



SOLO® EDITION

SOLO EVENTS BOARD | November 23rd

The Solo Events Board met by conference call November 23rd. Attending were SEB members Brian Conners, Mike Brausen, Bob Davis, Zack Barnes, Keith Brown, Mark Scroggs, and Marshall Grice; Charlie Davis and Jason Isley of the BOD; Doug Gill of the National Staff. These minutes are presented in topical order rather than the order discussed. **Unless noted otherwise the effective date for all new rule, class, and listing change proposals herein is 1/1/2021.** Comments regarding items published herein should be directed via the website www.soloeventsboard.com.

Recommended Items

The following subjects will be referred to the Board of Directors for approval. Address all comments, both for and against, to the Solo Events Board. Member input is suggested and encouraged. Please send your comments via the form at www.soloeventsboard.com.

Safety

#24310 Driver Restraints and Roll Bars in Street Driven cars

The SEB is recommending the following change to wording in Section 12:

Closed Car

A closed car is one with a full roof, a targa top-type car with a full windshield, or a T-top-type car with a full windshield. ~~or a convertible with a full windshield and a standard (as defined herein) hardtop which has been bolted securely in place.~~

Note: This will affect cars currently running a hard top and full harness without a roll bar.

Street Category

#26588 Please include GT3 (996 & 997 chassis, all) in SS

The SAC has recommended and the SEB has approved updating the following listing in Appendix A:

SS

Porsche

911 GT3/*GT3 RS* (996 & 997 chassis, *excl. 4.0*)

#27475 Tesla Model 3 Classing

In accordance with section 3.2 in the Solo Rules, the SAC recommends, and the SEB has approved, the following change to Appendix A:

Move from *BS* to *SS*:

Tesla

Model 3 Performance (2018-2020)



Street Prepared Category

#23358 Align SP fluid cooler allowances with ST allowances

The SPAC and SEB are recommending the following rule change:

15.10.U

Any transmission *and/or differential* oil coolers may be used. *Differential covers may be modified or substituted for cooling.*

#25246 15.10.O Clutch Hydraulics

The SPAC and SEB are recommending the following rule change:

15.10.O.

Any metal clutch assembly, metal flywheel, or metal torque converter that uses the standard attachment to the crankshaft may be used. Non-metallic friction surfaces (e.g., clutch disks) are permitted. Dowel pins may be added. Any hydraulic clutch line may be used. Replacement or substitution of the clutch slave cylinder *and clutch master cylinder* is permitted.

#25346 Leaf Springs in SSP

The SPAC and SEB are recommending the following rule change:

15.8.M *For cars originally equipped with transverse leaf springs: spring type may be changed to a coil spring. Spring perches may be added to shock absorbers for mounting coil springs in a "coilover" configuration.*

Street Modified Category

#23106 16.1.H Rule Clarification - Rear diffusers

After reviewing member feedback regarding the proposed rule change to 16.1.K regarding diffusers, the SMAC recommends the following addition to 16.1.K. The SEB has approved this recommendation.

16.1.K.

Aerodynamic Aids: Wings may be added, removed, or modified. Non-OE wings may only be attached to the rear deck/hatch area behind the centerline of the rear axle. The total combined surface area of all wings shall not exceed 8 sq. ft. (0.7432 m²) as calculated per the Wing Area Computation in Section 12. The number of wing elements is limited to two (2).

Wings, and any component thereof, may not extend beyond the vehicle width, as defined by the outermost portion of the vehicle doors, less mirrors, door handles, rub strips, and trim. In addition, no portion of the wing or its components may be more than 6.0" forward of the rear axle, more than 0.0" beyond the rear most portion of the bodywork, or more than 6.0" above the roofline of the vehicle, regardless of body style. For convertibles and roadsters, the highest portion of the windshield frame will be considered the highest portion of the roof; however, a convertible or roadster utilizing a hardtop will use the highest portion of the hardtop as the roofline.

Reinforcements to the wing mounting area may be used but may serve no other purpose. Body panels to which a wing mounts must remain functional (e.g., trunk lids and rear hatches must open). Wing endplate surface area is limited to 200 sq. in. (1290.3 cm²) each and limited to a maximum of two (2).

Except for standard parts, wings designed to be adjustable while the car is in motion must be



locked in a single position.

Canards are allowed and may extend a maximum of 6.0" (152.4 mm) from the front bodywork as viewed from above. No portion of the canard may extend past the widest part of the front bodywork/fascia as viewed from above. Canard area will be measured in the same manner as wings using Section 12. Canard area may not exceed 15% of total wing allowance. The sum of canard area and rear wing area may not exceed the total wing allowance. Fore and aft variance in curvature and angle is open. Canards may have endplates. Canard endplate total surface area is limited to 30 sq. in. (193.5 cm²) for each side.

