

NORTHWEST FOCUS MIDGET SERIES L.L.C.

2016 RULES

Design and Construction

All phase of design and construction are subject to the approval of the Technical Director. The Chief Steward and the Technical Director may exclude any car, design or construction, which they deem unsafe or not meeting the specifications, the spirit and/or the intentions of the rules contained herein.

Dimensions and Weight

A The wheelbase must be at least 66 inches and no more than 76 inches.

B The overall width will be a maximum of 65 inches.

C All cars must weigh a minimum of 1,140 lbs., including water, oil, fuel, and the driver with his personal equipment. Cars may be scaled prior to and/or following any event.

Additional bolt on weight must be mounted and fastened to the frame and/or chassis in a secure manner. Weight must be mounted in an area between bottom frame rails, front and rear axles and no higher than mid rails at cockpit. All weight must be mounted within confines of frame. No weight may be added during yellow or red flag. NO BALLAST/WEIGHT IN FRONT AXLE.

Car Construction / Body

A All cars shall be rear drive only.

B Engine must be mounted on the centerline of the chassis and the crankshaft must be parallel to the bottom plane of the chassis. Engine height is limited to 5/8 inch (.625) from flat on the bottom of the bell housing to the bottom of the engine mounting plate. Engine inclination must be thirty degrees from vertical as measured from the vertical centerline of the cylinder bores.

C Only torque tube type drivelines utilizing only one u-joint will be allowed, the torque tube must be one solid piece. Torque tube hoop or strap mandatory. Highly recommended driveline containment system utilizing steel shield bolted to engine plate or containment blanket to cover torque ball and u-joint.

D Radius rods may not be attached within the confines of the cockpit.

E The driver shall be seated directly behind the engine, driver's head can be no more than (1) inch off center line of roll cage, measured at center line of seat to top of driver's helmet when seated in an upright position.

F Only standard type Midget Car bodies, tail tank and hoods will be permitted.

G The front part of the body, known as the nose assembly, shall to be no wider than the parallel lines of the body and may not exceed the width of the frame. The nose assembly may not extend forward beyond the confines of the front bumper.

H The engine must be covered with a cowling or hood secured in place. The hood or cowling need not enclose the sides of the engine

I A forward facing scoop, or ducting, supplying "force air induction" to the injection inlets is not permitted.

J Side panels covering the sides of the engine may not extend vertically any higher than any part of the hood covering the engine bay behind the front engine mount. A maximum overlap of two inches is allowed for proper fastening.

K Right side cockpit body panels may be maximum of thirty-six (36) inches high as measured from the bottom frame tube at rear motor plate and projected rearward twenty-three (23) inches. Right side cockpit must have minimum opening of eight (8) inches vertical and twenty-three (23) inches horizontal.

L Left side cockpit body panel may be maximum of twenty-five (25) inches high as measured from the bottom frame tube at the motor plant and projected rearward twenty-three (23) inches.

M Side visors on roll cage (body panel) will be allowed, they will be limited to eight (8) inches tall. Visors that restrict driver's vision at the discretion of the Technical Director will not be permitted.

N Sail panel may extend rearward to triangular bar at back of roll cage, sail panels may not extend forward past a cross plane established by seat back.

O All paneling must not extend past edge of frame rails more than tickles of material.

P One (1) inch turnout allowed on all body and sail panel edges. (except sun visor and nerd bar panel).

Q Side visors on roll cage will be allowed, must maintain 8" vertical and 23" horizontal opening on the right side. The left side visor can be no longer than right side

R Only steel or aluminum floor pans are permitted (the driver floor pan must support driver weight when stood on). The floorpan may not extend rearward past the leading edge of the rear axle and must be flat from side to side without any aerodynamic aids.

S Sun visors are limited to seven (7) inches in length from top to bottom, and may not be wider than the width of the cage, sun visors must be flat on both sides. For fan recognition, all teams are encouraged to place the drivers' name on their visor in large letters.

T Airfoils, wings, spoilers or other aerodynamic appendages will not be permitted. The Technical Director may have any panel or part removed which in their opinion is not within the spirit or intent of this rule.

U With the exception of suspension components induction and/or exhaust systems and nerf bars, no accessory or component of the car may extended more than (6) inches from the main frame tubes. Cylindrical oil tanks mounted outside the frame, behind the engine must be mounted as close to the frame as practical.

