SECTION - 8

FIGURE 8 DIVISION - 2025

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.

8.0 Race Events

FRRC Figure 8 races are 13 laps long in memory of Jeff Wohlrabe.

8.1 COMPETING MODELS AS APPROVED BY FRRC

FRRC Figure 8 races are open to approved 1950 to 2015 models of American made passenger cars.

Cars must have full frame. (Unibody style cars are prohibited)

Convertibles and station wagons are prohibited.

All cars must always maintain a minimum wheelbase of 108.0 inches.

8.1.2 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.

8.1.3 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, single or two digit, numbers in contrasting colors to the body, must be at least 16 inches high by 3 inches wide and neatly applied (paint or decals) to both doors. Where required, participating sponsor's emblems, or decals will be placed in the position designated by FRRC Officials.

8.1.4 Retired numbers

- -Jeff Wohlrabe #13
- -Terry VanRoy #14

8.2 GENERAL CAR REQUIREMENTS

8.2.1 Bodies

- -Car and truck bodies are permitted.
- -Bodies must meet the following requirements:
 - -Steel Panels are recommended (fiberglass panels are acceptable, not recommended)
 - -Fiberglass roofs must be lined with 22 ga sheet metal
 - -Interior area of car must be completely enclosed from front to rear and be of steel or aluminum.
 - -All cars and trucks must have complete bodies, hood, fenders, and an approved front and rear bumper.
 - -Bumpers may be fabricated out of pipe, or tubing, with capped ends.
 - -Bumper tubing maximum of 2 inch diameter and max wall thickness of .125 inch.
 - -Bumpers may only have 2 points of contact to frame horns. No additional bracing allowed.
- -All exterior body moldings must be removed (chrome, trim, mirrors, door handles, etc.)
- -All combustible material must be removed (headliner, seats, insulation, etc.)
- -All glass, except windshield must be removed (windows, headlights, taillights, etc.)
- -Screen of 1/2-inch mesh may be used on driver's side of windshield opening.
- -Stock hood and trunk hinges and latches must be removed and replaced with clip type hood pins.
- -Hood must seal to cowl / firewall
- -Spin-off hood pins are **prohibited**.

- -Stock grills must be replaced with expanded metal or screen.
- -Rub rails may be no larger than 2 inches in diameter 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 or welded to the roll cage.
- -Wheel wells must have a rolled edge.
- -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 body panels may not be allowed to compete
- -All openings in the firewall, and factory seams, must be closed and sealed.
- -The area between the seat and trunk must be closed and sealed.
- -A minimum of three stiffeners must be installed inside the windshield.
- -Stiffeners must be attached to the roof panel or roll bar and dash panel in an approved manner.

8.2.2 Weight

- -All cars must be a minimum weight of 3100 lbs
- -Any weight (ballast) added to the car must be secured by no less than two Grade 8 1/2-inch bolts.
- -The maximum spacing between bolts is 10 inches.
- -No weights may be added outside the body.
- -Added weights must be painted a bright color and have car number on weight.
- -Weight roll bar clamps must be steel.

8.3 FRAME AND ROLL CAGE

- -All frames and roll cages must be acceptable to FRRC Officials.
- -The frame and roll cage must meet the requirements described in the following paragraphs.

8.3.1 Frame

- -All frames must be stock passenger car frames. (Hearse and truck frames are prohibited)
- -Frame can be plated forward of front spring pockets to repair bent frame horn(s)
 - 3"x3" 11guage (1/8") steel plate welded on the outside of the frame.
- -No plating on the inside of the frame forward of the front spring pockets.
- -Filled frames are prohibited.
- -For safety, a crush zone must be present on the front of the car
- -Drilling or hole sawing of frame is prohibited.

8.3.2 Roll Cage

- -Roll cage installation and workmanship must be acceptable to FRRC Officials.
- -Roll cage tubing must be a minimum of 095 wall
- -Both Driver and Passenger sides must have door bars (Min 4 on Driver, 3 on Passenger)
- -The driver's side must be plated between the door panel and roll cage.
 - -Plate must be a minimum of 1/8 inch thick and must be welded on.
- -NO FORWARD BRACING
- -Jack posts must be guarded, or inside the body.
- -All roll bars exposed to the driver must be padded.
- -Bay bars allowed. (May only extend past upper A-arm 1" to allow clearance to remover A-arm nut)
- -NO ADDITIONAL bracing allowed on bay bars
- -Earnhardt bar is mandatory (1.5" min Dia tubing) (Tube connecting roof halo to dash bar)

8.4 SUSPENSION

- -4 corner screw jacks are allowed.
- -Coil springs must be a minimum of 5 inches in diameter
- -All suspension components must remain stock and in stock location, except where otherwise stated.
- -No spline type sway bars.
- -No bump stops or suspension limiting devices allowed front or rear.

-Suspension must have a minimum of 2" immediate drop

8.4.1 Front Suspension

- -The front suspension must be OEM style to parent frame.
- -Tubular upper control arms are allowed (must use stock bolt in ball joints)
- -Tubular lower control arms are not allowed
- -Upper control arm frame mounts may be relocated.

