

PROPOSED SCCA TIME TRIALS CATEGORY

(2-21-2019 Update)

Overview

Philosophy

This class is meant for street-drivable vehicles between Tuner and Max categories, with common OE engine swaps or aftermarket forced induction or camshafts. Vehicles in this category may also install mild aero modifications and simple engine bolt-on parts.

Safety

Must meet Safety Level 1

Vehicle Eligibility

Proposed Category is open to vehicles meeting the same production requirements as Sport and Tuner but is not limited to North American market vehicles.

Modification Rules

Everything in Sport/Tuner, plus the stuff listed. It is a restricted ruleset – If it Doesn't Say you Can, you Can't.

1. Interior

Everything legal in Sport and Tuner Categories, plus the items below.

- A. Interior parts may be swapped with alternate market parts. (JDM, EDM, etc.)

2. Chassis

Everything legal in Sport and Tuner Categories, plus the items below.

- A. Subframes may be modified the minimum amount to enable legal modifications in this section. Competitors are cautioned that modification is not replacement, and suspension geometry should not be modified beyond what is listed in this section.

3. Bodywork

Everything legal in Sport and Tuner Categories, plus the items below.

- A. Hoods, Fenders and bumpers may be replaced with OE parts and exact replicas from markets other than North America. (E.g., JDM, Euro-spec parts.)
- B. Hoods and decklids may be replaced with replicas including those made of alternate material. Replacement pieces must retain any OEM lights and must be able to use OEM hinges and latching mechanisms as standard.

C. Hoods may have vents installed for cooling purposes. The maximum combined total area of all vents (including OEM) shall not exceed 200 square inches. The 200 Square inches includes any area that deviates from the factory hood profile.

D. Hard tops may be replaced with replicas of alternate material. Replacement pieces must be able to use OEM hinges and latching mechanisms as standard.

E. Bumpers may be trimmed or cut for fitment or aerodynamics.

F. **Fenders may be flared, or cosmetic** over-fender flares may be added, and OE fenders may be trimmed or cut to facilitate the additions. **Flared fenders may not be trimmed or cut for drag reduction. Fenders must taper into the OE bodywork.**

4. Aerodynamic Aids

Wings, spoilers, splitters and air-dams may be added, removed, or modified with the following restrictions.

A. Non-OE wings have the following restrictions:

1. May not be added in addition to an OE wing.

2. Only one wing may be added.

3. May only be attached behind the centerline of the rear axle and may not attach to suspension components.

4. The total combined surface area of all wings shall not exceed 5.75 sq. ft. (0.5341 m²) as calculated.

5. The number of wing elements is limited to one (1).

6. Wings designed to be adjustable while the car is in motion must be locked in a single position.

7. Wings, and any component thereof, may not extend beyond the vehicle width as defined by the outermost portion of the bodywork including OE mirrors, door handles, rub strips and trim.

8. No portion of the wing or its components (including end plates and mounts) may be more than 6 inches (15.24 cm) forward of the rear axle, more than 6 inches (152.4 mm) beyond the rearmost portion of the bodywork, or more than 6 inches (15.24 cm) above the roofline of the vehicle, regardless of body style.

9. Reinforcements to the wing mounting area may be used but may serve no other purpose.

10. Wing endplate surface area is limited to 165 square inches (1064.51 cm²) each and the number of endplates is limited to a maximum of two (2).

11. For convertibles/roadsters with no roof and targas with no rear window, no portion of the wing may be higher than 12 inches (30.48 cm) above the wing's point of attachment to the body of the vehicle.

12. For a convertible/roadster with no roof or a targa-top with no rear window which retains the OE windshield frame, a windshield of any material that meets the top of the windshield frame shall be considered the top of the roofline and the car may use the wing mounting rules for a closed car.

13. Spoilers and rear wings are mutually exclusive such that a builder may use one or the other, but not both.

B. A spoiler may be added to the rear of the car provided it complies with the following:

1. It is a production rear spoiler which is standard or optional equipment of a US model of the vehicle or an exact replica in an alternate material.

2. It is a non-production rear spoiler which is mounted to the rearmost portion of the rear hatch, deck, or trunk lid. The spoiler may extend no more than 8 inches (203.2 mm) from the original bodywork in any direction. Alternatively, in a hatchback, the spoiler may be mounted to the rear hatch lid at or near the top of the hatch; in such a configuration the spoiler may not extend more than the original bodywork in any direction. The spoiler shall not protrude beyond the perimeter of the original bodywork as viewed from above. The use of endplates is prohibited. Angle of attack is free. The spoiler may not function as a wing.

3. Spoilers and rear wings are mutually exclusive such that a builder may use one or the other, but not both

C. A front spoiler/splitter is permitted, with the following restrictions.

1. Splitter blade shall be installed parallel to the ground (within $\pm 3^\circ$ fore and aft) and may extend a maximum of 3 inches (7.62 cm) forward of the front bodywork/fascia as viewed from above.

