

**2021 FTMS Late Model Rules**

# DISCLAIMER

*The rules and/or specifications set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. By making application for a competitor permit, it is deemed that the competitor agrees to become familiar with these regulations and abide by the directions set forth and prescribed by Management. No express or implied warranty of safety shall result from publications of, or compliance with these rules and/or specifications. They are intended as a guide for conduct of the sport and are in no way a guarantee against injury or death to participants, spectators or others.*

**THE INTERPRETATION OF THESE RULES WILL BE SOLELY THE JUDGMENT OF THE TRACK OFFICIALS & TECH STAFF IN CHARGE AND THEIR DECISION WILL BE FINAL.**

 Any cars entering “Tech” will be allowed to have only one driver and two team members present in the tech area. Any harassment from any driver or crew member to the tech staff (or any other track official) may result in an automatic disqualification, thus forfeiting all money earned that night



 **DISQUALIFICATION DECISION FOR ANY REASON WILL BE DEEMED FINAL.**

**IF YOU ARE UNSURE IF SOMETHING IS ALLOWED OR NOT PLEASE CONTACT THE SPEEDWAY FOR CLARIFICATION. In the interest of fairness and upholding a competitive division Track Officials reserve the right to adjust weight penalties as needed throughout a season.**

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Interpretation of these rules will be solely up to the judgment of the officials in charge of the area in question. The Speedway reserves the right to impound non-complying components with no compensation to the owner(s) Non-compliance with the specifications outlines herein may subject violating teams to disqualification, loss of points and moneys and or fine.

**NOTE: IF IT DOESN’T SAY YOU CAN DO IT, ASK THE TECH DIRECTOR FIRST.**

**1.0 SAFETY EQUIPMENT:**

All safety equipment must be inspected and approved by Speedway officials prior to the vehicle going on the racetrack. Safety Specs and Technical restrictions for Late Models may differ slightly to standards at other tracks because of the speedway sizes.

**ALL SAFETY EQUIPMENT MUST BE WORN ANY TIME DRIVER IS IN THE RACE CAR ON RACING SURFACE**

**1.1 BELTS:** A quick release lap belt of no less than 3” width and 3” shoulder 1 harness is mandatory. Belts must be securely fastened to frame or roll cage with minimum 3/8” grade 8 bolts. Belts must be dated within the last **3** years. **It is noted that some head and neck restraint systems require 2” shoulder harnesses, these may be used. When replacing belts it recommended purchasing the 3” belt system with the 2” shoulder to accommodate the HNR/HANS Device.**

**1.2 FIRE CONTROL:**

**Extinguisher:** Cars must have a current year 2 ½ lb. minimum fire extinguisher mounted in an approved mounting bracket and within driver’s reach with seatbelts fastened. On board fire suppression system highly recommended.

**Fire Suit:** Driver’s fire suit SFI3.2A/1 is **mandatory**. Recommended SFI3.2A/5. Driver and suit must maintain clean looking appearance.

**Gloves & Footwear:** Fire Proof Racing Gloves and shoes are **Mandatory**

**1.3 FUEL CELL:** Fuel cell is mandatory. Fuel cell must be mounted between the frame rails (no notching of the rails allowed). Fuel cell must be secured with steel straps made of 1” x 1/8”, not less than two lengthwise and two cross wise, full 360 degrees. Fuel cell must have left side and rear hoop protection bars, minimum 1 3/4” x .095 tubing. Check ball in overflow must be operational in Fuel Cell. No vented gas caps permitted. Gas cap must have an appropriate attaching line to prevent its loss. Cell must be vented out the rear tail section of the car. A ground strap from the frame to the cell is mandatory.

**1.4 FUEL SHUT-OFF:** Must have a shutoff valve installed which is accessible to driver and safety crew. Must be clearly marked “OFF” and “ON”

**1.5 HEAD AND NECK RESTRIANTS SYSTEM: As of 2019 all racing divisions are required to have a head and neck restraint system to enter the speedway surface, this is MANDATORY.**

**1.6 HELMET:** A Snell 2010 SA or newer approved racing safety helmet is **MANDATORY** and complete drivers fire suit must be worn in all practice and race events and until car is parked in pit area.

**1.7 ROLL CAGE:** Cage must be constructed of 1 3/4” minimum outside diameter by .095” wall thickness round steel tubing. Four Point cage compulsory. A minimum of four horizontal bars must be inside the left side door and an "x" minimum on the right side. Minimum 40” length by 17” high, 16 Gauge metal between door bars and body skin on driver’s side is mandatory. No pipe fittings allowed. All roll bars in the driver’s area must be properly padded and taped. Left leg protection bar must be installed by bolts. Roll bar padding is mandatory.

**1.8 SEAT:** An aluminum or steel racing seat must be used, bolted or welded to roll cage, between roll cage and left front frame rail. All welds must be electric or MIG and will be subject to the approval of the tech inspectors. Seat must be positioned completely to the left of the center line of the car. An approved head rest required on the right side and recommended on the left.

