

SOLO

SOLO EVENTS BOARD | May 22nd

The Solo Events Board met by conference call May 22nd. 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 1/1/2020.**

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.

Street Touring Category

#24805 ST Preamble

The following is the corrected version of the Street Touring Category Preamble:

Category Objective:

Street Touring allowances and modifications build upon existing Street category allowances. Competitors in this category are looking to add performance to a select group of vehicles based on performance potential.

Category Values:

- 1. Vehicle modifications should not prevent daily use on public roads; "Daily use" is a subjective criterion; Competitors will interpret this differently; "Street legal" is a category goal. Some states may require more stringent requirements. It is not the intention of "street legality" to be an absolute. It is intended for the majority of the membership. Drivetrain configuration variances are balanced through limited slip differential and wheel/tire allowances.*
- 2. Performance Improvements Through "Bolt-On" Modifications*
 - a. Modifications should not require cutting, drilling, or permanent alterations to body panels.*
 - b. Modifications that enhance the performance for Solo and street driving*

1. Suspension
2. Differentials
3. Bolt-On Engine Parts
4. Aftermarket/Larger Brake Kits
5. Wheels/Tire Upgrades
3. Vehicle Safety Systems
 - a. ABS may be electronically disabled, but otherwise must remain unaltered
4. Required Diagnostic Systems
 - a. OBDII systems should remain functional
 - b. Retention of specific emissions systems
5. Engine Tuning

Current Classes Offered:

STS (Street Touring Sport): Naturally Aspirated Front-Wheel Drive sedans and coupes, and similar performance light/older RWD and AWD cars. Emphasis on momentum and handling over power.

STR (Street Touring Roadster): Low to medium HP Rear-Wheel Drive roadsters and coupes. Generally, sports car based chassis.

STX (Street Touring Xtreme): Medium HP coupes and sedans. Primarily RWD with some performance matching AWD mixed in.

STU (Street Touring Ultra): Higher power and performance sports cars and coupes, along with similarly high performance AWD sedans.

STH (Street Touring Hatchback): Turbo hatchbacks and sedans

#26205 ND2 to STR for 2020

The STAC is recommending the following vehicle classing **effective 1/1/2020**. Provided there are no changes for the 2020 model year, the 2020 cars will also be included when this classification change goes into effect.

Appendix A:

STR (Street Touring Roadster)
Mazda
MX-5 Miata (2006-19)

Street Modified Category

#23106 16.1.H Rule Clarification - Rear diffusers

After reviewing member feedback regarding a rule change to 16.1.K regarding diffusers, the SMAC recommends adding wording to 16.1.K as follows:

“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

#25235 ABS/Traction Control/Stability Control in Prepared

The PAC recommends the following changes to 17.6 and Appendix A:

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 (ABS)*, 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.~~

Member Advisories

Street Category

#26897 Camaro LPO Options clarification

The SAC would like to remind members that the GM LPO options must be specifically listed in Appendix A. The SAC is not adding any additional LPO options at this time.

#26916 My 1979 Porsche isn't competitively classed

The SAC would like to remind members that cars over 30 years old are not eligible for national competition. Local Regions are allowed to alter classing for local events as desired.

Change Proposals

Street Category

#26886 Nissan 370Z to DS

The SAC would like member feedback on the following proposal:

Move **from BS to FS:**

Nissan

370Z (excl. Nismo) (2009-19)

Move **from DS to FS:**

Nissan

350Z (excl. Nismo) (2003-09)

Street Modified Category

#23829 Please add 4 seat Porsches to SSM

The SMAC and SEB are requesting member feedback regarding the proposed update to the SSM section of Appendix A below. This change would make 4 seat Porsches and the Lotus Evora eligible for competition in SSM. The proposed wording also removes the repetitive listing of SM cars.

“Super Street Modified class (SSM)

Eligible Vehicles:

- All 2-seat cars not excluded below
- All SM/SMF eligible sedans/coupes and those excluded from SM for failure to meet weight requirements.
- ~~All SM eligible vehicles~~
- McLaren MP4-12C
- *Porsche (all)*
- *Lotus Exige, Elise, Evora, & Esprit*

Excluded Vehicles:

- Lotus (all except *models listed as eligible*)
- All 2-seat cars not eligible for Street Prepared Category
- All vehicles not meeting specifications to have been delivered in the US

Minimum Weight Calculations Without Driver (LBS):

- FWD.....1350 + 125 per liter
- RWD.....1600 + 200 per liter
- AWD.....1600 + 300 per liter
- Supercharged/Turbocharged SSM Engines:.....Add 1.4L to the actual displacement
- Rear wheel weight greater than 51%..... + 25 per liter
- Tire width 275 mm or less..... -200
- Regardless of the weight formulas above, no car will be required to weigh more than 2900."

Prepared Category

#26771 Driveshaft material update

The PAC feels that composite/non-metal based driveshafts are not as exotic as they once were. The PAC would like member feedback regarding the following proposed change to 17.10.Q.1.