V Rear view mirrors are not permitted.

Roll Cage and Chassis

A Frame and/or chassis must be constructed of 4130 normalized tubing.

B Roll cage construction cars constructed after 1/1/98, main uprights forming the roll cage must be minimum of 13/8 inches O.D. x .095 wall thickness 4130 normalized tubing.

C No water or oil coolers are to be placed above or beside the cockpit opening.

Fuel System

A A conventional tail tank, fuel cell and the fuel contained must be carried on the centerline of the chassis and be located behind the driver. All cars must be equipped with a fuel cell and tail tank meeting the requirements of SFI Specifications 28.2.

B The minimum capacity of the tank must be 18 U.S. gallons.

C All tanks must have a minimum of four mounts to the chassis.

D Fuel tanks may not be mounted to the chassis utilizing any portion of the access plates or the nut plates bonded into the fuel bladder.

Bumper / Nerf Bars

A The car must be equipped with a rear bumper at all times.

B Front and rear bumpers, and nerf bars must be constructed of magnetic and or stainless steel (NO TITANIUM) tubing with a minimum O.D. of 7/8 inch and having a minimum wall thickness of .065 inch and a maximum wall thickness of 120 inch. A maximum of three horizontal and/or three vertical tubes are allowed in the construction of nerd bars.

C All cars must have a tubular front bumper extending forward no more than 21 inches from the leading edge of the front axle. Bumpers must be constructed so as not to cause a safety hazard.

D The right nerd bar cannot extend beyond the outside of the right rear tire.

E With the exception of the exhaust system, no components or accessories may be attached to the nerf bar assembly.

Steering and Suspension

- A Removable steering wheels incorporating a quick release mechanism conforming to SFI Specification 42.1 are mandatory. Pin type mechanisms are not allowed.
- B Drag link straps mandatory.
- C No electronic weight, shock, sway bar or any suspension item adjuster.
- D Shock absorbers must have all valve mechanisms housed in a single cylindrical unit. Shock absorbers may have only one external adjustment and may be adjusted remotely only by manual methods. Shock absorbers cannot operate or be adjusted electrically and cannot be adjusted from the cockpit.
- E External adjustments only on all suspension, coil over, torsion bar, sway bars, shocks radius rods, weight jacking. No cockpit adjustable devices for any suspension item.

Axles

- A All front axles must be constructed of SAE 4130 steel or a steel alloy equivalent to structural strength. Titanium front or rear axles are not permitted.
- B (7) inch rear ends will not be allowed.

Wheels

- A The number of allowable wheels is restricted to two (2) front wheels and two (2) rear wheels on each car.
- B The rim diameter must be 13 inches.
- C The rim width is limited to eight (8) inches for both front wheels and the left rear.
- D The right rear wheel may be a maximum of ten (10) inches in rim width.

Tires

- A The use of any device's the air pressure of the drive tires while the car is in motion is prohibited. The tire listed below are the only rear tires approved for competition.

Right Rear	Hoosier #35172	80/10.0-13	Branded USAC
Left Rear	Hoosier #35140	74/10.0-13	Branded USAC
	Hoosier #35155	76/10.0-13	Branded USAC
	Hoosier #35165	78/10.0-13	Branded USAC

Throttle

- A Throttle toe straps are mandatory. A minimum of three (3) return springs must be connected to the throttle and at least one of these must be connected to the butterfly shaft.
- B If the throttle actuating mechanism is the cable type, the cable must be encased.
- C The throttle pedal must have a wide-open pedal stop.

Brakes

- A Cars must be equipped with an effective braking system.
- B Master cylinders are not fixed to the frame must have flexible lines.
- C Brake discs are limited to being manufactured of steel, ferrous or aluminum alloy. Titanium, carbon and/or carbon composite, brake discs are not allowed.
- D If at any time during competition it becomes evident that a car is without brakes, the necessary repairs must be completed before the car can continue in competition.

Engine, Starter and Clutch

- A Starter and de-clutching device are provided with the Ford Focus engine package and must be operational. The car must have a neutral position in the final drive. All cars must care an on-board battery capable of starting the engine.

Ford Focus Midget Engine

The Ford Focus engine with the USAC seals or our series seals is the only engine approved for competition.

All necessary repairs to the Focus long block must be performed by the Series Technical Director.

