

# 2020 FUEL Racing Series Competition Guide

Situations may arise that are not covered in this guide. FUEL Racing Series (FUEL) will make all rulings/decisions. Rules are set to facilitate conduct and competition guidelines. By participating, FUEL competitors willingly agree to comply and accept all rulings.

- NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION, OR COMPLIANCE WITH THE RULES AND REGULATIONS. They are intended as a guide for the conduct of the sport, and are in no way a guarantee against injury/death to participants, spectators, officials, or others. Series Officials shall be empowered to permit any reasonable interpretation or deviation from any specifications that does not alter the minimum acceptable requirements.

REGULATIONS & PROCEDURES APPLY TO FUEL RACING SERIES. FUEL reserves the right to revise rules/procedures at any time. By hosting/participating in a FUEL event, FUEL decisions are final and shall not be challenged publically or legally in any form

**FUEL Membership (\$100): Enables a driver to be eligible for point fund monies, contingencies, and/or series awards. No driver under 16 years of age may compete, unless he/she meets all qualifications set forth by track hosting event.**

## Series Championship

- Championship: Drivers are allowed TWO drop races. Ex: If series completes 12 events, the best 10 finishes are scored for the championship, etc. Disqualifications ( series discretion) may not be dropped (Exceptions: being light at scales, etc)
- Series Championship Tiebreaker: Most feature wins, most 2nd Place finishes, most 3rd Place finishes, etc.

1 <sup>st</sup> (100)	2 <sup>nd</sup> (98)	3 <sup>rd</sup> (96)	4 <sup>th</sup> (94)	5 <sup>th</sup> (92)	6 <sup>th</sup> (90)
7 <sup>th</sup> (88)	8 <sup>th</sup> (86)	9 <sup>th</sup> (84)	10 <sup>th</sup> (82)	11 <sup>th</sup> (80)	12 <sup>th</sup> (78)
13 <sup>th</sup> (76)	14 <sup>th</sup> (74)	15 <sup>th</sup> (72)	16 <sup>th</sup> (70)	17 <sup>th</sup> (68)	18 <sup>th</sup> (66)
19 <sup>th</sup> (64)	20 <sup>th</sup> (62)	21 <sup>st</sup> (60)	22 <sup>nd</sup> (58)	Non Qualifiers (50)	

## Hot Laps, Qualifying, & Driver/Car Changes

- Drivers will qualify in the order of the pill draw (all drivers deemed late for qualifying will only get 1 lap of qualifying)
- Should 2 or more cars post the exact same qualifying time, the tie(s) will be broken via the 2<sup>nd</sup> fastest qualifying lap.
- FUEL approved driver/car changes after qualifying allowed (driver/car will move to rear of next stage of event)

## Heat Races, B-Mains, & Provisional Positions

- Delaware Double File Restarts will be utilized throughout the entire length of Heats & B-Mains (Race Director Discretion)
- Starting at Event 2 (Event 1 – 2019 Standings), provisional is based on 2020 Point Standings (Tiebreaker: Fastest Qualifier)

## Initial Starts

- Initial starts are double-file and inside the designated FIRING ZONE. Heat Race #1 winner has choice of inside or outside. INSIDE car sets pace and starts race inside FIRING ZONE. Cars called for jumping will be moved back 2 positions.
- If 1 car is involved in a caution before 1 lap is complete, that car will tag the rear of field. If more than 1 car is involved in a caution before 1 lap is complete, all cars will revert back to their original starting positions for another initial start attempt.

## General Race Rules & Conduct Guidelines

- Drivers with 2 or more unassisted incidents that bring out the caution in a race may receive the Black Flag.
- No repairs by crew are permitted on racing surface. (FUEL officials **DO NOT** pull sheet metal, repair cars, etc)
- TWO courtesy laps will be given changing flat tires in Feature Event Only (may be limited to lead lap cars only).
- Main event restarts are Delaware Double File until 5 To Go (Race Director Discretion, Track Conditions, Etc)
- Fighting, Rough Driving, and/or Disruptive Behavior will not be tolerated from Driver or Crew member at ANY TIME!
- Team members going out on the racing surface without approval from series officials will not be tolerated.
- Conduct violations may result in disqualification, loss of earned purse money, loss of points, and/or additional penalties.