Diffusers that come as a standard OE part are allowed but may not be modified. They may be removed in their entirety to facilitate other allowed modifications. Aftermarket diffusers or other items acting as diffusers are not allowed.

Prepared Category

#24975 Clarify NOC listings

The PAC and SEB recommend the following changes to Appendix A:

Appendix A, D-Prepared

Alfa Romeo:

Sedan or sports car (*NA*, RWD, NOC,)

BMW:

Sedan (*NA*, RWD, NOC)

Volvo:

Sedans (*NA*, RWD, NOC)

Appendix A, E-Prepared

Toyota

Sedans (~~non-turbo~~ *NA*, FWD, NOC)

Subaru

Sedan (~~non-turbo~~ *NA*, FWD, NOC)

#25235 ABS/Traction Control/Stability Control in Prepared

The PAC recommends the following changes to 17.6 and Appendix A, and the SEB has approved the recommendation:

17.6 BRAKES

Brake systems, including calipers, caliper mounts, disks, drums, lines, backing plates, pedals, boosters, master cylinders, handles, proportioning devices, pads, linings, *Anti-lock Braking Systems*, etc. are unrestricted except for Section 3.3.3 requirements and as follows:

A. Brake rotors/drums shall be located in the original position (i.e., inboard vs. outboard).

B. Brake rotor/drum friction surfaces must be ferrous metal. Carbon or ceramic composite brake rotors/drums are expressly prohibited.

C. Addition, replacement, or modification of Anti-lock Braking Systems (ABS) is prohibited. The standard system may be removed in its entirety or disabled electrically in a manner not readily accessible while driving, but not altered in any other way. Sensors and computers are considered part of the ABS system and may be not altered nor relocated.

17.9.F Any traction or stability control systems are permitted.

Appendix A – (XP) Prepared



4. Brakes

~~Anti-lock braking systems (ABS) may be added, replaced, removed, or modified. The use of ABS including original equipment incurs an ABS weight adjustment. ABS providing traction and/or stability control in any form will also incur a traction/stability control weight adjustment.~~

8.b. Minimum Weight Calculations

All listed weights are without driver. All weights are calculated based on displacement as listed above. Example: Weight for a RWD car with a 1796 cc Turbo engine and 51% of the weight on the rear axle is $1350 + [(1.796 \times 1.6) \times (200 + 20)] = 1982$ lbs.

Forced Induction Engine Displacement (lbs.)

- FWD.....1350 + 150 per liter
- RWD.....1350 + 200 per liter
- AWD.....1350 + 250 per liter

Normally Aspirated Engine Displacement less than 4.0L (lbs.)

- FWD.....1250 + 150 per liter
- RWD.....1250 + 200 per liter
- AWD.....1250 + 250 per liter

Engine displacement of 4.0L or greater (lbs.)

- FWD.....1650 + 50 per liter
- RWD.....1650 + 100 per liter
- AWD.....1650 + 150 per liter

Regardless of the weight formulas above, no car shall be required to weigh more than 2300 lbs. before applicable weight adjustments.

Weight Adjustments (lbs.)

- ~~ABS (anti lock braking system). + 50~~
- ~~TSC (traction/stability control). + 50~~
- Active/reactive suspension.....+ 100
- Greater than 51% of weight on rear axle.....+ 20 per liter

Appendix A – (CP) Prepared

~~Traction control/stability control may not be added to a car which was not equipped with an OE traction/stability control system. OE systems may be retained but may not be replaced or modified in any way other than removal.~~

#26099 Clarification: Radiator mount/support modification

The PAC and SEB recommend the following changes to section 17.10.O.2 and Appendix A:

In 17.10.O.2:

Any water radiator is allowed, provided there are no changes in the exterior bodywork to accommodate its use. It shall not be located in the driver/ passenger compartment. Separate expansion or header tank(s) are permitted provided they are not mounted in the driver/passenger compartment. The heater core may be removed entirely but not modified or replaced. Water radiators may be filled with water, antifreeze, and/or nonflammable liquids the purpose of which is to transfer heat and/or inhibit freezing, boiling, and/or corrosion. ~~A Corvair may use a water radiator. Other modifications which may be involved in its use are not permitted unless explicitly allowed by the contents of Section 17.~~ A radiator may be relocated so long as the other applicable items in Section 17 are not violated (e.g., the exterior bodywork is not altered) to accommodate the change. *OE radiator support/mounts*



can be modified to accommodate an alternate radiator configuration.

In Appendix A, class CP:

Chevrolet

Corvair & Corvair Turbo (1960-64); weight (lbs.):.....1850

A water radiator may be substituted. Other modifications which may be involved in its use are not permitted unless explicitly allowed by the contents of Section 17.