**1.9 WINDOW SAFETY NET:** Driver’s window net mandatory that meets SF1-27.1, with minimum 3/8” rod. Must have quick release latch.

**2.0 MECHANICAL & BUILD RULES**

**2.1 BODY STYLE & APPEARANCE:**

**2.1.1 Template Legal ABC** (Template Body receives 40 lbs weight break) **or an Outlaw Style Body**

**will be the only bodies allowed in 2020. (No exceptions)**.

There is a 50" maximum front overhang measured from the axle measured to the forward most part of the car, ABC nose piece recommended. There is a 50" maximum rear overhang measured from the rear axle to the rearward most part of the race car body/bumper/spoiler. The bumper must extend to the rear of the car even with the spoiler or extend beyond the spoiler of the car. Maximum rear quarter panel height is 36 ". Maximum rear width of the body at bumper height is 72”. The window opening on the driver's side must be a minimum of 13" at the center of the door to the roof.  **All cars will have an 81” Overall Maximum Width from outside of tire or body measurement, whichever is wider. (No tolerance)**

**2.1.2 OUTLAW STYLE**: All 4 tires must be covered with body. (No weight penalty)

**2.1.3:** Minimum wheel base is 101".

**2.1.4:** Rear Spoiler size is to be maximum 60" wide on either Template or Outlaw style bodies. There may be NO forward support of any kind, no boxed ends or runners. No Gurney lip or any type of wicker bill on the upper edge of the spoiler. It is highly, highly recommended that the Upper 2/3's of the spoiler and the rear window of the car made of CLEAR lexan to enable other drivers to see through them.

**2.2 PAINT & LETTERING:** All cars must be neatly painted. Numbers assigned by the track must be painted on both sides of the car and roof, in minimum 24" high by 3" wide letters. 4" numbers on both headlight and tail light caps required. Block type numbers 6" high, white in color, must be displayed on the upper righthand side of the windshield. All cars must display driver’s last name with 3” high white lettering on top of front windshield.

**3.0 BATTERY:** Must be anchored securely and separated from driver’s compartment by firewall.

**4.0 BRAKES:** Four Wheel hydraulic brakes in good working condition are compulsory.

**5.0 SUSPENSION:**  **Floater Racing Hubs mandatory on all 4 corners of car**.

**6.0 SHOCKS & SPRINGS:** One Shock and One Coil Spring per corner of car.

**7.0 DRIVELINE:** Must have steel 360 degree retaining loops ¼” x 2” positioned at the front and rear of the drive shaft with in 6” of each U-joint. No chains. Any drive shaft allowed. Drive shaft must be painted white or fluorescent. **Any transmission and/or clutch are allowed**

**8.0 EXHAUST AND HEADERS:** Maximum **96** decibel rated mufflers mandatory (any rear exit allowed)

**9.0 FRAME HEIGHT:** All cars must be able to get on and off the inspection scales without the use of any extra ramps or boards and the car must not drag on the scales.

**10.0 RADIATOR:**  No antifreeze or additives (100% water only).

**11.0 RADIOS & DRIVER COMMUNICATION:** 2 Way radio allowed, 1 Way driver radio receiver mandatory

**12.0 STARTER & WIRING:** Race cars must be self-starting. No push starting. Must have an ignition kill switch and must be painted red and clearly marked on/off.

**13.0 TIRES & RIMS:** 11" Towel City purchased only from FTMS

Maximum 10” Racing Rims only

**14.0 ENGINE OPTIONS: NOTE- All Motors must utilize a Holley Carburetor and Petroleum Based Gasoline. (Absolutely NO additives allowed to fuel)**

* 1. **LATE MODEL “BUILT” MOTOR**

**GM/ FORD/ DODGE: MAXIMUM** compression ratio **10 to 1**. Maximum 358 Cubic Inch rule. (Ford/Dodge 372) (Checked by Track whistler)

1. **CAMSHAFT:** flat tappet camshaft.

1. **CYLINDER HEADS:** Must be stock type O.E.M. cast. **74 cc Minimum (No tolerance)**

**2.1 GM Vortec heads allowed with 64 cc Minimum (add 40 lbs to LLM motor)**

 **2.2** **GM angle plug heads 62 cc Minimum (add 25 lbs to LLM motor)**

1. **INTAKE MANIFOLDS:** No alterations from manufacturer allowed.
2. **BLOCK:** Cast Steel only
3. **COMPONENTS:** No exotic materials or metals (**Titanium, Ceramic, ect**) allowed in any parts of the motor
4. **PISTONS:** Flat Top, 2 or 4 Eye browed only
5. **CRANKSHAFT:** Stock weight and stroke ONLY. (47 lb minimum weight allowance on GM)
6. **CONNECTING RODS:** Steel only, 6” maximum length