"Alternate driveshaft(s) may be used. Any driveshaft assembly may be modified to permit the use of an alternate transmission. ~~All non-standard driveshafts must be made of metal.~~"

Modified Category

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

Rule change proposal: change the displacement multiplication factor for rotary engines to 1.6. This is proposed 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 OHV vs. 4.5L OHV) *calculations as follows:*

- *13B 2-rotor normally aspired 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 SEB, the following change proposal is submitted for review and comment:

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.~~"

#26993 Aero, Diffusers

Change 18.1.F.5 as follows:

"5. Diffusers are allowed at the rear of the car only; *no part of the rear diffuser shall cross the wheelbase centerline into the front half of the vehicle.* The diffuser may protrude rearward beyond the top viewed outline of the car. Diffuser shall have no more than 25.0" (63.5 cm) front to back of expanding chamber; *this 25" expansion chamber length is inclusive of all parts/components/body forward and rearward of the diffuser.* A diffuser is defined as an expanding chamber between the vehicle and the ground for the purpose of accelerating air ahead of it to develop low pressure. Vanes or strakes are allowed inside the diffuser, sideplates and strakes may extend below the diffuser surface as long they do not attain a definite seal with the ground on level ground. Closed undersides or belly pans (lower surface) are permitted. The entire length of the underbody may be closed off to permit proper airflow to a rear diffuser or to smooth the underside of the car. The belly pan shall be flat within 1.0" (25.4 mm) total deviation. No tunnels or other underbody aerodynamic features are permitted. Chassis rake is free. Additionally, no side skirt or body side, etc., may extend more than 1.0 cm (0.394") below this lower surface anywhere on the car to the rear of the front axle unless specifically permitted by these rules."

Kart Category

#26905 Section 19 rule rewording.

The KAC believes that the Section 19 rules are currently difficult to read and is very poorly organized due to years of adding rules to different locations and not cleaning up the correct organization of those rules.

Below is the committee's proposed rewording of the whole section 19 including KM, JA, JB, and JC. This would be a complete strike out of the current section 19 and drop the replacement section in its place. It is believed to be much easier to convey what the KAC wants to achieve this way. The intent is not to change allowances or requirements, but rather to organize them in a clearer manner. Member review and input is requested.

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. Overflow 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 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) = 0 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. Re-plating & honing are allowed; re-sleeving 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® CR125R® 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 CR125R. 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 CR125R.

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 CR125R 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:
Same as Section 19.2.D.1.j*
- k. Exhaust silencer:
Same as Section 19.2.D.1.k*
- l. Transmission:
Same as Section 19.2.D.1.l*
- m. Shift mechanism:
Same as Section 19.2.D.1.m*
- n. Clutch:
Same as Section 19.2.D.1.n*
- o. Cooling:
Same as Section 19.2.D.1.o*

3. KZ & ICC:

- a. 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.*
- b. Carburetion & fuel system:*
 - I. Must meet current or prior CIK® homologation, maximum bore = 30.6 mm.*
- c. 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.*
- 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. Maximum exhaust duration = 199°. No ports may be added.*
 - II. Re-plating & honing of the bore are allowed. Bore size must remain within OE specifications.*
- f. 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.*
- g. Piston assembly:*
 - I. Non-tech, but diameter must be within OE specifications.*
- h. 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.*
- i. 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 into the dome of the combustion chamber.*

j. Exhaust pipe:

- I. Must be CIK® homologated with stamp present, and as supplied by the manufacturer for the engine series.*

k. Exhaust silencer:

- I. Non-tech.*

l. 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.*

m. Shift mechanism:

- I. Gearbox must be entirely manually operated.*
- II. Ignition interrupt systems are not allowed.*

n. Clutch:

- I. Must be cable-actuated with manual operation.*
- II. Aftermarket friction discs are allowed; all other components must be OE.*

o. 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.
- LO206 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.

Not Recommended

Street Category

#26880 Request to move the Kappa cars

Thank you for your input. The SAC feels that the GXP is appropriately classed, and the non-turbo cars are already classed in CS.

#26894 Move 2014-15 CLA/GLA 45 AMG to D street

Thank you for your input. The SAC believes these cars are appropriately classed.

#26911 987.2 Cayman S

Thank you for your input. The SAC believes the 987.2 is appropriately classed but will continue to monitor the performance balance in BS.

#26920 Changing the Mini's class

Thank you for your input. The SAC believes the Mini Cooper S is appropriately classed.

#26924 Move Cobalt SS Turbo (2008-10) to GS

Thank you for your input. The SAC believes the SS turbo exceeds the performance potential of GS.

#26929 Feasibility of Moving NC1 and 13-16 Twins to ES

Thank you for your extremely thorough and well-reasoned letter. The SAC continues to monitor the participation levels in ES.

#26930 Sound Exemptions for Cars with Complete OEM Exhaust Systems

The sound rules exist for the safety of the participants and to avoid undue friction with the communities that host our events. Factory equipment does not give the competitor a pass on meeting the sound requirements.

