

2016 SAUBLE SPEEDWAY 9HP JUNIOR LATE MODEL TECHNICAL RULES

DIMENSIONS/WEIGHTS:

Wheel base - 60" (equal right and left sides)

Wheel track - 46" (outside edge of tires at spindle/axle height)

Body length - 120" (overall maximum)

Body width - 46" (overall maximum includes side panel protectors)

Body height - 33" (measured 10" back from the center of front windshield)

Left Side Weight - maximum 55% of total measured weight

Measured weight (car and driver) Junior weight: age 8 to 12 - 580 lbs.

Senior weight: age 13 to 16 - 630 lbs.

Age as of May 17, 2016

AIR CLEANERS:

- Stock 9 Hp air filter and housing as supplied with engine by Honda elbow 17410-Z5K-000, cover 17231-Z5K-000 (available @ Sauble Beach Motorsports 519-422-2887)

- No ram air tubing or ducting to carburetor allowed.

- Washable snorkel type not allowed.

APPEARANCE:

- Race cars participating in racing events must be presentable at all times. Cars that are considered improperly prepared maybe rejected by Tech Officials at anytime.

AXLE:

- Axles must be 1-1/4" x .250" hollow tube with a length of 40-44".

- Axle C-clips must be installed at each end of the axle and be safety wired closed.

- No light-weight axles allowed.

- Axle hubs must be secured to the axle with 1/4" x 1/4" keyways which extend beyond both edges of the hub.

- No floating axle hubs allowed.

BATTERY:

- Must be anchored securely and separated from the driver compartment by the firewall. AGM technology battery recommended.

BODY:

- Only fiberglass bodies produced by Performance Fiberglass, Bee Gee, and Lightning Light in unaltered form maybe used.

- Must have an opening front hood and roof hatch with optional opening rear trunk.

- Bodies maybe colour impregnated gel-coat, painted or vinyl wrapped.

- Body must be straight, sound, stock appearing and in the stock position on the chassis.

- Alterations or customizing to gain any advantage is prohibited.
- Original wheel arches must be retained. Original body seams must be retained.
- Front nose clearance 1" minimum.
- Rear bumper fiberglass must be no more than 10" from the ground. No drilling holes in rear fiberglass bumper.
- Both hood and roof panels should be taped on a minimum one edge to keep them closed during a roll over event.
- Cars will not be permitted on the racing surface for practice or races without the car body in place and secure. In the event of an on track incident where body panels are lost, track officials reserve the right to disallow a car from continuing to complete if they feel there is a safety concern. The front bumper, hood, roof and windshield must be in place on the race car to continue racing.
- In the event a car starts a race missing body panels, it is the responsibility of the team to ensure the car is legal before and after the race.

BRAKES:

- Hydraulic brakes on the rear axle ONLY. No front brakes allowed.
- Brakes on each car will be tested for pedal "feel" and visually inspected for fluid leaks.
- Drilled rotors are allowed. Rotors 3/16" x 7", 3/16" x 9-1/4", 3/16" x 10" are allowed.
- Only steel brake lines are allowed. No plastic brake lines allowed.
- Brake calliper mounting bolts must be drilled and safety pinned.
- Brake pedal position will be determined by the driver seating position.
- Brake hubs must be secured to the axle with 1/4"x 1/4" keyways which extend beyond both sides of the hub.
- Keyways must be secured in a manner which prevents movement within the keyway groove.

BUMPERS:

- One front and one rear bumper are mandatory.
- Hollow steel tube with a maximum of 1" O.D. x .095".
- Bumpers must be located inside the fiberglass body panels.
- Rear external bumpers are not allowed, and may not extend beyond the rear fiberglass panel.

CHAIN:

- Only #35 chain may be used. No double chains allowed. Chains maybe joined by either a master link or solid link.
- Chain length maybe altered to allow for various sprockets in order to obtain the desired gear ratio.
- Chain guards maybe used along with the chain sprocket on the rear axle shaft.
- No transmission or other devices which would permit the changing of gear sprocket ratios while the race car is in motion are allowed.