### **Body (refer to diagrams)**

- Cars must have a minimum of 1/2" and a maximum of 1" radius at the top of fenders, doors and quarter panels.
- Floor boards and firewall must fully cover the driver's area and be constructed to provide maximum safety
- No wedge shape cars, fins or lips are permitted along the entire length of car (body line must be even front to rear)
- "Belly pans" or any type of enclosure on bottom of car is not permitted. Skid plate to protect oil pan is permitted.
- Non-approved bodies may at the discretion on the tech inspector, may be assessed a fifty pound weight penalty.
- "Scoops" used must be front of or around air cleaner (Max 1" above any part of cleaner). No fins or raised edges.
- Adjusters for shocks, weight jacks, trackers, ignition boxes or similar components are NOT permitted within reach of driver.

### **Nosepiece**

- Nosepieces must be made of molded type material and must be mounted so as to not alter its original shape.
- Approved stock nosepieces allowed (MD3, Performance Bodies, 2012 Dominator, ARbodies, Five Star, etc)
- Two piece noses must be fastened in the center (spacers added to gain width are not permitted – cooling holes allowed)
- Noses shall remain flat above nose lip/wicker bill (maximum of 52" from center of front hub to farthest point forward)

### **Roof - Roof Supports - Windows/Sail Panels**

- Roof: LENGTH (Min. 44" & Max. 54"). WIDTH (Min. 48" & Max. 52"). HEIGHT (45" - 48" from ground).
- Roof must be stock appearing and mounted level parallel to body and near center of car as viewed from the front.
- Maximum 1.5" roll, turned downward is permitted along front edge of roof. Maximum 1" roll, turned downward, is permitted along rear edge of roof. (Rolls permitted to strengthen roof.) No turn up at the rear of roof permitted
- No flat or odd shaped roofs permitted. No bellied/hollow roofs. Roof Post & Spoiler Supports may not overlap
- Any sun/antiglare shields may not exceed a 4" drop from the top roof line, and must hinge for easy exiting.
- A maximum of two (2) roof edge Bead rolls of a maximum height of one half (1/2) inch is allowed.
- Roofs are only allowed to be single plated and Maximum Thickness dimension of roof shall be 1/2 (one half inch)
- All roof side panels must extend to the edge of the body & match dimensions in drawing (minimum of 10" x 15")
- The window area may be covered with clear Lexan or equivalent, be cut out, or be represented by a decal.
- A maximum bow of two inches (2") outward on the window side panels as viewed from behind will be permitted
- Front roof supports up to two inches wide must extend forward to the rear of the hood

### **Front Fenders, Fender Flares and Hood**

- The hood and front fenders must be level and flat from the left to the right side of the car.
- Line from front to rear fender heights must slope up. Outside edges of hood and/or fender remain inside bodyline.
- Front fender can be a max. of 37" in height (measured vertically from ground to top of fender behind front tires.
- Front fender flares must be made of plastic and cannot alter the original shape of the nosepiece.
- The front fender flares cannot extend beyond the front tires more than one inch (1") per side to maximum width of 90 inches
- Front fenders flares must appear even across car, not be higher than fenders (3" max), & have collapsible supports

### **Doors & Quarter Panels**

- Door to door measurement cannot exceed 76" at top of doors and 82" in width at bottom in center of the car.
- Doors cannot exceed thirty seven inches (37") in height measured from ground (minimum ground clearance is 3")
- Door sides cannot break inwards from top 76" & bottom 82" measurements. No hollow / bellied doors permitted.
- Distance permitted from center of rear hub to top corner of the quarter panel is fifty-three inches (53") maximum.
- Panels can't exceed 76" in width as measured at the top or exceed 86" in width in center (19" height off ground)
- At no point can quarter panel sides break inwards towards the center of car. No hollow or bellied quarter panels!
- Distance from center of rear hub to end of quarter panel measured in straight line is forty-nine inches (49") max.
- The maximum height permitted from the ground to the top of the deck is thirty nine inches (39").
- Tire clearance from the body should be a minimum of 2 inches (No skirting permitted to behind quarter panel)

### **Spoiler and Spoiler Supports**

- Rear spoiler must be manufactured of adequate strength material (Lexan/Aluminum) - Max. 8" high & 72" wide
- Rear spoiler is not permitted to be suspended above deck (wing effect) and must begin where quarter panels end.
- Outer spoiler supports can't be mounted wider than top of quarter panel, in addition, must be centered on deck.

