited) • All A frames must be OEM geometry. Length may be + or - 1 inch from OEM per make and model.

Relocation of the "Top Hats" on the front suspension is permitted. Modification of "Top Hats" is prohibited. They must remain in original OEM condition. Any 5" coil spring allowed. Front screw jacks are allowed, shock placement must within 2 inches of original location. Front frame height adjusters allowed. The front sway bar may be mounted up-side-down, to the frame in the original location, and must use the factory brackets and rubber or urethane bushings, with no spacers between the bracket and frame. Independent rear suspensions are prohibited. Any 5" coil spring allowed. Screw jacks are allowed on all four corners of the car. All shocks must not exceed \$85 retail price. Front shocks can be mounted outboard if screw jacks are installed. Rear shock mount can be modified 2" from stock location. Stock type mount nonadjustable, non-rebuildable, steel shocks only. No external adjustments (pressure, compression, rebound) permitted on shock absorbers. Aluminum body and remote reservoir shock absorbers are prohibited. Devices, which can change the handling characteristics of the car, during the race, are prohibited.

7.5.1 Spindles, allowed IMCA # 91034501 ONLY.

Wheel Bearings, and Hubs and wheel bearings must be OEM and of the same make and model as the frame. Hubs must be OEM or OEM appearing (Coleman style hub). Dropped spindles are prohibited. No aftermarket or fabricated spindles.

7.5.2 Brake Components

Front and Rear Each wheel must be equipped with a brake in proper working condition. Anti-lock brake systems prohibited. Installation must be approved by FRRC. Front brakes may be disc or drum. Rear brakes must be drum. Disc brake calipers must be OEM, of the same make and model as frame, grinding is prohibited. Disc brake rotors must be steel. Aluminum or composite rotors are prohibited. Drilled rotors are prohibited. Brake pedal may be aftermarket. Front/Rear bias adjusters are prohibited. One brake master cylinder only. After market brake components are not allowed. Floor mounted pedals are prohibited. Proportioning valve on rear brake line recommended. Proportioning valve may be accessible to driver inside the car. Only 1 adjuster allowed.

7.6 ENGINE REQUIREMENTS

7.6.1 General Eligibility

Only V-8 engines are permitted. Engine must be of Parent Corporation of frame. The maximum displacement on a General Motors Vortec head engine is 360.0 cubic inches and the maximum compression ratio is 10.80 to 1.

7.6.2 Engine Location

Engine mounts may be after market. The engine must be centered in the frame. The engine set back is as follows: Car Type Location 1973 – 1977 Chevrolet Monte Carlo Stock location. Modification of the

cross member is not allowed. General Motors Metric Chassis 33.50 inches from the center of the top steering box bolt, on the frame, to the back of the engine block. The cross member may be notched out and plated in the area of the fuel pump only. All other cars The engine may be set back so the lower ball joint lines up with the center of the number 1 spark hole.

7.6.3 602 Sealed Crate Engines allowed.

Crate engine must use HEI distributor with MSD #8728 or 8727CT rev control and Maximum 6400 RPM Chip.

7.6.3.1 Engine Block

Must be a factory production cast iron block with external measurements identical to standard production engine. All engine block markings must remain. Grinding of any kind on the engine block, including the valley under the intake manifold, is prohibited. Angle milling of block is prohibited.

7.6.3.2 External engine oil coolers are permitted.

Oil cooler may not be located in the driver's compartment.

7.6.3.3 Cylinder Heads

Cylinder heads must remain stock. All cylinder head markings must remain. Angle milling, chemical treating, acid dipping, acid flowing, abrasive blasting, bowl cutting, addition of material to the ports or combustion chamber, or other alterations to the original, as cast, head is prohibited. Valves, rocker studs, head bolts, and spark plugs may not be relocated. No polishing or grinding of ports or runners is permitted. No material may be added to the combustion chamber.

7.6.3.5 Camshaft, Valve Lifters, & Rocker Arms

Only the original OEM camshaft that came with the engine may be used. Only the original OEM chain and sprocket camshaft drive system may be used. Camshaft journals must be stock for engine. Rev kits are prohibited. Only the original OEM valve lifters that came with the engine may be used. Only the original OEM rocker arms are permitted.