Corvair & Corvair Turbo (1965-69); weight (lbs.):.....1850

A water radiator may be substituted. Other modifications which may be involved in its use are not permitted unless explicitly allowed by the contents of Section 17.

Modified Category

#23570 clarification request for front wind splitter dimensions

The MAC recommends the following rule change proposal, and the SEB has approved the recommendation:

18.1.F.3. Front Aero

c. The front spoiler may not be wider than *either the front* or the rear bodywork, measured as the maximum distance between the outside edges of the wheel well openings or fender flares at axle height. The total fore-to aft curvature or deviation of the rear spoiler, measured at the trailing edge, shall not exceed 10.0" (254.0 mm) as viewed from above. The front spoiler ~~may not function as a wing and therefore must be installed such that air does not pass both over and underneath it. This may be accomplished by ensuring that the upper edge of the spoiler is in complete continuity with the~~ *must be connected to* bodywork above the spoiler *across its full width*. New bodywork may be added to close the gaps between the fenders, nose, and spoiler/splitter/airdam assembly on cars with open or irregular front bodywork such as the Ford® Model T, MG® TD, Morgan®, and Lotus® 7. When these or similar vehicles use a full-width front spoiler, the car's spoiler/airdam is required to be vertical (between 80-100°) for the lower 8.0" (20.3 cm) of its extent. The change in top view outline caused by these bodywork changes is allowed.

d. Front splitters are allowed but must be installed parallel to the ground within ±1.0" (±25.4 mm) fore to aft. ~~Splitters may not be wider than, nor extend more than, 6.0" (15.2 cm) forward of the topview outline of the car. The splitter trailing edge must be fully sealed to the front bodywork/fender flair/spoiler and the splitter may not get wider as it extends forward. From each point on its trailing edge the splitter can extend no more than, 8.0 inches (15.2 cm) directly forward of the top-view outline of the car.~~ The splitter must be a single plane with the top and bottom surfaces parallel, with an overall height of 1.0" (24.5 mm) or less. The leading edge of the splitter may be rounded (the radius area may extend backwards no more than the splitter thickness). The bottom of the splitter may attach to the belly pan but is not required to do so. Splitter endplate mounting location may be at the outside lateral end or inboard of the outside lateral end of the splitter. Additional mounting plates or strakes may be added inboard of the endplates but these must be no larger than the endplates.

#25046 Solo Vee carburetor(s)

The MAC recommends the following change proposal, and the SEB has approved the recommendation:

In Appendix A, Modified Class C, section C.1.a.2, change

"Any single carburetor is permitted. Multiple carburetors are prohibited."

to



"Any single carburetor is permitted. Dual one-barrel carburetors are permitted."

#25252 Footplates in B Modified

The MAC recommends the following proposal, and the SEB has approved the recommendation:

In Appendix A under Modified Class B, change section E.1 as follows:

"E. Aerodynamic restrictions for Sports Racers:

1. The total area when viewed from the top of front and rear wings shall not exceed 8 sq. ft. (0.743 m2). Area calculation is of *a rectangle fully enclosing* the airfoil element plan view and does not include *flat vertical* side plates but *does include footplates and similar aerodynamic devices*. Side plate area and element profile are unrestricted."

#25570 Allow Dial a Jet modifications for FMod carbureted engines

The MAC recommends the following rule change proposal, and the SEB has approved the recommendation:

In Appendix A, under F Modified, add new subsection A.6 (and renumber subsequent sections accordingly) as follows:

"6. External carburetor jetting devices may be used (such as Mikuni Power Jet, Dial a jet, Intelijet, Thunder Powerjet). They must be plumbed to the float bowl for the carburetor for which they are installed. Remote float bowls are not allowed."

#26464 Rotary Engine displacement calculation (SM, Prep, Mod)

The MAC has recommended the following change to the displacement multiplication factor for rotary engines to 1.6, and the SEB has approved the recommendation. This is to be implemented as follows:

18.0.B.2: Rotary Engines (Wankel) – These units will be classified on the basis of a piston displacement equivalent to **1.6** times (**1.6x**) the volume determined by the difference between the maximum and minimum capacity of the working chamber, times the number of rotors.

18.1.D.5: For weight designations in EM, Mazda Rotary engines are compared to the piston engines listed (i.e., 3.2L OHC vs. 4.5L OHV) *calculations as follows:*

- 13B 2-rotor normally aspirated engines (1308cc x 1.6 = 2093cc)*
- 13B 2-rotor forced induction engines (1308cc x 1.6 x 1.4 = 2930cc)*
- 20B 3-rotor normally aspirated engines (1962cc x 1.6 = 3139cc)*
- 20B 3-rotor forced induction engines (1962cc x 1.6 x 1.4 = 4395cc)*

Appendix A, Modified Class E:

A. Weight with driver vs. Displacement (lbs.):

...