8.4.2 Rear Suspension

- -The rear suspension must be OEM style to parent frame.
- -3-Link suspension systems or variations of them are Prohibited
- -Independent rear suspension is prohibited.
- -Aftermarket rear control arms are allowed, stock fixed length only.
- -Non-adjustable rear control arms with stock dimensions,
 - -73-77 GM A body upper 11.25" lower 22.375"
 - -78-88 GM G body-upper 11.25" lower 19.25"

8.4.2 Shocks

- -Steel body racing shocks are permitted
- Non-adjustable steel shocks only.
- -rebuildable shocks are prohibited.
- -Maximum Shock MSRP price \$130
- -Aluminum body and remote reservoir shock absorbers are prohibited.
- -Front and rear shocks may mount in any position (Only one shock per wheel)

8.4.3 Spindles, Wheel Bearings, and Hubs

- -Spindles, wheel bearings, and hubs must be OEM to the parent frame.
- -Dropped spindles are prohibited
- -3-piece IMCA Approved spindles are permitted (GM metric spindle # 91034501)

8.4.4 Steering components

- -Steering boxes and components must be OEM stock and unaltered for the car.
- -Aftermarket Power Steering pumps are Permitted
- -Steering Quickeners are Permitted
- -Cars must have either a collapsible, two piece steering column, or a minimum of two swivel joints.
- -The steering column must have an impact collar (no less than 11/2-inches in diameter, welded, or bolted to the column forward of the column support inside the drivers' compartment)
- -The center of the steering wheel must be padded with resilient material.

8.4.5 Brake Components - Front and Rear

- -Each wheel must be equipped with a brake in proper working condition.
- -Brakes may be disc or drum. (Disc brake calipers must be OEM)
- -Grinding of brake components is prohibited.
- -Disc brake rotors must be steel. (Aluminum or composite rotors are prohibited.)
- -Fabricated foot boxes are permitted.

8.5 ENGINE REQUIREMENTS

- -Only V-8 engines with a 2 bbl. carburetor are permitted.
- -Engine must be of Parent Corporation of frame.

8.5.1 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.

8.5.2 Cylinder Heads

- -Aluminum cylinder heads are prohibited.
- -Titanium valves are prohibited.
- -No RH Heads

8.5.3 Intake Manifold

- -Any production type, cast iron intake manifold is permitted.
- -An adapter plate with gaskets may be used (Maximum thickness of 11/4-inches between the intake manifold and carburetor. Only 2 gaskets (1 per side), with a maximum thickness of 0.065inches, may be used on the adapter plate)
- -Corvette intake manifolds prohibited
- -Aluminum intakes are Prohibited

8.5.4 Carburetor

- -Holly 4412 carb or Rochester 2 bbl carburetor.
- -All carburetors must be Guage Legal

8.5.5 Air Cleaner

- -All cars must be equipped with an air cleaner during competition.
- -Air cleaner may not protrude thru the hood.

8.5.6 Ignition System and Battery

- -Magnetos and crankshaft-triggered ignitions are prohibited.
- -HEI Ignition systems only
- -12-volt Battery and electrical systems only
- -The battery must be located between the frame rails, and securely installed.
- -Batteries located in the driver compartment must be enclosed in either a plastic marine battery box or an FRRC approved battery box.

8.5.7 Exhaust System

- -Exhaust manifolds must be unaltered OEM cast iron.
- -Headers are permitted. (No cross over or late model style headers)
- -Exhaust manifold may not exceed 2.5" i.d. when measured at the exhaust flange.
- -All exhaust systems must extend past the driver's feet and exit under the car or exit the side of the car.

8.5.8 Cooling System

- -Radiator must mount in front of engine.
- -Electric fans are permitted.
- -Use of antifreeze is prohibited

8.5.9 Engine Location

- -Engine mounts may be after market.
- -The engine must be centered in the frame.
- -Modification of the cross member is not allowed.
- -The cross member may be notched out and plated in the area of the fuel pump only.
- -The engine set back is as follows: Car Type Location
- -1973 1977 Chevrolet Monte Carlo, Stock location
- -GM Metric Chassis, 33.50 inches from the center of the top steering box bolt on the frame to the back of the engine block.
- -All other cars; Engine may be set back so the lower ball joint lines up with the center of the number 1 spark hole.