CHASSIS:

- All chassis parts are to be stock with No modifying.
- Alignment maybe adjusted i.e. caster, camber, toe, load bolts, and axle angle.
- Any roll cage repairs must be made with equal size tubing (1-3/8" x .100" mild steel).
- Sauble chassis may also be made from 1" x .085" D.O.M. chrome-moly tubing.

CLUTCH:

- Dry centrifugal clutches with a 15 tooth, #35 chain gear are only permitted.
- Engagement springs maybe changed. No other modifications allowed.
- Approved clutches are: North American 3 shoe, Brutus 4 shoe or Horstman Redhawk 4 disc.

DUCTING:

- No ducting through firewall allowed, No ducting to carburetor allowed.
- Ducting to cylinder head and clutch allowed only off bottom of chassis, through wheel wells or side window.

ENGINE:

- Honda GX270 OHV single cylinder, air cooled, displacement 270cc, bore 77mm, stroke 58mm (available @ Sauble Beach Motorsports 519-422-2887)
- Dynamometer equalized and mandatory seals @ cylinder head, crankcase and flywheel cover.
- Race prepared engines must not exceed 10.5Hp.
- Engines maybe built by anyone, in accordance to the Honda shop manual.
- Engines must be dynamometer tested and sealed (Keith Marshman 519-245-0425 or Greenwood Motorsports 705-435-3898) with a serial number trace.
- Teams will be required provide a dynamometer test printout to technical official.
- Block may be bored to the three oversize pistons available from Honda: .25mm, .50mm, .75mm.
- Piston dish must be a minimum on .037".
- Piston may be a maximum on .003" above the deck.
- Stock Honda piston rings must be used and installed properly.
- Any ring gap is allowed.
- Stroke must be 58mm or 2.287" maximum.
- Stock or .010" undersize connecting rods allowed.
- Any heat range spark plug allowed, however reach must be stock.
- Stock valves and valve keepers, satellite EX allowed.
- Valves may be refaced.
- 3 angle valve job allowed.
- Any valve spring permitted.
- Minimum head cc is 26.
- Cylinder head thickness from deck surface to valve cover surface is 3.730" minimum.
- Composition head gasket .042" minimum.
- Any flywheel air gap permitted.
- Stock flywheel and locating key.
- Any carburetor jet and emulsion tube allowed.
- Carburetor throttle bore .792" maximum.
- Carburetor venturi .635" maximum.
- Any crankcase pressure pulse operated fuel pump.

- Any camshaft timing allowed.
- No metal may be added or removed from the camshaft.
- Intake cam lobe height 1.240" minimum – 1.265" maximum.
- Exhaust cam lobe height 1.240" minimum – 1.263" maximum.
- Intake valve lift .280" maximum.
- Exhaust valve lift .275" maximum.
- Camshaft may not have lobe separation angle changed from stock angle.
- No porting, No polishing, No de-burring, No port matching.
- All parts may be compared with known Honda parts to verify their originality.
- One off parts will be considered unacceptable manufacturers deviations.

EXHAUST SYSTEM:

- Exhaust header, must remain unaltered.
- Pipe size 1-1/8" x 24" long (flange to end of muffler)
- No modifications. All exhaust connections must be sealed.
- No wrapping of the exhaust pipe.
- R.V.L. muffler part #BRK-6011 mandatory with round hole end plate.
- Temperature sensors are not permitted in the exhaust system.

FEATURE RACE:

- Only one feature race.
- All race cars which started a heat race(s) will be lined up based on heat race results (inversion rule applies).
- Any additional race cars which were damaged during a practice event maybe positioned scratch, after passing a technical inspection.

FIREWALL:

- Rear firewall must be original, in original location with all holes filled and made from 22 gauge sheet metal.

FLOOR:

- MANDATORY 1/8" steel floor plate or 1/4" aluminum floor plate under driver's seat, bolted in with minimum (4) 3/8" diameter bolts with locking nuts.
- Steel floor from front of chassis to front edge of driver compartment and from outer frame rail to inner frame rail both sides of driver compartment fabricated from 22 gauge sheet metal.

