

2025 Escanaba Motor Speedway

JR MICRO SPRINT RULES

It will be the car owner and/or driver's responsibility to read and follow the rules in this booklet. If you do not understand what is written, please contact a track official for an explanation. The Escanaba Motor Speedway Board of Directors has the right to interpret and execute the following rules as they see fit for the good of the association and racing in general. No expressed or implied warranty of safety shall result from publications of or compliance with these rules and/or Regulations. All vehicles subject to inspection by track officials. Changes may be suggested to keep the vehicles safe and competitive. Please keep in mind these are children, and our main intent is to allow them to build their driving skills in a safe competitive environment.

ALL GENERAL TRACK RULES APPLY

Drivers must be 5 to 13 years old to participate in the Jr Micro Sprint Class.

SAFETY

1. 5-point harness that is a maximum of 5 years old (Must pass Visual inspection for safety)
2. Full Face helmet with eye protection (face shield)
3. Head sock is required if helmet is not fireproof
4. Must have master electrical shut off clearly marked
5. Helmet must be SA2015 or newer. Must be SA rated. Must also be full face with eye protection, no goggles.
6. Minimum SFI-Approved Driving suit and SFI-Approved Gloves & Shoes required.
7. Neck brace (horse collar) or HANS device required.
8. Headrest support on BOTH sides of seat required
9. Arm restraints or side nets are mandatory.

Chassis

1. 1" Diameter with 090 wall minimum steel tube sprint-style cage
2. Coilover or torsion suspension
3. Minimum 4 uprights on cage per side
4. Frame width 26" Maximum (Measured on the main frame)
5. Frame Length 85" Maximum

6. Front and rear axle must not extend beyond frame length.
7. 78" Wheel Base Maximum (Measured axle to axle).
8. 52" Track width Maximum (Measured from outside of the tire).

ENGINE

All parts must be B&S factory production parts unless otherwise noted in these rules. No machining or alteration of parts is permitted unless specifically noted in these rules. All parts are subject to comparison with a known stock part.

DO NOT ASSUME ANY ITEM IS LEGAL BECAUSE SPECIFIC REFERENCE IS NOT MADE!

1. 206cc Maximum single cylinder 4 stroke.
2. Naturally aspirated.
3. Shroud and covers: All shrouds and covers must be run as supplied. Flywheel cover, top plate are non tech items. Cylinder shield may be trimmed for CHT sensor installation and header flange clearance. Bolts used to secure metal or plastic covers may be replaced with bigger diameter bolts. Breather by-pass (555688) is allowed.
4. Header and silencer: RLV 5442S only (coated or non-coated allowed). Header may be cut and turned to fit car as long as the overall length and tube size remains the same as stock factor header: 20.5" .9375" x .065" wall (.807 +/- .005 Any exhaust gasket or you may use sealer. Exhaust gas temp sensor is allowed. RLV Silencer #4100 Required and may be coated. If baffles have been altered or removed, the muffler will be deemed illegal. Baffle rattle is allowed. Baffle holes are .128" no-go gauge. Silencer to header must be safety wired. If Silencer becomes dis-attached from header in race the racer will be DQ'd.
5. Electric starter: Starter motor must operational and capable of starting engine.
6. Air cleaner: B&S #698973 Green air filter brand 40 x 75. Pre-filter may be used.
7. Spark plug: Any commercially available, 10mm thread spark plug allowed. Spark plug must be stock. Indexing washers allowed. If using temp sensor you may remove sealing washer.
8. Fuel pump: B&S #557033 only. Must be pulsed from intake manifold only.
9. Clutch: May be on engine or jack shaft mounted. Belt or chain drive from engine to jack shaft. May use #35 or #219 chain.

10. Rev Limiter: Rev limit is 7100 rpm +/- 100 rpm (Red coil). May be checked at any point in race program. Rev limit will be checked with a suitable memory capable tachometer attached to the plug lead and motor accelerated until the rev limiter begins to function. All rev limiter must function within 100 rpm when checked with the same instrument.

11. Fuel: Methanol or gasoline only, NO ADDITIVES. Use a temperature correction chart to determine specific gravity. VP M3 and M5 and other brands of like fuel are illegal. Any approved test means available may be used.