8.6 DRIVE TRAIN

8.6.1 Clutch, Bell Housing, Transmission, and Drive Shaft

- -Any three, four, or five speed, American made, manual transmission is permitted.
- -Unaltered automatic transmissions are permitted.
- -Transmissions must have all forward and reverse gears in working order
- -Torque converter diameter cannot be less than 10".
- -Quick-change transmissions, couplers, in/out boxes, and buttons are prohibited.
- -All manual transmission cars must be equipped with a scatter-proof bell housing. (A 3-inch diameter hole is required in the bottom of the bell housing for inspection purposes)
- -The flywheel and clutch assembly must be a single disc, OEM, (no less than 10.5 inches in diameter and cannot weigh less than 31lbs)
- -All cars must be equipped with a loop that surrounds the drive shaft. (The loop must be fastened to the frame or cross member)

8.6.2 Rear End

- -Only OEM passenger car rear ends are permitted.
- -Rear ends must have mount for paired frame
- -Quick-change rear ends are prohibited.
- -Locked rear ends are permitted.
- -Ford 9" rear ends are permitted.
- -Axles must be steel. (Titanium axles are prohibited)

8.6.3 Wheels

The wheels must be steel and meet the following requirements:

- -Aftermarket steel wheels are required. (No magnesium or aluminum wheels)
- -All wheels must be 15 inches in diameter and no more than 8.0 inches wide.
- -Wheel studs must be a minimum of 7/16 inch diameter and at least flush with outside of lug nut.
- -Wheels must be attached with 1-inch, steel, lug nuts. (Lug nuts may not be altered)

8.6.4 Tires

- -No buffing or treatment of tires allowed.
- -No modifications of tires allowed.
- -Cars must run approved tires only
- -All tires must be USED, No new tires (decision of used made by FRRC Tech Officials)
- -Approved tires:
 - -Hoosier F53, 8.0/27.0-15
 - -Hoosier F75
 - -Hoosier R-750
 - -Hoosier D-800

8.7 FUEL SYSTEM

- -Electric fuel pumps are **prohibited**.
- -Fuel line must be steel hard line, braided line or reinforced rubber line.
- -Fuel line can run along the inside of the frame rail.
- -Fuel line may not be located in driver's compartment unless incased in steel tube.

8.7.1 Fuel Cell

- -All cars must be equipped with a fuel cell.
- -Maximum Fuel cell capacity is 22 gallons.
- -Fuel cell must be located behind the rear end, between the frame rails and centered in the trunk area.
- -The fuel cell must be attached to the frame in an approved manner.

-Minimum height to the bottom of the fuel cell container is 11 inches.

8.7.2 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 must be a minimum of 18 gauge steel.

8.7.3 Fuel

- -The fuel must be gasoline only. (Max of 110 octane)
- -The use of nitrous oxide is **prohibited**.
- -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.

8.8 MISCELLANEOUS EQUIPMENT

8.8.1 Seat

-Seat must be made of aluminum and installed in a manner acceptable to FRRC Officials.

(Minimum of (4) Grade 8 1/2-inch diameter bolts must be used to attach seat to frame and cage. A flat steel washer no less than 11/2-inches in diameter must be installed between the head of the bolt and seat)
-Headrest on seat is mandatory.

8.8.2 Seat Belts and Shoulder Harness

- Head and neck restraint system such as a "Hans Device" is required.
- -Approved quick release lap belt and double shoulder belt is mandatory.
- -A submarine belt is also mandatory.
- -Seat belt and shoulder harness must be date stamped 2020 or newer.
- -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 (*Grade 8, no less than 3/8 inch in diameter*)

8.8.3 Helmet

-A helmet that meets SA2010 Snell Foundation specifications is mandatory. (2025 will change to SA2015)

8.8.4 Drivers Suit

- -It is mandatory that a driver wears a fire-retardant suit (free of rips and tears) and gloves while on the racetrack.
- -It is required that a driver wear fire retardant socks or 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)

8.8.5 Window Net

- -It is mandatory that all cars are equipped with either a 1-inch web or knitted mesh window net on the driver's side. *(The minimum allowable length is 12 inches)*
- -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 net.
- -Window net must be in place while car is on the racetrack.

8.9 TRANSPONDERS & RECEIVERS

- -Transponders are required on every car whenever the car is on the racing surface
- -Transponders are required to be working and turned on whenever the car is on the racing surface
- -Only 1 transponder allowed per car.
- -Transponder to be located 75 inches from the center of the transponder to the front bumper
- -All drivers must use Receivers when on the race surface that is in working order.

9 TECH

- -All cars must pass tech and get season inspection sticker or will not be allowed to race
- -Top 3 finishers must present car at the tech stand within 15 mins post race

FIGURE 8 TRACK POLICY

- 1-Any car in competition with a flat tire must leave the race track immediately or you will not be scored.
- 2-At the "X" all racers must yield (give right of way) to cars coming from the right, to prevent a hit in the drivers' door.
- 3-Drivers must be signed in by 5:15pm, Starting line-ups will be posted shortly after the Drivers' meeting. The previous week's winner will start last. Any driver not signed in by 5:15pm will start at the rear of the field.
- 4-All competitors must be 18 years of age or older.
- 5-All points go with the driver or team.
- 6-These rules apply to all Figure 8 races held at W.I.R. ran by FRRC
- 7-Use your best judgment when entering and leaving the race track or pit area. Severe penalties will be imposed if extreme caution is not used.
- 8-Track officials can have a competitor's car inspected at any time. If a driver refuses to present the car for inspection, they forfeit their right to compete for 1 full year from the date of the infraction and lose all points and money accumulated up to that point.
- 9-Slinger Drivers may run Slinger rule package for one night only