7.6.3.6 Intake Manifold

Only the OEM intake manifold that came with the engine may be used. Grinding or polishing of the ports is prohibited. Chemical treating, acid dipping, acid flowing, abrasive blasting, addition of material, or other alterations to the original, as cast, intake manifold is prohibited. Adapter plates or carburetor spacers are prohibited. Only one flat gasket, with a maximum thickness of 0.065 inches, may be used between the intake manifold and carburetor.

7.6.4 Unsealed Engine

7.6.4.1 Engine Blocks

Block must be a factory production cast iron block with external measurements identical to the standard production engine. Angle milling of block is prohibited.

7.6.4.2 Crankshaft

Only cast iron or forged steel crankshafts are permitted. Titanium crankshafts are prohibited. Only Steel OEM standard type harmonic balancers are permitted. Aluminum or fluid type balancers are prohibited. All crankshafts have a minimum weight of 48lbs. No Knife Edging, Undercutting & Honda Journals are Prohibited.

7.6.4.3 Pistons and Rods

Only magnetic steel connecting rods are permitted. Titanium rods are prohibited.

7.6.4.4 Oil Pump, Pan, and Cooler

Wet sump oil pumps only. Dry sump oil pumps are prohibited. After market oil pan may be used. Oil pan must be equipped with a 3/4 inch plug for inspection. The plug must be directly in line with a rod journal. Engines equipped with a windage tray must provide a hole in the tray, in line with the plug. External engine oil coolers are permitted. Coolers may not be located in the driver's compartment.

7.6.4.5 Cylinder Heads

Only cast-iron OEM, or cast-iron OEM replacement (SR), cylinder heads are permitted. GM "bowtie" cylinder heads are prohibited. W-2, GT-40, SVO, and all other non-Factory part number cylinder heads are prohibited. Aluminum cylinder heads are prohibited. Titanium valves are prohibited. Only General Motors Vortec (Casting P/N 10239906 or 12558062) cylinder heads are permitted. General Motors Vortec cylinder head P/ N 25534351 & 25534371 are prohibited. Vortec heads may be drilled and tapped to install intake manifold. Cylinder heads must remain unaltered. All cylinder head markings must remain. Angle milling, chemical treating, acid dipping, acid flowing, abrasive blasting, bowl cutting, addition of material to the ports or combustion chamber, or other alterations to the original, as cast, head is prohibited. Valves, rocker studs, head bolts, and spark plugs may not be relocated. No polishing or grinding of ports or runners is permitted. No material may be added to the combustion chamber. The cylinder head to block surface may only be machined a maximum of 0.050 inches from OEM. Minimum combustion chamber size shall be 58.0 cc's for all models. A three angle valve job may be done as long as no machining marks are more than 1/8" above the head of the valve. The maximum valve sizes, as measured across the face, are as follows: Manufacturer Intake Exhaust GENERAL MOTORS VORTEC 1.940 inches 1.500 inches ALL OTHER GM 2.020 inches 1.600 inches FORD "CLEVELAND" 2.046 inches 1.656 inches FORD "WINDSOR" 1.8437 inches 1.5469 inches MOPAR 2.020 inches 1.625 inches The maximum allowable spring diameter is 1.50 inches.

7.6.4.6 Camshafts, Valve Lifters, & Rocker Arms

Only flat tappet, steel, camshafts may be used. The maximum camshaft lift on all engine's is 0.500 inches, measured at the retainer. Gear driven camshafts are prohibited. No roller tappets, or mushroom lifters are allowed. Only the following steel, straight barrel lifters are allowed: Manufacturer Maximum Diameter GENERAL MOTORS 0.843 inches FORD 0.875 inches CHRYSLER CORP. 0.904 inches Rev kits are prohibited. Only steel push rods are allowed. Only stock rocker arms are permitted. Roller rocker arms are prohibited. Maximum rocker ratio is 1.6 to 1. Stud girdles are prohibited.

7.6.4.7 Intake Manifold

Only cast-iron intake manifolds are permitted. Edelbrock 7116 Aluminum Performer Manifold permitted on Vortec head engine. Grinding or polishing of the ports is prohibited. Chemical treating, acid dipping, acid flowing, abrasive blasting, addition of material, or other alterations to the original, as cast, intake manifold is prohibited. General Motors intake manifolds 14096242 and 14096011 are prohibited. An adapter plate, with a straight bore and a maximum thickness of 1¼-inches (including gaskets), may be used between the intake manifold and carburetor.