FUEL:

- Commercially (gas station) available pumped unleaded gasoline only.
- No additives allowed.
- 94 Octane maximum.

FUEL CELL:

- Plastic one gallon fuel cell only installed in metal fuel cell box (all sides, bottom, top).
- Must remain securely mounted in the fuel cell brackets.
- Race cars will be black flagged/disallowed from competition if there are any fuel leaks.
- No refuelling of the vehicle with driver in car, or with engine running.

FUEL PUMP:

- Crankcase pressure pulse operated fuel pumps only. No electric fuel pumps allowed.

GROUND CLEARANCE:

- Minimum ground clearance of 1" is required at the nose and chassis side rails.

GRILLE:

- Grille area must remain sealed, no grill openings allowed.

HARDWARE:

- No aluminum or titanium hardware allowed.

HEAT RACES:

- One heat race with a race car count of 1 to12.
- Two heat race with a race car count of 13 or more.

HOOD:

- Fiberglass hoods only, as supplied.
- Must be held closed with hood pins on each front corner.

IGNITION:

- Ignition "kill" switch must be mounted on the left side of the chassis in the drivers compartment in such a manner that the engine can be turned off from outside of the car in the event of an emergency.
- Ignition switch must be labelled.
- Alteration of ignition system or timing not permitted
- Spark intensifiers are not permitted

INSPECTION OF RACE CARS:

- All race cars are required to pass through technical inspection before entering the racing surface for practice and racing events.
- The top 3 finishers of the feature event must report to technical inspection immediately after exiting the racing surface.
- Random technical inspections may occur at any time the race car is within the speedway pit area.

INSTRUMENTS:

- Optional engine tachometer, engine cylinder head temperature, engine oil temperature and voltmeter gauges allowed.
- No exhaust temperature sensors/gauges allowed.

INNER FRONT FENDERS:

- Inner front wheel wells maybe made from either fibreglass or 22 gauge aluminum.

LEAD WEIGHT/LOCATION:

- Must be painted white with the race car number clearly marked on the painted surface.
- Must be bolted to the chassis with (2) 3/8" diameter bolts, fastened with locking nuts and safety pinned.
- Lead weight must be located between the two side frame rails, behind the steering gear and not more than 12" behind the driver's torso
- Lead weight maybe mounted internally to the left lower side rail (square tube chassis) with a pinch bolt to prevent movement, and a bolt securing the open end of the side rail.

LINE-UPS:

- Heat race line-ups will be determined by draw.
- Feature race line-up will be determined by heat race results, an inversions rule will be applied based on race car count.
- Parents may place their driver/race car in the scratch position at any time prior to line-up by informing the technical director.

MIRRORS:

- No mirror in any form are allowed on the exterior or interior of the race car.

PAINT AND LETTERING:

- All cars must be neatly and brightly painted.
- Numbers assigned may be vinyl or painted and must be on both door panels and the roof panel (readable from the right side of the car) in a colour offering distinct contrast to the car colour. Numbers must be a minimum of 12" in height and 3" in width. Numbers must be legible and approved by technical officials.

NOTE: Both front fenders (considered being from nose of car to front edge of number) and windshield banner shall be completely free of lettering or decals. Sauble Speedway retains the right to specify type, size and location of all decals on the front fenders and windshield.

PEDAL ASSEMBLY:

- Location may be altered to suit driver.
- Steel kart pedal, aluminum A.R.C. assemblies, or full size stockcar pedals allowed.
- Must be bolted directly to the chassis.

POINTS:

- Points will be awarded for both heat and feature races.

POINT STRUCTURE:

Heat Race	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th	Feature Race	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th	13 th	14 th	15 th	16 th	17 th	18 th	19 th	20 th	21 st	22 nd	23 rd	24 th	25 th	26 th	27 th	28 th	29 th	30 st	31 st	32 nd	33 rd	34 th	35 th	36 th													
	10	9	8	7	6	5	4	3	2	1	1	1	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

RADIOS:

- One-way radios are mandatory
- Model # Y1600 Elite Driver RACEceiver radio or equivalent.
- Must be able to receive frequency UHF 454.000

REPAIRS FOLLOWING AN ON-TRACK INCIDENT:

- Repairs must be made in the pit area ONLY off the track facility.
- No repairs will be made on the track enter/exit ramp.