### **Interior & Frame**

- Interior of cockpit can be no less than 11" below the roof in addition, roll cage measured straight up and down.
- If front of roof has a rolled under lip, you will not be required to have 11" in the front but top of roof must be 11"
- Side windows must have 15" opening, measured at an angle to door. No support bars blocking right window exit!
- A rock guard (lexan screen) can taper back from steering wheel to a height of 1" in line with driver's chest providing the 11" minimum clearance is met at any point from the roll cage to the body or rock guard.
- Dropped interiors may begin no further forward than the rear engine plate with a maximum of 4 inches and cannot drop below 4 inches of the rear of the hood. The start of the dropped interior may not be open, as this forms part of the fire wall. The entire width must be closed off in sheet metal.
- Interior must gradually taper up to quarter panel height and be level for 20" from rear of quarter panel and deck.
- Full metal firewall must encompass compartment (front to rear, both sides, floorboards – Aluminum/sheet metal)
- Driver's seat must be of a high back aluminum racing seat design, on left side of car & securely attached to frame)
- Seat design should be from a current manufacture (full containment design per manufacture recommendations).
- Mirrors are NOT permitted. Radios and/or electronic and/or data communication devices will not be permitted.
- The wheel base width must be between a minimum of (103") and a maximum of (105").
- Frames must be of steel construction (minimum 2" x 2"), or rectangular, (minimum material thickness of .083")
- If a round tube frame is used, the tubing must have a minimum 1.75" outside diameter, with a minimum material thickness of .083 inches. These frames must use 4130 Chrome Moly Steel or DOM for construction.
- If the rear bumper is stubbed, it may only extend a maximum of (8") beyond frame. Any stubbed rear bumper that extends in excess of (8") beyond frame must be rounded and directed eight inches towards the front of car.
- No external rub rails are permitted and it is recommended that all cars be equipped with a tow hook or strap.
- Frames 2006 and newer must have builder's unique serial number plate prominently welded on left side of roll cage upright.
- Cars must have suitable steel roll cage in driver compartment. Side roll bars mandatory (must extend into panels)
- Minimum of 3 bars must be used on the left side of car (Minimum 1 1/2" in diameter - minimum thickness of .065")

### **Transmission – Suspension - Drive Train - Rear End - Brake System**

- Direct/Straight drives NOT permitted. Cars must be self-starting, bolted to engine, and able to shift FWD/REV
- Only one drive shaft is permitted. Drive shaft must be a minimum of 2 inches diameter and must be painted white
- Driveshaft must be protected with a minimum of one secure driveshaft hoop or sling (2 hoops recommended).
- Most rear end differentials permitted (NO "live axle" rear ends/suspension permitted – floater wide five permitted)
- All cars must be equipped with a four wheel disc braking system.

### **Shocks - Springs**

All Shocks, including lift bar and torque arm shocks, must be magnetic steel or aluminum. "Thru Rod" style shocks NOT permitted. Remote reservoir shocks permitted. Shocks must have no more than 2 external adjusters. Remote reservoirs may only have 1 external adjuster. Adjuster mechanisms must not be hidden by rod end. Adjuster mechanisms must be on the shock body, the shock rod, or on the remote reservoir. Cockpit adjustment shocks, shocks adjustable by remote, or ANY SHOCK that can be electronically adjusted in way are NOT permitted. Cartridge style shocks, mass inerter style shocks, or dampers NOT permitted. Shock rods must not exceed 3/4" in diameter and not surpass 250 pounds of pressure while extended at room temperature. Standard late model shock equates to 1 shock per wheel except on the left rear, in which 2 are allowed (1 in front of rear end and 1 behind). Shocks must be mounted vertical to axle tube. No horizontal shocks! Items deemed suspicious are subject to inspection and/or removal unless approved by FUEL officials. **NO SPRING RODS!** Coil springs must be steel. Leaf springs may be composite or steel.