**14.2.0 SUPER LATE MODEL TYPE “BUILT” MOTOR:** (75 lbs added to total weight)

**GM/ FORD/ DODGE: MAXIMUM** compression ratio **11 to 1**.

 Maximum 364 Cubic Inch rule. (Ford/ Dodge 372) (Checked by Track whistler)

* + - 1. **CAMSHAFT:** Solid flat tappet camshaft.
			2. **CYLINDER HEADS:** O.E.M. type Cast Steel only. **60 cc Minimum (No Tolerance)**
			3. **INTAKE MANIFOLD:** No alterations from manufacturer
			4. **BLOCK:** Cast Steel only
	1. **GM 602 CRATE: Factory Sealed/Stock/Unaltered** 602 GM Crate Motor (receive 100 lbs. weight break)

**\***Oil Pan, timing chain can be updated.

***2020 FTMS Late Model "SPEC" 377 GM engine package***

 2020 Late Model "SPEC" 377 engine package is allowed any Holley 4 BBL carb

 (1996-2002 V8 production GM Vortec 5700 L31 engine which came in pick-ups and vans) \*\*Absolutely **NO** machining, balancing or alterations from production specification or changes other than parts below\*\*.

The **ONLY** changes to the "SPEC" engine allowed **by part # listed and approved**

1-hydraulic roller camshaft .431/.451 lift (GM P/N - 14097395)

2- aluminum intake manifold (Edelbrock P/N - 2116) **OR**  (GM 602 crate manifold)

3- racing oil pan/pick-up/pump (Champ P/N - CP100RB) **OR** (GM 602 crate pan/pump)

4- racing harmonic balancer (Powerbond P/N - PB2221-SS) (or equivilant)

5- double roller timing chain (JP Performance P/N - JP 5981T) (or equivilant)

6- replacement racing valve springs (P/N - 19154761 only)

7- Screw -in studs, 1.6 aftermarket rockers allowed , pushrods, retainers and keeper upgrade optional. **No lightweight or Titanium parts**

8- Eagle Street Performance Rotating Assemblies ( P/N - B13405L00068 only)

9- rocker cover upgrade allowed

10- electric fuel pump with oil pressure shut off **MANDATORY**

ALL engines will have to be **PRE-APPROVED** (cost of $150 for travel/time) by a FTMS Tech Official "**before**" any re-assembly, NO MATTER WHAT STAGE OR PARTS REMOVED. All parts, components and measurements will be documented before you can re-assemble or use for competition any FTMS Late Model "Spec" 377 motor.

\*\*Any tampering or changing of ANY parts or components after FTMS Tech Offical's inspection and approval will result in PERMANANT SUSPENSION from Full Throttle Motor Speedway.

Call the Speedway for an official inspector and inspection date

1-519-791-7326

* 1. **WEIGHT:** Base weight is **2800** lbs with driver sitting in seat (no fuel/parts loss compensation after race). **57**% maximum left side with driver in after race (**NO** tolerance on any weight formula).

* 1. **WEIGHT ADDITIONS/DEDUCTIONS:**
		1. Template/ABC Body – deduct 40 lbs
		2. Dry Sump Oil System – add 20 lbs
		3. Super Late Model Built Motor – add 75 lbs
		4. Roller Cams – add 40 lbs (except SPEC engine)
		5. 23 Degree Aluminum Heads – add 40 lbs
		6. Other Aluminum Heads – ASK TECH
		7. Ported heads and/or intake add – 40 lbs
		8. Stock GM 602 Crate – deduct 100 lbs
		9. Stock GM 603 Crate – deduct 60 lbs
		10. Stock Ford 347 Crate – add 40 lbs
		11. Stock Dodge 360 Crate – add 40 lbs
		12. Stock GM 604 Crate – add 20 lbs
		13. APC/CRA Series Type 604 – add 40 lbs
		14. Over cube engines – add 5 lbs per cubic inch over Cubic Inch limits
		15. Over Compression- add 10 lbs per ½ cc
		16. Engine set back is **80%** of wheelbase (center of rear axle to back of block) - add **15 lbs per extra inch** of engine setback (max 4 inches) Minimum 101” and 107” Maximum wheelbase
		17. **STOCK type** GM steering box, center link and lower control arms (**must have all 3**) – deduct 50 lbs
		18. **Stock Camaro** Type Clip with **Stock Appearing GM** Lowers with **Rack and Pinion –** deduct 25 lbs

**16.0- WEIGHT LOCATIONS & MOUNTING SPECIFICATIONS:**

 Weight must be bolted in no lower than frame rails in block form, no less than 10 lb. pieces.

 All ballast weight must be either fastened to or encased within the frame rail.

 All added weight must be double bolted and painted white, with car number clearly marked on each piece. Loss of add-on weight will result in a severe penalty up to and including expulsion. If stacked or bolted weight exceeds 30 lbs. it must be bolted into an approved weight tray.