- 2-rotor rotary engines *all configurations* 1700
- 3-rotor rotary engines (*normally aspirated*) 1700
- *3-rotor rotary forced induction engines* 1800

#26669 Rule clarification

Per the MAC and SEB, the following change proposal is recommended:

Change 3.3.3.B.22 as follows:

"Alcohol may not be used in manifold injection or spray bottles ~~unless it is specified for this use by the OEM.~~"



Kart Category

#26905 Section 19 rule rewording.

The KAC has provided and is recommending the following updated version of the Section 19 reorganization, including changes for 2020 which have been previously published and approved:

19 KART CATEGORY

19.1 GENERAL REQUIREMENTS

A. Kart:

1. Frame and axle:

- a. Shall be constructed of a carbon steel alloy. Movable suspensions are prohibited. Mechanisms that allow the rear wheels to rotate at different speeds are prohibited. Frame-mounted jackshafts and / or axle clutches are prohibited.

2. Dimensions:

- a. Maximum overall width = 55.0"; Maximum overall length = 84.0".

3. Engine:

- a. A kart shall have no more than one (1) engine.

4. Fuel:

- a. Gasoline is the only allowed fuel. May be mixed with oil only. Performance additives are not allowed.

5. Chain guard:

- a. Required on all chain-driven karts

6. Overflow:

- a. Over flow lines for carburetor / radiator / fuel tank, if present, must terminate in an overflow bottle(s) of at least 2 oz. (59.1 mL) capacity.

7. Pedal extensions:

- a. Must be positively secured in a manner that prevents movement out of their intended position, possibly interfering with pedal operation. Examples such as a through-bolt, machined flatten surface with a setscrew, or brackets are acceptable. Cylindrical (round) pedal extensions are exempt.

8. Seating:

- a. Unsecured seat pads or inserts are not allowed. Seat belts or other devices restraining the driver to the kart are not allowed.

9. Brakes:

- a. A disc-type brake that operates on the rear axle, providing braking to both rear wheels, is required. A redundant brake pedal-to-master cylinder linkage (safety cable) is required.

10. Bodywork:

- a. A nose cone and driver fairing are required.
- b. Left & right sidepods, confined to the area between the front & rear tires, are



required.

- c. Floor trays must be confined within the frame rails and must not extend aft of the lower front seat mounting points.
- d. Other aerodynamic devices, including wings or vertical sealing devices, are not allowed.
- e. Metal bodywork construction is not allowed; metal floor tray construction is allowed.

11. Fasteners required to be secured:

- a. The following fasteners must be secured using a locking nut, safety wire / cotter pin through the bolt end, machined-groove & clip, or other positive locking mechanism:
 - Tie rod end bolts
 - Kingpin bolts
 - Spindle nuts attaching front wheel
 - Steering wheel to hub bolts
 - Steering hub to shaft bolt
 - Lower steering shaft uniball
 - Throttle pedal pivot to chassis
 - Brake pedal pivot to chassis
 - Master cylinder to chassis bolts
 - Brake caliper mounting bolts (if applicable)
 - Brake pad retaining bolts (if applicable)
 - Brake rotor to hub (if applicable; no nylon lock nuts)

12. Ballast weights:

- a. Must be affixed to the frame, floor tray, seat, or driver only.
- b. Must be affixed to prevent movement during competition runs.
- c. Weights affixed to the kart must meet all of the following criteria:
 - I. Maximum weight per bolt used = 10 lb.
 - II. Minimum 5/16" (8 mm) SAE Grade 5 (Metric 8.8) mounting bolt.
 - III. Minimum 1-3/16" (30mm) diameter metal washer under the bolt head.
 - IV. A single locking nut and safety wire passing through the bolt end; *or* double locking nuts.
- d. Weights affixed to the driver must be on the torso only.

B. Driver:

1. Helmet:

- a. KM: Minimum per section 4.3.1.
- b. FJ: Must comply with 4.3.1. and be a helmet of closed face design, with full-face



shield and chinbar.

2. Neck Brace:

- a. An unaltered, collar-type neck brace designed for motor sports use is required. A kart-specific neck brace is recommended.

3. Suit:

- a. An abrasion-resistant jacket (leather, vinyl, nylon karting jacket, or equivalent) and full-length pants are minimally required. A karting-specific suit is recommended.

4. Hand / foot protection:

- a. Shoes, socks, and abrasion-resistant gloves are required.

5. SFI-certified chest protector:

- a. Required for all drivers age 12 and under.

6. Seating position:

- a. The driver must be able to reach and fully operate all controls.

19.2 KART MODIFIED (KM)

A. Minimum age & weights:

- 1. Minimum driver age = 15 years
- 2. Minimum weights are as-raced including driver
- 3. KM class base minimum weight = 385 lb.
- 4. KML class base minimum weight = KM base weight -20 lb.
- 5. Some engine configurations run with an addition or deduction to the minimum base weight, per section 19.2.D .