7.6.5 Carburetor

All Super Stock engines, except Sealed Crate Engine and General Motors Vortec head engines, must run either a Holley Model 4412 two-barrel, General Motors 2bbl or 4bbl Quadra jet carburetor. Sealed Crate Engines must run a 650 cfm. 4bbl Holley 4150HP carburetor (model # 80541-1). General Motors Vortec head engines must run a Holley Model 4412 two-barrel carburetor. The Holley Model 4412 carburetor must meet the following: A. Carburetor Body – No polishing, grinding, or drilling permitted. Factory type air bleeds only. Screw in air bleeds are prohibited. B. Choke – The choke may be removed. C. Choke Horn – The choke horn may not be removed. D. Boosters – The boosters and booster location may not be changed. The size or shape must not be altered. Boosters may not be tapered. Height must remain standard. E. Venturi – Venturi area must not be altered. Casting ring must remain. F. Base Plate – Base plate must not be altered. G. Butterflies – Butterflies must not be thinned or tapered. Retaining screws may not be altered. H. Throttle Shafts – Throttle shafts must not be thinned. I. Metering Block – Only metering block 134-137 is permitted. Adjustable metering blocks are prohibited. Metering block must not be altered.

Any attempt to pull outside air other than down thru the venturies is prohibited. Throttle linkage must be solid rod, cable type linkage is prohibited. Gas pedal must be push/pull type.

7.6.6 Air Cleaner and Air Intake

7.6.6.1 Air Cleaner

All cars must be equipped with an air cleaner during competition. The air cleaner must be no more than 14 inches in diameter and may not protrude thru the hood.

7.6.6.2 Air Intake

Forward intakes are not allowed. Cowl air induction is not allowed. Air boxes are not permitted. Carburetor "hats" are prohibited. No devices for directing the flow of air into the air cleaner are permitted.

7.6.7 Ignition System and Battery

Stock distributor ignitions only. No internally adjustable or chipped distributors allowed. OEM 4 prong module only no rev chips allowed. No external ignition boxes. Magnetos and crankshaft-triggered ignitions are prohibited. 12-volt battery and electrical systems only. A, labeled, centrally located, master on-off switch, to cut off all electrical power to the car mandatory. The battery must be located between the frame rails, must be securely installed, and be enclosed in either a plastic, marine battery box or an FRRC approved battery box. The battery may not be located forward of the radiator, or behind the rear end of the car.

7.6.8 Exhaust System

All cars must have a complete exhaust system. Exhaust manifolds must be unaltered, cast iron, OEM. Corvette style exhaust manifolds are prohibited. Exhaust manifolds must be OEM for the engine used in the car. The use of OEM manifolds designed, described, listed, marketed or sold as "truck" or "marine" replacement or "truck" or "marine" OEM style manifolds is prohibited. Ceramic Coating, Chemical treating, acid dipping, acid flowing, abrasive blasting, addition of material, or other alterations to the original, as cast, exhaust manifold or headers is prohibited. All exhaust systems must extend past the driver and ~~exit under the car~~ **may exit out the side of the car**. The maximum size of the exhaust system is 2½- inches, i.d. The maximum decibel limit is 85 db. A 2 into 1 muffler with a maximum length of 18 inches is permitted. A 5 inch diameter turn down with a maximum length of 9 inches, measured from the end of the muffler, is permitted. It is permitted to have the following tubular exhaust headers. All headers must match the engine manufacturer. **ONLY** the following headers are allowed... All others are prohibited! • GM – Schoenfeld 185 or 185M • Ford – Dynatec 04-645000 • Mopar – Schoenfeld 455 Vortec Headed Motors are allowed to have either the Schoenfeld 185CM or 185MCM **ONLY!** All Headers must remain stock, unmodified and in original production condition. All primary tubes must enter directly to one collector and at an equal point with every other primary tube. Exhaust must remain dual and separate, no crossovers, 'X' pipes or 'Y' pipes are allowed **on cars using headers**. Mufflers are required and must exit behind driver under the car. (see above) A taper measuring 6 inches in length is allowed to make the transition from the 3 inch collector pipe to the 2.5 inch exhaust pipe.

7.6.9 Cooling System

Electric fans are permitted. Use of antifreeze is prohibited. Water recommended. All cars must be equipped with a steel or aluminum approved overflow or catch tank. Factory catch tanks are permitted. Radiator must mount in front of engine. Radiator may be any size, but must mount in original stock location. Radiator may not protrude thru hood. Radiator shrouds must retain the same shape as OEM shrouds. Shrouds must be metal or OEM and extend to fan blades.