12. Oil: Any crankcase oil is allowed. Must pass oil burn test.

13. Carburetor, Spacer, Manifold: Stock Walbro PZ carburetor only, no alteration allowed. Verturi .9902" max and Horizontal .7382" max. Unaltered carburetor spacer only B&S #557130. Unaltered intake manifold and pulse line only B&S #557009

a.) Slide must remain unaltered and unaltered needle marked CDB is required.

b.) Choke assembly is optional and may be removed and shaft holes plugged with silicon.

c.) Jets and Nozzle: pilot jet .026" no-go. Main jet .072" no-go. Nozzle .111" no-go.

14. Camshaft: First camshaft check will be taken at valve spring retainer. With the lash set at zero, the measurement on the valve spring retainer may not exceed .3085". Any camshaft with a measurement at the push rod of less than .306" should be removed and measured on the grind and checked for alteration. Camshaft must be as supplied with stock profile and compression relief.

a.) Install degree wheel, using positive stop method.

15. Check ignition timing: With the left edge of the right coil leg aligned with the right edge of the right magnet, the motor must be from 23 degrees to 29 degrees BTDC. Flywheel key must have B&S logo. Minimum key width is .182".

16. Tech camshaft at push rod: Push gently down on dial indicator stem to ensure that there is no lash when push rod are going down. Exhaust Lobe Lift 75-71 BBDC .020 57-53 BBDC .050 39-35 BBDC .100 25-21 BBDC .150 9-5 BBDC .200 12-16 ABDC .250 25-29 ABDC .275 .3085 MAX 70-66 BTDC .275 57-53 BTDC .250 37-33 BTDC .200 21-17 BTDC .150 6-2 BTDC .100 11-15 ATDC .050 29-33 ATDC .020 Intake Lobe 34-30 BTDC 18-14 BTDC 2BTDC-2ATDC 13-17 ATDC 29-33 ATDC 49-53 ATDC 63-67 ATDC .3085 MAX 31-28 BBDC 18-14 BBDC 2-6 ABDC 19-22 ABDC 33-37 ABDC 49-53 ABDC 66-70 ABDC

17. Push Rods: Must be stock. Diameter is .185" - .190". Length is 5.638" - 5.656"

18. Deck/Piston: Machining of deck surface is permitted. Piston pop-up cannot exceed .035" above block surface in center of the piston. When measuring piston pop-up,

it should be accomplished with bar stock on a parallel with the piston wrist pin and using a dial indicator, check the piston pop-up in this area.

19. Bore: Max bore 2.725". Factory oversize pistons allowed.

20. Stroke: Max stroke is 2.204". Push piston down to take up rod play.

21. Head gasket: Any commercially available head gasket may be used but must maintain same configuration of shape of standard B&S "Fire Ring" head gasket. Minimum thickness .040", measured with micrometer from inside cylinder hole of gasket.

22. Head: Only the Head Gasket side of surface may be machined. Depth from gasket surface to head surface between valves must be a minimum of .319". If gasket surface is machined, the section of the head directly over the piston must be machined to same plane. Hard carbon may be scraped off before measurement is made

a.) Rocker Arms: Minimum length to be 2.820"

b.) Rocket Arms Studs / Cylinder Head Plate: All must be as produced.

c.) Valve Cap: Unaltered valve cap required.

d.) Intake port: Maximum diagonal measurement is 1.101" Maximum vertical measurement 1.044"

e.) Intake port has a machined chamber where the bottom of the intake port intersects with the bowl cut for the valve seat. Chamber does not reach iron seat.

f.) Exhaust port: Maximum I.D. Of shoulder in bottom of exhaust port is .854"

g.) Valve seat: one 45 degree angle only.

h.) intake valve seat is .972" No-go. Exhaust valve seat .850" No-go.

i.) Valves: Intake valve head diameter is 1.055" – 1.065". Exhaust valve head is .935" - .945". Valve stem diameter is .247" +/- .002". Valve face must have one 45 degree sealing surface only. Intake and exhaust valve length is 3.372" +/- .010". *** May use Stainless steel W/F exhaust valve in place of stock B&S exhaust valve***

j.) Valve spring: Dual valve springs as supplied by B&S are required. Inner spring wire diameter is .066" - .068". Outer spring wire diameter is .112" - .114".

k.) Valve guides: Replacement of valve guides with B&S factory parts is allowed.