B. Wheels and Tires:

1. Wheels:

- a. Maximum diameter = 6" (as indicated on tire)

2. Tires:

- a. Dimensions (as indicated on tire): Minimum diameter = 9.0", maximum diameter = 12.5". Maximum width front = 5.5", maximum width rear = 7.1"
- b. Brand and compound: Tire brand and compound are open.
Exception: The tire must not appear on the following list, which may be altered at any time by the SEB upon notification of membership:

- No tire models are currently listed.

C. Brakes:

- 1. In addition to the requirements of 19.1.A.9, karts with 125cc & larger gearbox engines must have:
 - a. Disc-type brakes that operate on both front wheels, *and*
 - b. Dual master cylinders arranged in a manner to provide braking for at least two wheels in the event of failure in part of the system.

D. Engine:



1. Modified Moto:

- a. Must be a mass-produced, single cylinder, motocross motorcycle engine originally sold in the U.S. Maximum displacement = 125cc.
 - I. Weight adjustment (OE ignition) = +10 lbs.
 - II. Weight adjustment (non-OE ignition) = +25 lb.
- b. Carburetion & fuel system:
 - I. Single carburetor only. Must be float bowl-type with fixed jets. Floatless and recirculating systems are allowed.
 - II. Fuel pumps must be pulse driven.
- c. Induction:
 - I. Intake & reed assemblies are non-tech.
- d. Crank / rod / bearings:
 - I. Crank & rod must be OE components for the engine series. Machining main bearing journals for slip fit is allowed; any other modifications to the crank assembly are not allowed.
 - II. Bearings are non-tech.
- e. Cylinder:
 - I. Machining of the port areas and mating surfaces are allowed. No ports may be added or deleted.
 - II. Replating & honing are allowed; resleeving is not allowed. Bore size must remain within OE specifications.
- f. Cylinder head:
 - I. Machining is allowed. External water fittings may be modified or aftermarket.
- g. Piston assembly:
 - I. Non-tech, but diameter must be within OE specifications.
- h. Crankcase & external modifications:
 - I. All castings must remain recognizable as OE parts.
 - II. Crankcase mating surfaces and ports may be machined. Machining of the reed block / intake boot mounting surface or shortening of the intake tract is not allowed. Kick starter assembly may be removed and plugged. The kick start boss may be altered for carburetor clearance. The crankcase may be repaired to original dimensions from incidental damage.
 - III. Non-OE electric start systems are allowed.
- i. Ignition:
 - I. Coil / spark plug: Coil must be OEM. Plug wire, cap & plug are non-tech.
 - II. OE ignition: Stator, CDI, rotor / flywheel and stator mounting hardware must be original to the engine series. Stator mounting holes may be elongated to allow for static timing changes only. Wiring to the coil may be extended and shutoff switch leads may be removed. All other parts of the ignition system must remain unmodified. Power jets, shift interrupts or other performance systems controlled by ignition output are not allowed.



- III. Non-OE ignition: Weight adjustment = +25 lb. Stator, rotor / flywheel and stator mounting hardware must be original to the engine series and may be modified for static timing changes only. CDI & wiring harness are non-tech. Power jets, shift interrupts or other performance systems controlled by ignition output are not allowed.
- j. Exhaust pipe:
 - I. Non-tech.
- k. Exhaust silencer:
 - I. Minimum length = 12”.
- l. Transmission:
 - I. OE 5-Speed or 6-Speed transmission components only. Gears may be interchanged within the OE engine series only. Machining / coatings are not allowed.
- m. Shift mechanism:
 - I. Gearbox must be entirely manually operated. Ignition interrupt systems not allowed.
- n. Clutch:
 - I. The original configuration (wet or dry) must be retained.
 - II. Components may be aftermarket, but all components must be present and in original working order.
 - III. May be cable- or hydraulically-actuated. Must be manually operated.
- o. Cooling:
 - I. OE water pump impeller may be modified.

2. Stock Moto:

- a. Honda® CR-125R® engines only. Must conform to all Section 19.2.D.1 Modified Moto rules, with additional restrictions as indicated in this section.
 - I. Weight adjustment = -10 lb.
- b. Carburetion & fuel system:
 - I. Keihin PWM-38 or PWK-38 carburetor is required. May be modified for floatless recirculating fuel system. Jets, jet needle & slide are non-tech. No other carburetor modifications are allowed.
- c. Induction:
 - I. Same as Section 19.2.D.1.c
- d. Crank / rod / main bearings:
 - I. Same as Section 19.2.D.1.d
- e. Cylinder:
 - I. Must be OE 1997 – 2002 Honda CR-125R. Overall height (between mounting surfaces) minimum = 3.307”, maximum = 3.316”.
 - II. May have power valve assembly removed and plugs installed.
 - III. The casting must not have other modifications or tool markings of any type.
 - IV. Honing of the bore is allowed; replating is not allowed.