A The following parts are supplied with the Ford Focus engine package and may not be modified or substituted.

Flywheel	Injector Horns
Clutch Assembly	Throttle Bodies
Fuel Pump	Ignition Trigger, Controller, and Coils
Oiling System	

B The following parts are supplied with the Ford Focus engine and may be modified and/or substituted.

Nozzels, Jets and Valve Bodies
Spark Plugs, Spark Plug Wires
Ignition settings within the parameters of the spec ignition
Oil and Oil Filter

C There are 2 approved exhaust systems for competition with the Northwest Focus Midget Series

- 1) B & B Performance Exhaust,
Header #FRAC-0291
Collector #FRAC-092
Muffler #FRAC-0310
- 2) OPC Ford Focus Midget Complete Exhaust #OPC-0201

D There are 2 Air Cleaners approved for use

- 1) ITC #JC-50
- 2) K&N #55-1040

E Tracks requiring additional sound reduction, the Extreme Muffler and U-Bend must be used.

Extreme Muffler, U-Bend #966-2020-2
Phone: 805-584-2984

F Pure methonal is the only approved fuel. NO ADDITIVES

G All fuel is subject to testing at any time.

H Ignition and Electronic Equipment.

a) All cars must be equipped with an ignition switch or emergency shutoff located within easy reach of the driver and clearly marked on and off.

b) Electronically controlled fuel injection systems are not permitted.

c) The only ignition controllers and coils allowed are the following:

- Electromotive HPX - Ignition (purple)
- Electromotive XDI - Ignition (silver)
- Electromotive coils supplied with above ignitions, Motorcraft #988f-12029-AC

coil pack or any stock Ford Focus replacement for 2 liter Zetec engine)any above coils may be used on Electromotive controllers).

d) Electronics that provide traction control are prohibited. All electronic components may be inspected, sealed, or confiscated at any time by the Technical Director. The Maximum penalty for utilizing traction control is one year suspension from competition and loss of all points for the season.

e) the use of electronic logic processors to control any function of the race car, and/or any system for gathering continuous data from any function of the race car is strictly prohibited.

f) Tachometers are the only item approved for use to collect/record data.

g) Electronic ignition system may only be used to control; coils(s), trigger(s), spark curve(s) and RPM limits.

Safety Equipment

A Approved aluminum or composite seats may be used, no fiberglass. Seats must be mounted with minimum of 4 bolts 5/16 diameter. Seats must be installed and used in accordance with manufacturer's instruction.

B It is mandatory that all cars have a headrest of high impact, shock-absorbing material meeting SFI Specification 45.2 behind the driver's head with a minimum thickness of (1) inch.

C Seat belts must meet SFI 16.5 or SFI 16.1, be within two (2) years from date of manufacturer (must have label) Seat belts must be installed and used in accordance with manufacturer's instructions.

D Helmets - All participating drivers must wear safety helmets designed specifically for auto racing that meet or exceeds the SA2005 or SA2010 Snell Foundation 31.1 Specifications and are labeled as such. Helmets will be subject to inspection at each event by the Technical Director.

E Uniforms - All drivers must wear fire resistant underwear, socks, shoes, gloves and a one-piece uniform fitted snugly around the neck, wrists and ankles. It is recommended that you also wear a fire resistant head sock and/or helmet skirt. Recommended all above items meet SFI Foundation Specifications 3.2A and 3.3.

F Arm Restraints - Arm restraints are mandatory and must be work at all times during competition,

G Roll cage nets will be required if full containment seats are not utilized.

H If required, cars will be fitted with roll cage nets on both the left and right sides of the roll cage for all events. All roll cage nets must conform to SFI Specification 37.1, which specifies a functional quick release opening mechanism. The life of a roll cage nets shall not exceed two (2) years. Caution should be used when positioning head restraining nets to be certain that the driver's head cannot get under the net in case of an accident. The bottom of the roll cage net should be as close to the top of the shoulder as possible.

I Roll cage padding conforming to SFI Specification 45.1. Mandatory if not utilizing full containment seat in all areas surrounding head, highly recommended with full containment seat.

J A SFI approved head and neck restraint system is highly recommended.

K One way radio/race receiver is mandatory.

MISC.

AMB 260 Red or X2 Transponders are required at all tracks, and are to be placed behind the rear axle on either left or right side.

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