2. No part of the front spoiler shall be lower than 3 inches from the ground.

3. Splitters may not extend rearward past the vertical centerline of the front wheels.

4. No portion of the splitter may extend beyond the widest part of the front bodywork including the top of the wheel arch or further than 3 inches from the edge of the bumper – whichever is less.

5. Openings in the front spoiler are permitted for the purposes of ducting air to the brakes, cooler, and radiator.

6. OE (factory) front spoiler/air dam systems are permitted, and if mounted in the stock location, have no height restrictions.

~~D. Diffusers are allowed with the following restrictions:~~

~~1. May not extend forward past the vertical centerline of the rear wheels.~~

~~2. May not extend beyond the rear bodywork.~~

5. Wheels and Tires

A. Wheels

Any width or diameter wheel and wheel spacers may be used provided it complies with the following:

1. Non-metallic wheels must be certified/approved from an appropriate, recognized standards organization. (e.g., FIA, SFI, SAE, TUV, etc.)

2. Wheel spacers are permitted.

3. Wheel studs, lug nuts, valve stems (including pressure-relief types) and/or bolt length may be changed. Wheel bolts may be replaced with studs and nuts, but the number of fasteners may not be changed.

4. Tire pressure monitoring sensors may be removed.

5. Centerlock/spline drive/knock-off type hubs may be converted to lug-type hubs.

B. Tires

Tires must meet the same requirements as Sport and Tuner Categories for production, tread depth and treadwear ratings and the following restrictions:

~~1. The tread surface of the tire may not be visible when viewed from above. (Must be hidden by bodywork.)~~

6. Brakes

Brakes may be modified or changed within the guidelines of Sport and Tuner Category, plus the allowances below.:

A. Proportioning valves may be added.

7. Steering and Suspension

A. Steering

Proposed Category vehicles may do any modification in Sport or Tuner.

B. Suspension

Proposed Category vehicles may do any modification in Sport or Tuner, plus the allowances below.

1. Ball Joint Extenders/Bump Steer adjustment.

Parts which bolt directly to OE parts may be installed.

2. Control arms/Camber Adjustment

~~Upper and lower Arms may be replaced for camber adjustment on both top and bottom of suspension control items.~~

a. Control Arms

Control arms for vehicles having integral bushing/arm assemblies may be replaced subject to the following restrictions.

i. The replacement arms must attach in the original standard mounting points. All bushings must meet the requirements of this section.

Intermediate mounting points (e.g., shock/spring mounts) may not be moved or relocated on the arm. The knuckle/bearing housing/spindle assembly cannot be modified or replaced.

ii. The replacement arm length must be the same as OE.

iii. The replacement arm may not be adjustable, unless it meets the restrictions for Camber Kits as outlined below.

iv. The bushings of the replacement arms may not be spherical.

a. Camber kits (also known as camber compensators) may be installed. These kits consist of either adjustable length arms or arm mounts (including ball joints) that provide a lateral adjustment to the effective length of a control arm.

Alignment outside the factory specifications is allowed. The following restrictions apply:

i. On double/unequal arm (e.g., wishbone, multi-link) suspensions, only the upper arms OR lower arms may be adjustable, but not both. Non-integral longitudinal arms that primarily control fore/aft wheel movement (e.g., trailing arm(s) or link(s) of a multi-link suspension) may not be replaced, changed, or modified.

ii. On arm-and-strut (MacPherson/Chapman) suspensions, the lower arms may be adjustable OR other methods of camber adjustment as allowed by the previous sections may be used, but NOT both.

3. Leaf Spring cars may be converted to a coilover design.

8. Electrical

Proposed Category vehicles may do any modification in Sport or Tuner, plus the allowances below.

A. Wiring harnesses may be replaced or modified in order to accommodate further allowances in these rules.

9. Engine and Drivetrain

A. Engine Control/ECU/Electronics

1. Engine Control/ECU may be replaced or modified without restriction.
2. Distributors may be replaced by alternate same-manufacturer OE units.

B. Intake

All vehicles may perform any Sport- or Tuner-legal intake modification plus the allowances below, but further allowances and restrictions on the intake are in place in the “engine” section of these rules. ~~The OE Intake may be modified or replaced with the following restrictions~~

- ~~1. Any Sport or Tuner Legal Intake modifications are allowed.~~
- ~~2. Throttle bodies may be replaced or modified.~~
- ~~3. The Intake Manifold may be changed with the following restrictions~~
 - ~~a. It is an OE intake manifold from the same manufacturer for street use which will bolt on to the engine without adaptors or modification.~~
 - ~~b. It is the same design as the OE intake manifold. (E.g., an aftermarket cast manifold may replace an OE cast manifold, but an OE cast manifold may not be replaced with individual throttle bodies, or custom slab built manifolds.)~~

C. Cooling

Proposed Category vehicles may do any modification allowed in Sport and Tuner, plus those listed below.