- f. Cylinder head:
 - I. Must be OE 1997 – 2002 Honda CR-125R.
 - II. External water fittings may be modified or aftermarket.
 - III. The casting must not have other modifications or tool markings of any type.
- g. Piston assembly:
 - I. The only allowed pistons are Honda OE as follows: #13110-KZ4-A40, #13110-KZ4-A90, #13120-KZ4-A40, #13120-KZ4-A90.
 - II. Ring, bearing & circlips must be OE.
- h. Crankcase & external modifications:
 - I. Same as Section 19.2.D.1.h
- i. Ignition:
 - I. OE 1999 Honda CR-125R stator & CDI only.
 - II. Stator cover plate holes only may be enlarged to the size to the backing plate holes to allow for static timing changes. All other portions of the stator assembly and CDI must be original and unmodified.
- j. Exhaust pipe:
 - I. Same as Section 19.2.D.1.j
- k. Exhaust silencer:
 - I. Same as Section 19.2.D.1.k
- l. Transmission:
 - I. Same as Section 19.2.D.1.l
- m. Shift mechanism:
 - I. Same as Section 19.2.D.1.m
- n. Clutch:
 - I. Same as Section 19.2.D.1.n
- o. Cooling:
 - I. Same as Section 19.2.D.1.o

3. KZ & ICC:

All current and prior approved CIK® / FIA® ICC & KZ engines are allowed. All components must be unmodified CIK® / FIA® homologated except where otherwise specified. Components may be interchanged within the same engine series by the same manufacturer only.

- I. Weight adjustment = +25 lb.
- a. Carburetion & fuel system:
 - I. Must meet current or prior CIK® homologation, maximum bore = 30.6 mm.
- b. Induction:
 - I. An unmodified current or prior CIK® homologated air box is required; maximum number of tubes = 2, maximum tube ID = 30mm.
 - II. Intake & reed assembly are non-tech.
- c. Crank / rod / bearings:
 - I. Crank & rod must be OE components for the engine series. Machining main bearing journals for slip fit is allowed; any other modifications to the crank assembly are not allowed.
 - II. Bearings are non-tech.
- d. Cylinder:



- I. Machining of the port areas and mating surfaces are allowed. Maximum exhaust duration = 199°. No ports may be added.
- II. Replating and honing of the bore are allowed. Bore size must remain within OE specifications.
- e. Cylinder head:
 - I. *Machining of the cylinder head is allowed. Combustion chamber volume must be at least 13.4 cc as measured with the LAD tool.*
 - II. The outside of the head may be painted.
- f. Piston assembly:
 - I. Non-tech, but diameter must be within OE specifications.
- g. Crankcase & external modifications:
 - I. Crankcase mating surfaces and ports may be machined. The crankcase may be repaired to original dimensions from incidental damage. No other modifications to the crankcase are allowed.
- h. Ignition:
 - I. Stator & coil / CDI must be CIK® homologated and as supplied by the manufacturer for the specific engine.
 - II. Spark plug must be commercially available. With crush washer or temperature sending unit in place and the spark plug at operating torque, the body of the plug (excluding electrodes) must not extend in to the dome of the combustion chamber.
- i. Exhaust pipe:
 - I. Must be CIK® homologated with stamp present, and as supplied by the manufacturer for the engine series.
- j. Exhaust silencer:
 - I. Non-tech.
- k. Transmission:
 - I. If an aftermarket part is substituted it must be of similar dimensions as the original part. The weight of the replacement part shall not be less than the OE part. The outside diameter and tooth count of replacement gears must be the same as the OE part.
 - II. Grinding and / or polishing transmission parts is allowed.
- l. Shift mechanism:
 - I. Gearbox must be entirely manually operated.
 - II. Ignition interrupt systems are not allowed.
- m. Clutch:
 - I. Must be cable-actuated with manual operation.
 - II. Aftermarket friction discs are allowed; all other components must be OE.
- n. Cooling:
 - I. An electric water pump may be added.

4. Rotax® DD2:

- a. Engine must be sealed with matching & current Rotax® Motor Identity Card (Passport®) present. Engine, gearbox, clutch and all related systems must be unmodified, as supplied from the manufacturer.



5. Other allowed engines:

Other Engines – Engines must be either:

- a. Mass-produced, single speed, single cylinder two-cycle engine, not to exceed 125cc. Weight adjustment = -25 lb.
- b. Mass produced, single speed, single or twin cylinder four-cycle engine, not to exceed 250cc. Weight adjustment = -25 lb.
- c. Exceptions: The engine must not appear on the following list, which may be altered at any time by the SEB upon notification of membership:
 - No engines are currently listed.