## **Wheel - Tires**

- Steel or aluminum wheels permitted (must be mounted with lug nuts). Maximum wheel width permitted is 14"
- Wheel spacers are permitted (Must maintain maximum width of 90 inches on the front and 88 inches on the rear)
- **Hoosier 1350, Hoosier HTS 1350 or Hoosier HTS 1600 (Crate Racin D21 & D55 OK). No defacing, rebranding, softening, conditioning, or chemical alterations allowed! Grooving & Siping is allowed.**
- FUEL may sample tires at to send to tire-testing lab to ensure it adheres to manufacturer's benchmark and hold monies until results are finalized. If tire fails testing, driver forfeits points, event monies, and is not eligible for point fund. In addition, driver and/or team will be fined \$1000. Penalty for a 2<sup>nd</sup> tire infraction in a 365 day period will be at the discretion of FUEL

## **Engine**

ENGINES: GM/Chevrolet Performance CT525, FUEL Racing Series Sealed CT525, GM/Chevrolet Performance 604, Series Sealed 604 and Steel Block Engines in compliance with specifications outlined in the Steel Block Engine Section of this Competition Guide. Sealed engines must remain intact and not be tampered with. Penalty for tampering with seals, modifying any internal engine parts, changing the parts from stock or rebuild guidelines may be up to \$1500 fine and suspension from FUEL Racing Series up to 365 days.

- No changes allowed to engines - intake manifold, heads, valve covers, front cover, oil pan, harmonic balancer or any other parts on or in engine. CT525 engines will use components as delivered from Chevrolet Performance.
- **FUEL Approved Ignitions: GM Performance Ignition (P/N 19171130 or 19355863) & MSD (P/N 6014CT)**
- Aftermarket Spark Plug Wires Acceptable
- Carburetor Spacer/Objects may not protrude into the intake manifold below the mounting surface at any point.
- No Vacuum Pumps
- Engine setback will be 6" from center of top ball joint to the #1 spark plug (1.5 inch tolerance on engine setback). Cars with a 7.51 – 8.00 inch setback will be a 50-pound penalty at the motor plate. No cars with more than an 8 inch engine setback.

**THE ONLY LS ENGINE ALLOWED IS A CT525 SEALED BY CHEVROLET PERFORMANCE OR APPROVED SERIES REBUILDER**

## **FUEL RACING SERIES STEEL BLOCK ENGINE COMBINATIONS-----MAXIMUM 365 CUBIC INCH**

- ANY CARBURETOR - NO CFM LIMIT
- 2 VALVES PER CYLINDER
- CRANK TRIGGER **OR** DISTRIBUTOR BASED IGNITION SYSTEMS ARE ALLOWED
- 2400 LBS. MINIMUM WEIGHT AT ALL TIMES - WET SUMP OR DRY SUMP OIL SYSTEM ALLOWED
- OEM or AFTERMARKET CAST IRON BLOCK—NO ALUMINUM BLOCKS
- ANY STEEL CRANKSHAFT AND RODS---NO TITANIUM RODS
- FLAT TOP OR DOME TOP PISTONS ALLOWED CAMSHAFT, ROCKER ARM, PUSHROD ALLOWED
- STAINLESS OR TITANIUM VALVES OK - MAXIMUM VALVE SIZES: INTAKE (2.08") AND EXHAUST (1.625)
- NO RAISED RUNNER HEADS. Intake floor may not exceed 3/8 from Fire Deck at the entrance of the Intake Port.
- NOTES BASED ON FACTORY VALVE TO PISTON ANGLE - CHEVROLET (23 DEGREES) & FORD (20 DEGREES)

### **• STEEL HEAD OPTION**

- Any cast iron head with factory valve to piston angle. May angle mill heads (must be within 3° of factory stock).
- Porting and polishing allowed. The blending of valve pockets allowed. Any intake allowed.

### **• ALUMINUM HEAD OPTION (MINIMUM OF 50 LBS. BOLTED IN FRONT OF MOTOR PLATE)**

- Any Aluminum factory angle head or Brodix SUPR spec head is allowed. May angle mill heads, angle must be within 3 degrees of factory stock.
- Valve placement may not be altered

## **Weight**

- 525 & 604 (2300) - Steel Block/Steel Head (2400) - Steel Block/Aluminum Head (2400 with 50 lbs. at engine plate)
- A 1 lb. per green flag lap burn-off will be used for feature races only (CT525 & GM604 engines only).
- Weights up to 50 lbs. must be positively fastened by 2 ½ inch, minimum grade 5 bolts with a minimum of two clamps.
- Weight(s) must be secured to frame below decking (rear bumper and/or outside the frame weights not permitted)
- Pellet-type or liquid-type weight/ballast not permitted. Driver operated weight adjustment devices not permitted.