There are no further allowances at this time.

D. Engine

There are three “either-or” options of engine modification. Engines may either be swapped, or may **replace/modify items from the “ports out” plus** replace the camshaft(s), or may add aftermarket forced induction, but may only pick one.

- 1. Option 1: Engines – including swapping OE Forced-induction engines for naturally aspirated and vice-versa – may be replaced with the following restrictions:**
 - a.** The engine must be from a production car of the same manufacturer, and that engine must have been produced and delivered in at least **5,000** vehicles per calendar year in any single market. (USDM, JDM, EDM)

b. An engine swap may not be performed on a vehicle taking advantage of options 2 or 3, nor may items from Options 2 and 3 be performed on a swapped engine.

2. Option 2:

a. On OE Naturally aspirated engines, items from the “ports out” plus camshafts may be replaced with the following restrictions:

i. Intake Manifold, carburetors and throttle-bodies may be modified or replaced.

ii. Camshafts may be replaced or modified, but cam gears may not be swapped.

b. On Forced Induction OE engines, components of the system may be modified or replaced with the following restrictions:

i. the OE intake manifold, throttle body and supercharger or turbochargers may not be modified or replaced.

c. These allowances may not be done on a vehicle taking advantage of option 1 or 3.

3. Option 3: Aftermarket forced induction may be added with the following restrictions:

a. Only a single unit may be added. (E.g., A single turbo or single supercharger. Multi-turbos or twin-charged systems are prohibited.)

b. Forced Induction may not be added in addition to OE forced induction.

c. OE Forced induction may not change to aftermarket forced induction.

d. Aftermarket forced induction may not be added to a vehicle taking advantage of Option 1 or 2.

E. Transmission/Differential/Drivetrain

Same as Tuner plus the following.

1. Transmissions and drive-gear may be replaced as part of an engine swap, with the following restrictions:

a. The transmission/differential/drivetrain components must meet category rules otherwise.

b. The transmission/differential/components of the drivetrain must have been packaged with the original car, or the car supplying donor engine. Further mixing and matching of different , models, option packages or trim level is prohibited.

2. Clutches may be replaced with those of different design.

3. Flywheels may be replaced with those of non-OE material.

F. Exhaust

1. Exhaust manifolds, headers, downpipes, catalytic converters and any associated EGR tubes may be replaced with alternate units. Exhaust exit may be relocated provided it meets safety requirements. Relocation of the oxygen sensor is permitted. Exhaust heat shields which cover only, and attach solely to, these parts may also be replaced, removed or modified. All other exhaust heat shields may be modified the minimum amount necessary to accommodate allowed alternate exhaust components. Mounting brackets/hardware which serve no other purpose are considered part of the exhaust components.

Note: The SCCA does not encourage or condone the breaking of laws governing pollution control systems or the alteration of street-driven vehicles contrary to state and Federal laws regarding their use. It continues to be the responsibility of the individual to comply with such state and federal laws.

10. Fuel

Proposed Category vehicles will use fuel which is “Federally approved for use on public highways.” This does not allow racing-type fuels which are available at service station pumps. The use of E85 is not restricted.

Propane/Natural gas is ok with Sport/Tuner Restrictions on the system.

11. Proposed Category Classing

Displacements go by real displacement or the correction factors for Rotaries, 2-cycle and forced-induction engines and all weights are with driver.

Class 1

A. Vehicles with a real or corrected displacement of no more than 6.5 Liters, not weighing less than 3,000 lbs.

B. Vehicles with 2.995 Liters – 3.9 Liters real or corrected displacement weighing less than 2,600 lbs.

Class 2

A. Vehicles with a real or corrected displacement of no more than 3.9 Liters, not weighing less than 2,600 lbs.

B. Vehicles between 1.995 Liters – 2.995 Liters real or corrected displacement, weighing less than 2,200 lbs.

Class 3

A. Vehicles with a real or corrected displacement of no more than 2.995 Liters, not weighing less than 2,200 lbs.

B. Vehicles with a real or corrected displacement of 1.995 Liters or less, weighing less than 1,900 lbs.

Class 4

A. Vehicles with a real or corrected displacement of no more than 1.995 Liters, not weighing less than 1,900 lbs.

12. Displacement Correction Factors

1. Rotary: Actual displacement X 2.0
2. 2-Cycle Engines: Actual displacement X 2.0
3. Forced induction: Actual or corrected displacement X 1.5
4. For each additional forced induction unit 0.5 should be added to the forced induction displacement modifier (e.g., twin charged, twin turbo: Actual corrected displacement X 2. Quad turbo: Actual displacement X 3).