23. Ignition: Unaltered stock B&S PVL #557125 coil is required. PVL flywheel must be used. Attachment bolts must not be altered. Spark plug connector must be stock factory type. Coil air gap is non tech.

24. PVL Flywheel: Unaltered from B&S required.

a.) Plastic fan and starter ring gear required.

b.) Minimum weight is 4 pounds 1 ounce.

23. Valve lifters: Must be stock.

a.) head diameter must be .964" No – go

b.) length of lifter must be 1.515" to 1.525"

25. Connecting rod: Stock connecting rod or unmodified series produced aluminum alloy rod that is available to the karting industry is allowed. Must meet stock specs.

a.) Rod length, measured from bottom of wrist pin hole to top of crank journal hole is 2.419" minimum to 2.429" maximum. Oil hole opening is .185" no-go.

26. Wrist pin: Maximum I.D. Is .414". O.D. Is .624" - .626". Minimum length is 1.901"

27. Piston rings: Three rings mandatory. Top compression ring must chamfer or "O" toward top of piston. Second scraper ring must be installed with inside chamfer down and "O" toward top of piston. Oil ring must be installed as from factory. Rings must be self-supporting in the cylinder bore of engine being inspected. Ends of ring must remain flat. Excessive end gapping of rings is not allowed. Maximum end gap of .050". Rings must be in one piece when removed from block. Aftermarket rings are allowed if they meet the specifications listed below.

a.) Minimum width of top two rings is .095"

b.) Thickness of top two rings .059" - .064"

c.) Minimum width of oil ring is .065". Thickness of oil ring is .098" - .102". Ring groove must be present. Expander must be installed. End of expander may be clipped.

28. Piston: Stock "kidney bean" piston required. Arrow on piston must point to flywheel side

a.) Minimum from top of piston to top of wrist pin .658"

b.) Minimum piston length is 1.768"

c.) Factory oversize World Formula B&S piston are allowed.

29. Crankshaft: Stock B&S crankshaft with stock timing gear installed in stock location only. No alteration in any manner allowed. Offset crankshafts not permitted. Stock bearings required.

a.) Shim(s): if used, must be installed as from factory.

b.) Crankshaft journal diameter is 1.094" - 1.100" 30. Block: Must be stock with no alterations, except block may be repaired from broken rod damage, providing that repair does not constitute a functional modification of original block. No welding is permitted from cooling fins upward.

WING

1. Top wing required 6-10 square feet.

BUMPERS

1. 1" Diameter light wall tubing maximum.
2. Front and rear bumpers no wider than frame rail.
3. Single hoop front bumper must not extend outward more than 10".
4. Nerf bars 1" maximum diameter.
5. All bumpers and nerfs must have rounded corners- NO 45's.
6. NO BATTERING RAMS.
7. All 270 cars must have a maximum of 12" front bumper height with 2 mounting points.

WEIGHT

1. Car must weigh minimum of 400lbs with driver.

TIRES AND WHEELS

1. Wheels to be 8" or 10" diameter, steel or aluminum. The right rear spec for 8" tires is to be the Hoosier Jr. Sprint tire 16.0/8.5/8/8 RD 20 and 10" tires must be RD20. You can groove or sipe all tires. Wheels must be held on with 4 or more standard lug nuts or knock-off hubs. Three spoke front wheels may be ran if they are manufactured that way.

CAR NUMBERS

1. Car numbers must be a minimum of 10" high and on both sides of top wing.
2. Numbers must also be on the nose section.

3. Absolutely no duplicate numbers. Numbers are on a first registered basis. If you had a number in the previous year, you will be able to keep that same number until you no longer race in that class. Please contact the pit coordinator prior to putting the number on the car to make sure the number is available. Letters before or after will not be accepted.
4. Cars with numbers that are not readable by crowd's nest personnel will be required to fix corrections. If the correction is not made by the following week the car will not be scored.

ROOKIES

1. All new drivers to the Jr Micro Sprint Class are required to start three full nights of racing from the back.
2. All Rookies are required to run a yellow mark provided by the track on the driver's side rear of the car for a minimum of 3 nights of racing.