## ENGINE PROTEST & INSPECTION PROCEDURES

P & G Protest (\$300): Must finish in Top 5 of Feature and fee must be paid within 5 minutes after the race (series discretion)  
FUEL is not responsible for parts and/or reassembly of protested or inspected engines. REFUSAL TO ACCEPT INSPECTION OR PROTEST OF ENGINE WILL RESULT IN EVENT DISQUALIFICATION, FINE, & FUEL DETERMINED SUSPENSION.

VIOLATION OF ENGINE RULES/SPECS OUTSIDE OF ENGINE (OUTSIDE SEALS/BOLTS ON 525 or 604) WILL RESULT IN DISQUALIFICATION. DRIVER AND/OR OWNER MAY BE SUSPENDED & FINED UP TO \$1000.00. VIOLATION OF ENGINE RULES/SPECS INSIDE ENGINE (SEALING SYSTEM OF CT525 OR GM604) WILL RESULT IN DRIVER AND/OR OWNER BEING DISQUALIFIED, SUSPENDED FROM SERIES (UP TO 365 DAYS) AND FINED A MINIMUM OF \$1,000.00.

## Electronic Devices, Traction Control Devices, & Radios

- All electronic or computerized wheel spin or acceleration retardation traction control devices are strictly prohibited. Controlled timing devices attached to or controlling accelerator or rotation of wheel prohibited.
- All devices utilizing wheel sensors or any means of measuring ground speed to control wheel spin are prohibited.
- Adjustable ping, dial a chip, timing, automated throttle, adjustable restrictors and remote controlled components prohibited.
- No Radios or devices for transmitting voice or data. Data acquisition systems prohibited. RaceCeiver Type Devices Only!

## Exhaust

- All headers must end with a collector. Exhaust extensions attached to the collector not approved for competition.
- Tri-Y headers approved and though mufflers are not required...some events will occur at tracks requiring mufflers

## Fuel System

- Cars must have fuel cells to FT3 specs (35 gallon max). Fuel cell must be in a completely enclosed minimum 20 gauge steel or 0.060" aluminum container. Fuel pick up must be on top or right side of cell, constructed of steel and have a check valve.
- Gasoline Based Fuels must have a specific gravity of less than .745. Any gasoline based fuel with a specific gravity greater than .745 will be disqualified. The FUEL Racing Series specific gravity test equipment or lab test may be utilized at any time
- Ethanol based E-85 Fuel is allowed. E-85 FUEL MUST CHECK WITHIN 3% AT ANY TIME (MIN 84% ETHANOL-MAX 88% ETHANOL). FUEL ethanol testing equipment will be the only tester used to determine ethanol content in fuel.
- FT3 fuel cell must be securely mounted behind rear axle between rear tires, a minimum of 4 inches ahead of the rear bumper, no lower than quick-change housing. It must be mounted with a minimum of two .125 inch thick steel straps 2 inches wide around entire cell. Cells mounted in a square tubing frame OK but must be mounted to frame with bolts (minimum 7/16")
- No fuel injection system, electrical fuel pumps, or pressurized fuel systems -Only mechanical or belt driven pump
- METHANOL, ALCOHOL, NITROUS OXIDE, PROPYLENE OXIDE, OTHER ADDITIVES NOT ALLOWED
- **Series may lab test fuel against manufacturer's benchmark. Penalties for fuel deemed illegal will mirror tire penalties**

## Seat Belts – Seats - Helmets

- Car should be equipped with SFI 16.5 or SFI 16.1 approved seat belt restraint system until date of belt expiration. Seat belts restraint systems shall be installed in accordance with the directions of system supplier or manufacturer.
- Seat belt restraint system and all components should be SFI approved, correctly installed, & properly maintained.
- Full Containment seats recommended - Suitable FIA manufacturer approved full containment composite seats are permitted.
- Driver must wear full face helmet, with at least a valid SA 2010 or SA 2015 (Head & Neck restraint strongly recommended)
- Standard Snell and/or valid SFI 31.1, SFI 31.2 or SFI 31.1 2010 label at all times on the track when competing

## Protective Clothing

- Each driver should wear a fire resistant uniform meeting the SFI 3.2A/5 specs and display valid SFI 3.2A/5 label.
- Fire resistant accessories that cover the remaining parts recommended. Shoes and gloves should meet SFI 3.3 specs.