19.3 FORMULA JUNIOR

A. Safety items:

In addition to compliance with all items in Sections 19.1.A & 19.1.B, the following safety procedures are required for all Junior Class karts:

1. Emergency kill switch:

- a. All Formula Junior karts must have an emergency ignition kill switch clearly visible and easily accessible to the driver while seated and operating the kart. The ignition kill switch shall be located on the steering wheel, near the top of the Nassau panel, or on the frame between the driver and gas tank in plain view with unimpeded access. All drivers must demonstrate the ability to shut down the engine both while driving and stationary.

2. Engine starting & running:

- a. Safety Procedures: On centrifugal clutch-based karts, the engine may not be started or running without a driver sitting in the seat unless the two rear wheels are suspended in a secure manner preventing the tires contacting the ground.
- b. When a kart is securely resting on a kart stand, the rear wheels and tires cannot be rotated by the engine unless all minors are a minimum of 3 feet from the rotating assembly.

B. Chassis:

1. Must meet all requirements of Sections 19.1.A

C. Tires:

1. Dry tire brand and compound is restricted to the MG® HZi
2. Maximum tire dimensions (as marked): Front = 4.6 / 10 – 5. Rear = 6.0 / 11 – 5
3. Rain tire brand & compound are non-tech; sizing is per 19.3.C.2. Rain tires may be used only upon declaration of a rain event by the Youth Steward.

D. Junior Class A (JA):

1. Ages:

- a. 12 years to 18 years

2. Engines:

- a. Briggs & Stratton® World Formula®



- I. Minimum weight: 310 lb.
 - II. Operating requirements:
 - Engine & clutch must be as-shipped from the manufacturer. Cylinder bore must remain within the manufacturer's specifications.
 - #35 pitch clutch sprocket is allowed
 - Electric starter assembly and ring gear may be removed, but must be replaced with Briggs cover #555702
 - Old-type (Briggs analog) and new-type (PVL® digital) OE ignition systems are allowed
 - No other modifications are allowed
- b. Briggs & Stratton® Animal® LO206®
- I. Minimum weight: 275 lb.
 - II. Required components:
 - Air filter: Briggs & Stratton #555729
 - Exhaust header: RLV #5506 or #5507
 - Exhaust silencer: RLV B91 (#4104)
 - Clutch: Must be of drum-type centrifugal configuration and commercially available in the U.S., with a maximum of nine (9) springs and six (6) shoes. Drum must be stamped steel. Clutch mounting bolt must be minimum SAE Grade 8. Machining or alteration of any clutch part from the manufacturer's original configuration is not allowed. Clutch key, springs, and drive sprocket are non-tech.
 - III. Operating requirements:
 - All components, including carburetor jets, must remain as provided from the manufacturer.
 - LO-206 engines must remain sealed as from the manufacturer.
- c. Briggs & Stratton® Raptor®
- I. Minimum weight: 290 lb.
 - II. Operating requirements:
 - The unmodified OE Briggs & Stratton camshaft must be used.
- d. Yamaha® KT-100®:
- I. Minimum weight: 330 lb.
 - II. Allowed types:
 - Only heads with OEM casting "Yamaha"® and cylinders with "787"® and "Y3"® or "Y4"® and "787"® are allowed.
 - III. Required carburetor & exhaust:
 - Walbro® WB3A® & RLV® SSX-V® (4-hole)
- e. Rotax® Mini-Max®
- I. Minimum weight: 330 lb.
 - II. Operating Requirements:
 - Engine must be sealed with matching & current Rotax® Motor Identity Card (Passport®) present. Engine, clutch, Mini-Max® restricted exhaust header



and all related systems must be unmodified, as supplied from the manufacturer.

- III. Required sprocket sizes:
 - #219, 13T front & 82T rear

3. JB or JC karts in JA:

JB or JC karts may compete in JA. The driver must meet JA age restrictions and the kart must be compliant with JB or JC requirements.