7.7 DRIVE TRAIN

7.7.1 Clutch, Bell Housing, Transmission, and Drive Shaft

Any three, four, or five speed, American made, steel case, manual transmission is permitted. All gears must work **NO** Removing of any Gears. Quick-change transmissions, couplers, in/out boxes, and buttons are prohibited. Aftermarket clutch pedal assemblies are permitted. Hydraulic throw out bearings are allowed. Unaltered automatic transmissions are permitted. The minimum weight of the torque converter & fluid, and flex plate is 40 lb. No allowance is made for fluid loss. All manual transmission cars must be equipped with a scatter proof bell housing or ¼" steel scatter shield covering the top 180

degrees of the bell housing. A 3-inch diameter hole is required in the bottom of the bell housing for inspection purposes. The flywheel must be steel and the clutch must be a single disc, OEM, no less than 10.50 inches in diameter. The minimum weight of the clutch, pressure plate, and flywheel is 40 lb. External transmission oil coolers are permitted. Coolers may not be located in the driver's compartment. Drive shaft must be steel OEM and painted white or bright color. Aluminum drive shafts are prohibited. All cars must be equipped with a 360 degree, steel, hoop that surrounds the drive shaft. The hoop must be located approximately 6 to 10 inches behind the front U-joint and be bolted to the floor using washers no less than 1½ inches in diameter.

7.7.2 Rear End

Only OEM passenger car rear ends are permitted. Ford 9" is allowed. All components must be Steel. No Gun drilled Axles. The rear suspension must be OEM. Relocation of the rear suspension control arm brackets on the frame is prohibited. Upper and lower rear control arms must be, unmodified, OEM, and of the same make and model as the frame. Metal pivot bearings and bushings are prohibited. Upper control arm mounts on the rear end housing may be relocated to change pinion angle but must remain stock length for make and model. Lower control arm must be stock length and be in stock location for make and model of chassis your running 73-77 GM A body – upper 11.25" lower 22.375" 78-88 GM G - Body upper 11.25" lower 19.25" . Any 5" coil spring allowed. Screw jacks are allowed on all four corners of the car. Full floating or quick-change rear ends are prohibited. Locked rear ends are permitted. Limited Slip permitted. Relocation of the holes in the lower control arm brackets is prohibited. Axles must be steel. Titanium axles are prohibited.

7.7.2.1 WHEELBASE AND TREAD WIDTH

Wheelbase must be within 1-inch of stock. Maximum tread width 62 1/2"-inches for GM Metric chassis. 66 ½"-inches for GM Full Size Chassis, (64 ½"-inches for Ford or Chrysler front stub), measured center to center of tires at spindle height (front and rear).

Any 5" coil spring allowed. Screw jacks are allowed on all four corners of the car. Full floating or quick-change rear ends are prohibited. Locked rear ends are permitted. Relocation of the holes in the lower control arm brackets is prohibited. Axles must be steel. Titanium axles are prohibited.

7.7.3 Wheels and Tires

7.7.3.1 Wheels

The wheels must be steel and meet the following requirements: A. Only after market steel racing wheels or 8 spoke wheels are permitted. B. All wheels must be 15 inches in diameter and no more than 8.0 inches wide. C. Wheels, less tire, weights, and valve, must weigh a minimum of 19.0 pounds. D. Wheel studs must be a minimum of 7/16 inch diameter and at least flush with outside of lug nut. E. Wheels must be attached with 1-inch, steel, lug nuts. Lug nuts may not be altered. F. Wheel covers are prohibited

7.7.3.2 Tires

Only approved tires allowed D800 NO EXCEPTIONS. Area Sportsman cars must run the tire specified in their current rules or can run the Frrc super stock specified tire D-800. No buffing or treatment of tires allowed. The tires used for qualifying, must be used all night. One NEW tire will be Allowed every other week. If new Tire is detected in consecutive weeks you lose qualifying points for that night or if detected after heat or feature points will be lost then. Except for the first FRRC Event. After the first FRRC Event, any car with more than one new tire must start all races in the last row and will lose qualifying points. Tire warming blankets are not allowed.

7.8 FUEL SYSTEM

Electric fuel pumps are prohibited. Fuel line may not be exposed in driver's compartment and must run along the inside of the frame rail.

