

Flexi National Series Rules Page

November 28, 2018 ·

FNRS PRODUCTION LMP SPECIFICATIONS Revised 11-28-18

STAMPED STEEL CHASSIS REGULATIONS

The FNRS requires all chassis and it's components to be commercially available.

The chassis may have a minimum of two and maximum of three chassis parts. All chassis will consist of one solid center section and a maximum of two separate pans. Two piece center sections are not allowed. The portion of the center section to which the motor is attached must be steel. The pans may be steel or aluminum. No home made parts allowed.

The chassis blanks may be cut with a Laser, EDM, Water Jet, Mill, or Die Stamp. All axle uprights, motor brackets, guide tongues, body clip mounting holes, etc must be formed by stamping of the center section and pan(s). Spring steel solder together type chassis are not allowed. Chassis may not exceed 83 MM width at any point on the chassis.

The FNRS will approve chassis and chassis components for FNRS competition on a individual and yearly basis. Decisions will be made and announced by no later than July 1st for the upcoming calendar year. All chassis and chassis components will be approved at the discretion of the FNRS.

If any manufacturer who produces a current FNRS approved chassis or chassis components are found to be altering the chassis after the FNRS approval and/or found to not be supplying sufficient inventory.will be subject to removal off of the approved list.

*Please Note At this time no new chassis or components can be made legal until January 2020. Any new chassis manufactured between July 12, 2018 and July 1, 2019 will be reviewed for legality for the 2020 FNRS Series. If approved, they will become FNRS approved on Jan 1, 2020.

- A) May use lightweight replacement pans and center sections.
- B) May interchange parts from a single manufacturer; such as Flexi and Flexi---2 parts, JK long or short center sections, and heavy or light pans on JK, Champion, Parma, Mossetti chassis.
- C) No modifications except for the following:
- D) May solder or glue motor, axle oilites/bushings, and front wheel retainers.

- E) May add lead weight and/or tape to chassis.
- F) May file holes in motor bracket to allow better gear mesh, but must retain a portion of motor bracket.
- G) No oilite/busings modifications allowed. May use offset oilites/bushings. No Ball Bearings.
- H) May add spacers between pan and center section.
- I) May add a 1---inch (25.4 mm) long motor brace and a maximum of two upright braces (one for each upright).
- J) The original manufacturer's plating may be removed only in areas to be soldered.
- K) May add pin tubes. Pin tubes must be in stock holes/location. Pin tubes may be either solid or floating. May add lead wire retainer.
- L) May change stock bite bar diameter supplied by the MFG to a bar that is .062 maximum and .039 minimum diameter. The bar must be steel, straight, round, no bends, no flats and does not deviate from stock. May not solder bite bar to center section and/or pans.
- M) Overall width maximum 83mm (3.268")
- N) May solder on steel guide tongue reinforcement but the original tongue may not be removed, modified, or moved.
- O) No other---modifications, soldering, cutting grinding or bracing allowed.
- P) May use any guide, nut, spacers, lead wire and clips. Only one guide flag per car.
- Q) May perform reasonable filing of rear oilite/bushing chassis holes to allow for axle alignment.
- R) On the Mossetti chassis...Must use either .062" dia brass tube or the M-1052 .064" stainless tube only. Must use push/body pins to retain the bar in the chassis. The MR-1051 Chassis Retaining Clip may be used and can not be modified or soldered to the chassis.
- S) Front axles and front wheels are not required. If racer chooses to use front wheels the min. diameter is .500" o.d. Front axle minimum dia is .047" and max dia is .063". Front axle may be soldered to center section uprights.
- T) On the JK C43 "A" chassis, front axles may not be added. Must use stock JK produced "J Bars" and sizes only. J Bars may not be soldered to the chassis.

MOTOR SPECIFICATIONS

LMP Only the JK Hawk Retro long shaft motor and the JK Hawk Retro R7R7R7R7 with short shaft may be used at FNRS Events. May trim the pinion shaft. No trimming of shaft on endbell side of motor. No other modifications of/to motor allowed.

May use clip on type heat sinks or screw on type heat sinks that screw to the can on the pinion side of the motor. Comm coolers allowed.

GEARS

LMP 13 tooth 64 pitch pinion only Any size/brand 64 pitch PLASTIC ONLY spur gear may be used and gear must clear track by .047". No Metal Spur Gears Allowed.

FNRS reserves the right to change the pinion specs based on different track size (shorter or longer), power/voltage, etc. If the pinion spec is to change for certain events, this will be announced in advance of the event.

REAR WHEELS/TIRES/AXLES

Black rear tires/rubber only. No dyed tires allowed. No Speed Rubber allowed.

Wheels/tires/rubber may not be wider than .815" max width. Max wheel dia is .625".

Axles minimum 3/32" dia. Drill blanks allowed. No hollow, non steel or light weight axles allowed. Axle flats for gear/tire set screws allowed.

FRONT WHEELS/AXLES

Front wheels and tires are optional and not required. If using front wheels: Min dia .500" o.d. with o-ring or rubber.

Fronts do not have to touch the track surface.

Front axle minimum dia is .047" and max dia is .063". Axle may be soldered to chassis front uprights. Axle must be one piece, solid and steel. Wheel retainers may be soldered.

CLEARANCE

Rear Clearance will be .047" minimum including the spur gear. Clearance will be measured under the rear of the car, directly under the rear axle and between the rear wheels, with the car at rest on a flat tech block with the guide in the tech block slot.

Clearance will be checked at the beginning of the race, with no check at the end. If a car is suspected to be dragging on the track during racing, the race director, at his discretion may check clearance. Any car found to be dragging the track will be repaired during green flag racing conditions.

A mid race clearance check may be carried out by the tech director/race controller at the beginning of any heat of any race. Any car found with rear clearance less than .039" inches at the beginning of any heat will have to change tires and have the clearance rechecked under green flag racing conditions.

BODIES

Bodies must be fully painted and opaque. Sides may be left clear in the body pin/clips area only. Must have three numbers.

Must have suitably painted 1/24 scale (with head, helmet, shoulders, torso, arms and steering wheel) 3-D, vacuum formed lexan driver in the proper cockpit position.

Chassis or track may not be visible when looking through windows. All windows must be clear.

Bodies may have tape/lexan/mylar added for reinforcement.

No additional air control/spoilers/diaplanes may be added.

Body must completely cover chassis/tire when looking directly down on the car at tech except for the front chassis wings.

Blade portion of guide flag may extend past the front bumper/nose of body. No braid, clips or top of guide may be visible.

No cutting into the top surface of the body.

No rear body height requirement in any class.

FNRS reserves the right to reject any body at tech that does not meet these requirements.

Front Wheel Area: Must use sticker fronts if no front wheels are used. If front wheels are used; front wheel openings must be cut out/open or left clear and 80% of the front wheels must be visible in the opening or clear area. No cutting into the top surface of the body.

LMP Bodies are to be either open or closed cockpit LMP or GT-1 type/style bodies with a "Stepped" type rear spoiler and are commercially available. FNRS reserves the right to reject any body at tech that does not meet these requirements.