E. Junior Class B (JB):

1. Ages:

- a. 8 years to 12 years

2. Engines:

- a. Briggs & Stratton® World Formula®
 - I. Minimum weight: 270 lb.
 - II. Throttle restrictor: The required 0.420" (10.67mm) restrictor & cap lock, with Briggs & Stratton® check tool, are available through the SCCA® Solo® Department only.
 - III. Operating requirements: Same as 19.3.D.2.a.II
- b. Briggs & Stratton® Animal® LO206®
 - I. Minimum weight: 250 lb.
 - II. Throttle restrictor: The required restrictor, Briggs & Stratton® #555734 ("Blue"), is available through Briggs & Stratton® retailers.
 - III. Required components: Same as 19.3.D.2.b.II
 - IV. Operation requirements: Same as 19.3.D.2.b.III
- c. Briggs & Stratton® Raptor®
 - I. Minimum weight: 260 lb.
 - II. Operating requirements: Same as 19.3.D.2.c.II
- d. Yamaha® KT-100®:
 - I. Minimum weight: 265 lb.
 - II. Allowed types: Same as 19.3.D.2.d.II
 - III. Required carburetor & exhaust:
 - Walbro® WA55B® carburetor & manifold with RLV® SSX-V® or HPV1® exhaust, *or*
 - Walbro® WB3A® carburetor & 0.600" restrictor plate with RLV® YBX® exhaust.
- e. Rotax® Micro-Max®:
 - I. Minimum weight: 260 lb.
 - II. Operating requirements:
 - Engine must be sealed with matching & current Rotax® Motor Identity Card (Passport®) present. Engine, clutch, Micro-Max® restricted intake & exhaust, and all related systems must be unmodified, as supplied from the



manufacturer.

- Required sprocket sizes: #219, 14T front & 73T rear

f. Clone:

- I. Minimum weight: 250 lb.
- II. Required engine:
 - Predator, Powerhorse or similar inexpensive 6.5hp 4-stroke engine up to 212cc displacement.
- III. Permitted modifications:
 - Engine must remain stock with the exceptions that the governor may be removed or defeated, and the gas tank may be removed. A top plate and mechanical fuel pump may be added to the motor to route fuel from a center-mounted gas tank. No other modifications or changes to the cam, flywheel, exhaust, carburetor, or intake are allowed.

g. Comer® K-80®:

- I. Minimum weight: 250 lb.
- II. Operating requirements: Carburetor, exhaust, and clutch as supplied with engine from manufacturer.

3. JC karts in JB:

JC karts may compete in JB. The driver must meet JB age restrictions and the kart must be compliant with JC requirements.

F. Junior Class C (JC):

This is a Regional-only, restricted availability class; available by prior approval from the SCCA® National Office only.

1. Ages:

- a. 5 years to 8 years

2. Chassis size: “Baby,” “Kid” or “Cadet” racing-style chassis only. Maximum wheelbase = 950mm. Larger chassis are inappropriate for this class regardless of any modification.

3. Tires: Brand & compound are open. Maximum indicated dimensions for front = 4.60/10.0-5 . Maximum indicated dimensions for rear = 5.00/11.0-5 .

4. Engine:

a. Honda® GXH50®:

- I. Minimum weight: No restriction imposed at this time.
- II. Operating requirements: Must comply with GXH50_Class_Rules.pdf (see SCCA® website or contact Solo® Department for details). The yellow oil alert wire must be disconnected or cut.

b. Comer® C50® & C51®:

- I. Minimum weight: No restriction is imposed at this time.
- II. Operating requirements: Carburetor, exhaust, and clutch as supplied with engine from manufacturer.



G. Additional classes:

Regions may add Formula Junior classes which extend the maximum age range, but such classes may not allow additional modifications beyond those of JA / JB as documented herein.

H. Action or Protest:

Any disciplinary action or protest needed to be taken against a Junior Driver and / or kart will be addressed to the parent / legal guardian listed on the Minor Waiver of that Junior Driver.

Member Advisories

Awards

#27932 Request for Kelly Cup Nominations

The SEB is requesting membership nominations for the Kelly Cup award. This award is presented to the SCCA® member who has shown extraordinary dedication and contribution to a Regional Solo® Events Program. Further information and a list of past winners may be found in Appendix K of the Solo Rules.

Prepared Category

#27707 Rule clarification

In accordance with section 1.b of XP in Appendix A, removing material from the hood for engine clearance is an allowable modification; adding material to re-contour the hood for engine clearance is also an allowable modification. The XP rules do not require the line of sight to the engine be blocked with the hood closed.

Kart Category

#26523 Feedback for sunset of Formula Junior engines

The KAC has recommended that the Briggs Raptor, Rotax Mini-Max, Rotax Micro-Max be removed from JA and JB rules due to lack of participation with these engine and parts availability due to age of the engine packages. The SEB has approved this recommendation, per 2.8 and Appendix H, and the restructured Section 19 will be updated to reflect these changes.

#26903 Increase Minimum Weight for Mod-Moto to 395lbs

The KAC believes that the FJ Mod-Moto engine package should incur a +10lb weight penalty. Hence the minimum weight for a Mod Moto engine would be 395lbs. The SEB has approved this recommendation, per 2.8 and Appendix H, and the restructured Section 19 will be updated to reflect this change.

19.2

D. Engine:

1. Modified Moto:

a. Must be a mass-produced, single cylinder, motocross motorcycle engine originally sold in the U.S. Maximum displacement = 125cc.

I. Weight adjustment (OE ignition) = ~~0~~lbs + 10lbs.

II. Weight adjustment (non-OE ignition) = +25 lb.