7.8.1 Fuel Cell

All cars must be equipped with a fuel cell. The maximum capacity of the fuel cell is 22 gallons. The installation must be FRRC approved. Fuel cell must be located in the trunk area behind the rear end, between the frame rails. Minimum height to the bottom of the fuel cell container is 11 inches. 7.8.2 Fuel Cell Container The fuel cell container must be a minimum of 18-gauge steel and must have a 1-inch lip. The container must have, two, 1 inch by 1/8-inch steel straps, around the top, sides, and bottom, in both directions. The top may be either 18 or 20 gauge, steel.

7.8.3 Fuel

The fuel must be automotive gasoline only. The gasoline must not be blended with, ethers, aniline or its derivatives, or oxygenated additives (such as nitro methane or nitro propane). The use of nitrous oxide is prohibited. The fuel must be automotive gasoline only. FRRC has the right to sample a competitor's fuel at any time, during an event. Samples will be tested by FRRC and/or any outside laboratory at FRRC discretion.

7.9 MISCELLANEOUS EQUIPMENT

7.9.1 Steering components

All steering boxes and components must be stock, unaltered OEM, for the car. No quick steering devices allowed. All cars must have either a collapsible, two-piece steering column, or a minimum of two swivel joints. A metal (no plastic) quick release coupling, acceptable to FRRC, on the steering wheel is mandatory. The steering column must have an impact collar, no less than 1½-inches in diameter, welded to the column forward of the column support inside the drivers' compartment. The center of the steering wheel must be padded with resilient material.

7.9.2 Seat

Must be made of aluminum and installed in a manner acceptable to FRRC Officials. It is recommended that the center of the seat be no less than 16 inches from the inside edge of the driver's side door bar. No less than 4, ½-inch diameter, bolts must be used to attach seat to frame and cage. All mounting hardware must be Grade 5 or better. A flat steel washer no less than 1½ inches in diameter must be installed between the head of the bolt and seat. Seat must be equipped with a fully padded cover. Headrest on seat is mandatory.

7.9.3 Seat Belts and Shoulder Harness

A quick release lap belt and double shoulder belt no less than 3 inches wide is mandatory. A 2-inch submarine belt is also mandatory. Seat belt and shoulder harness must be date stamped and not more than 4 years old for SFI rated belts and not more than 6 years old for FIA rated belts. Seat belt and shoulder harness must be installed according to manufacturer's recommendations. The belts and harness must be attached to the roll bar cage at approximately shoulder height with Grade 5 or better hardware, no less than 3/8 inch in diameter.

7.9.4 Helmet

A helmet that meets SA2010 or SA2015 Snell Foundation specifications is mandatory. Neck collar or head and neck restraint system mandatory. It is recommended by the FRRC that you purchase and use a complete head and neck restraint system such as the Hans or Hutchins systems.

7.9.5 Drivers Suit

It is mandatory that a driver wear a SFI approved fire retardant suit (free of rips and tears) while on the race track. It is recommended that a driver wear fire retardant socks and shoes. Drivers will not be allowed on the track unless wearing a fire retardant suit and gloves. If a driver removes his/her gloves during an event, the driver will be black-flagged.

7.9.6 Fire Control System

It is mandatory that each car be equipped with a fully charged fire extinguisher or on-board fire control system. The fire extinguisher must be a dry type of no less than 2 pounds and be equipped with a gauge to indicate state of charge. The extinguisher must be mounted in a metal bracket, have a quick release latch (tape is prohibited), and be within reach of driver.

7.9.7 Window Net

It is mandatory that each car be equipped with either a 1-inch web or knitted mesh window net on the driver's side. The minimum allowable length is 12 inches. The window net must attach to the roll cage at the bottom and release with a seat belt snap or FRRC approved release on the top front corner of the window. Window net must be in place any time the car is on the race track.

A head restraint net, mounted between the window net and seat IS HIGHLY RECCOMENDED. Net may be rectangular or triangular. Net must be mounted according to manufacturer's recommendations

7.9.8 Mirrors are permitted.

7.9.9 Two Way Radios are prohibited.

7.9.10 One Way Receivers

One Way receivers are mandatory. Receivers will ONLY be allowed to receive track personal direction. Team spotters are prohibited. Receivers are required to be programmed to track mandated frequency only. Receiver Elite 1600 receivers only