ROLL CAGE HEAD CLEARANCE:

- With the driver properly secured in the racing position, his/her helmet must be a minimum of 1" below the top edge of the roll cage.

ROLL CAGE/STEERING SHAFT PADDING:

- Is strongly recommended for the protection of the driver.
- Padding maybe placed on any roll cage tubing within the reach of the driver's hands, arms, knees and legs.
- The steering shaft maybe wrapped with padding in a manner which will easily allow inspection of the steering joints and connection points.

SAFETY BELTS:

- A quick release 5 point belt of no less than 2" in width in good condition is MANDATORY.
- Belts must be securely fastened to the chassis by means of suitable reinforced mounting brackets.
- Belts older than three years past the date of manufacture MUST be replaced.

SAFETY HELMET AND APPAREL:

- HELMET – minimum Snell rated full face helmet with eye shield required (M2005/SA2005 or newer mandatory).
- DRIVER'S SUIT – 1 or 2 piece, full body, single layer Proban or Nomex required (SFI rating mandatory).

ABSOLUTELY NO NYLON OR OTHER FLAMABLE MATERIAL ALLOWED.

- FOOTWEAR – full leather upper shoe or nomex driving shoe required.
- BALACLAVA –Nomex balaclava strongly recommended.
- NECK COLLAR – Nomex neck collar mandatory.
- ARM RESTRAINTS – recommended.
- SOCKS – Nomex socks strongly recommended.
- GLOVES – Nomex single layer glove or full leather gloves mandatory.

NOTE: if a HAANS device is used only a right side head support is required. Without a HAANS device a neck collar and both right and left head supports are mandatory. A HANNIS device is highly recommended.

SEAT:

- A bucket seat is mandatory and must be securely bolted to the roll cage/chassis with minimum of 3 bolts (2 lower, 1 upper).
- Aluminum seats are recommended.
- Head supports must be attached to the seat - mandatory on both left and right sides of seat. Must be made of aluminum and be padded.
- Leg supports must be attached to the seat – optional on either or both sides of the seat. Must be made of aluminum and be padded.
- Seat should be correctly fitted to driver as per manufacturer's guidelines.

STEERING:

- Rack and pinion steering gear (EMPI Part# 00-3147-7 or old style square shaft rack)
- Only 3/8" steel tie rods allowed.
- All tie rods must be secured by self locking nuts and safety pin/cotter pin.
- 3/4" or 1" diameter spindles allowed, spindle tethers recommended.

SUSPENSION:

- Rigid chassis no suspension allowed.
- Front – load bolts with adjustable caster, camber and toe.
- Rear- live axle mounted in adjustable axle bearing cassettes.

TIRES:

- Sauble Speedway only allows the use of American Racer Tires with compound M32 – 15.0/7.0 8S Part #MCC-JNMPP.
- All visiting race cars attending Invitational Events must comply with the tire rule – **No exceptions.**

WHEELS/RIMS:

- Only aluminum Douglas Racing rims allowed 8"x6" 3B+3N 4/4 .160" .5" Part #005-31.
- Absolutely no Steel wheels/rims permitted on the racing surface.
- Wheels/rims must be fastened to the hub with ½" "Whiz" nuts Part # BRP4150. Use of tapered lug nuts is not permitted.

WINDSHIELD/WINDOWS: (front, side, rear and firewall)

- Must be a minimum of 1/8" thickness Lexan.
- front, rear and firewall windows must be secured to the fibreglass body with rivets.
- (optional) right side window if used must be easily removed by the safety crew in the event of an on track incident
- Only approved markings on the front windshield.

WINDOW NETS:

- Window nets must be properly installed in both right and left side openings, if right side window is installed the window net may be removed.

The interpretation of rules will be solely up to the judgement of Sauble Speedway and the technical officials. Their decision will be final.