Street Touring Category

#26739 Replace Rear Seats with Rollover Protection

Thank you for your input. The STAC does not believe this change would be in the best interests of the category.

#26800 Add NISMO 350Z to STU

Thank you for your input. Due to its unique chassis the STAC does not feel that classing the Nismo 350z in STU is appropriate.

#26824 Classify C6 Corvette

Thank you for your input. The STAC does not believe that the C6 Corvette would be appropriate for STU.

Street Prepared Category

#26705 25346 Feedback and 24688

Thank you for your input.

#26895 ND from BSP to CSP

Thank you for your input. The SPAC is continuing to monitor the competitive balance in Street Prepared.

Street Modified Category

#26466 Rotary Engine displacement calculation (SM, Prep, Mod)

Thank you for your input. The SMAC will continue to monitor the competitiveness of the NA rotary. At this time, the SMAC believes the formula for rotary displacement has allowed for rotary powered SM cars to remain competitive.

Prepared Category

#26716 Belly pans to catch oil/fluids

Thank you for your input. The PAC does not feel that belly pans should be a required modification for Prepared

Other Items Reviewed

Street Category

#26838 Affordable Car Class

Thank you for your input. The SAC will continue to closely monitor participation across the category.

#26840 Support for proposal 24743

Thank you for your input.

#26893 Against moving C7GS to AS

Thank you for your input.

#26928 Question regarding the BS Tesla

Please see the response to letter #26721 in the June Fastrack.

Street Prepared Category

#26461 Solo Rules Specification FSP

The SPAC believes that the rule is sufficient as written.

#26626 In favor of 23358 - align SP fluid coolers to ST

Thank you for your input.

#26743 A general response to the state of SP - potential consolidation

Thank you for your input. The SPAC is continuing to monitor the category.

Street Modified Category

#26690 Rear diffusers

Thank you for your input regarding diffusers in SM.

#26717 Please respond to previous letter 25797

See the response to 25797 in the May Fastrack under Member Advisories. Thank you for your patience.

Prepared Category

#26365 No to traction control - bring back ABS weight penalty

Thank you for your input. Please see the response to letter 25235 contained in this Fastrack.

#26611 Support for #25235 ABS/Traction Control/Stability Control in Prep

Thank you for your input. Please see the response to letter 25235 contained in this Fastrack.

#26634 #25235 ABS/Traction control in Prepared

Thank you for your input. Please see the response to letter 25235 contained in this Fastrack.

#26652 RE 25235 - ABS Proposal

Thank you for your input. Please see the response to letter 25235 contained in this Fastrack.

Modified Category

#26573 Carb - changing jets

Thank you for your input.

#26574 Reference to letter # 25570

Thank you for your input.

#26644 Support for letter 25570 - Dial-a-jet for FM

Thank you for your input.

Handled Elsewhere

Street Touring Category

#26586 Please update STH to include the 2019 Hyundai Veloster Turbo

Thank you for your input. Please see the response to letter #26477.

Street Modified Category

#25325 Lotus Evora to SSM

This letter's request is covered in the SMAC's proposed change to Appendix A, as in item #23829.

Modified Category

#26883 Allow wings in D and E Mod

Thank you for your input. Please see item #25925 in the May Fastrack.

Tech Bulletins

Street Category

#26856 2019 Jetta GLI

Per the SAC, add the following listing to Appendix A:

GS
VW
Jetta GLI (2006-*19*)

#26921 Class the 2019+ BMW M4 CS in AS

Per the SAC, add the following listing to Appendix A:

AS
BMW
M4 CS (2018-19)

#26933 Need a classification ruling

Per the SAC, add the following listing to Appendix A:

FS
Audi
A7 (all) (2010-19)

#26941 Return the non turbo Z0K from the void

Errors and Omissions: The non turbo Z0K Solstice was erroneously removed from the rulebook. Please re-add the following to

Appendix A:

BS
Pontiac
Solstice (Z0K) (non turbo) (2007-10)

Super Street R

#26890 Update Porsche Listings for SSR

Per the SAC, update the following listing in Appendix A:

SSR
Porsche
718 (all) (2017-19)

Street Touring Category

#26477 Please update STH to include the 2019 Hyundai Veloster Turbo

The STAC would like to add the 2019 Hyundai Veloster to STH along with the previous Veloster Turbo models. The STAC is also adding the Veloster N to STU. This update also clarifies the previous STH listing for the prior generation Veloster Turbo.

Per the STAC, update Appendix A as follows:

STH
Hyundai
Veloster *Turbo* (~~2012~~ 2013-16)
Veloster Turbo (2019)

STU
Hyundai
Veloster N (2019)

#26722 Car classing for 2014 Benz E550

Per the STAC, add the following listing to Appendix A:

STU

Mercedes-Benz

E550 (non-AMG) (2014-16)

#26879 Civic sport classification for STH

Per the STAC, add to class STH in Appendix A as follows:

STH

Honda

Civic Sport (2017-19)