2020 SuperSpec Cup Regulations

Updated Mar 5, 2020. Copyright Speed Ventures Operations, LLC 2020. Changes for 2020 season in red.

The mission statement of SuperSpec Cup is simple: Safe, cheap, fun. To that end, SuperSpec Cup will always work with racers to find the most cost effective solutions to maintain safety and parity. Our goal is not to build the ultimate Miata. It is to create the context for the most affordable, safe, and fun production car racing on the west coast. Questions? Contact us.

Speed Ventures will host each and every SuperSpec Cup race event concurrent with their existing HPDE events. Any questions or concerns regarding event registration can be sent to Speed Ventures: info@speedventures.com

Competition License

A Speed Ventures Competition License will be required to be eligible to participate in any qualifying or race session. Speed Ventures will be the sole issuer of the Speed Ventures/SuperSpec Cup competition license. If a driver does not already have a current license with a different race organization, the driver should contact Adam Gershon at Speed Ventures for licensing procedures. If the driver possesses a current competition license from a different organization, they must provide a race resume and submit to a brief driver interview with Speed Ventures.

SuperSpec Cup Prep Guidelines

If you don't see it listed here, it's not legal. Feel free to contact Speed Ventures for clarification.

1. Safety

Vehicle

Minimum weight 2300 lbs. with driver in impound.

Minimum safety requirements will be no less than industry standard for wheel to wheel amateur club racing in North America. This includes, but is not limited to:

1. 6 point cage of 1.5” x .095” wall thickness DOM tubing
2. Current SFI and/or FIA rated 5 or 6 pt harnesses (4pts not allowed)
3. One piece with current SFI or FIA approved halo seat with no fewer than 4 fixed mounting points. Aluminum shell or expired FIA seats must have fixed back brace. Aluminum seats must also have halo attached to cage structure.
4. On board fire suppression system with two clearly marked releases. One release must be in center dash area in reach of driver. External release must be within 150mm of A or B pillar, left or right side of car. External pull can be inside our outside of cockpit provided it is easily seen and reached by someone standing next to car by reaching no further than their forearm. Min 2.5L capacity A/B/C type. Must be Ethanol rated if car runs on E85. Must have at least two nozzles, one in engine bay pointed at dipstick, one pointed at driver’s torso. Additional nozzles aimed at fuel rail and fuel tank filler hose recommended. Automatic thermo couple triggered systems allowed but must retain a manual pull also.
5. Hand held fire bottle of at least 2.5lbs A/B/C type or Element model must also be present. Must be Ethanol rated if car runs on E85
6. SFI center net mounted to cage structure on all ends. Net is intended to prevent shoulder from moving out of seat during side impact. Net should cover area from driver’s ear to upper arm at minimum.
7. SFI window net mounted to cage structure on both ends
8. Car must have master kill switch that turns engine off when activated, regardless of OEM ignition key position. Switch must be clearly labeled. Switch must be in center dash area, within reach of driver while belted.
9. Car must have externally accessible master kill switch with the same functionality as center dash master switch. External switch must be within 150mm of driver side A pillar, inside or outside of car.

Driver

1. SuperSpec Cup drivers are required to implement all safety gear at all times when on track. This means during a race, practice, qualifying, HPDE, test session and/or with other organizations. Visor down or eye protection, full suit, socks, gloves, nets in place, fire system charged and unlocked. Drivers may be fined if observed failing to implement required safety measures at non-SuperSpec Cup events.
2. SFI 2A/5 or higher rated or FIA 8856-2000 (or newer) one piece driving suit

3. SFI 3.2A/1 & 3.2A/3 suits must be worn with SFI 3.3 or FIA 8856-2000 rated upper and lower underwear
4. SA2010 or newer or FIA 8859-2015, 8860-2010, 8858-2010 full face helmet with functioning visor. M (motorcycle) or non SA (kart) rated helmets not allowed
5. SFI or FIA 8856-2000 rated fire retardant socks, no more than 5 years old
6. SFI or FIA 8856-2000 rated fire retardant driving gloves, no more than 5 years old
7. SFI or FIA 8856-2000 rated fire retardant shoes, no more than 5 years old
8. SFI or FIA 8856-2000 rated head and neck restraint, no more than 5 years old

2. Car

Engine

The intent of the engine rules and Power Cap are to allow 100% OEM, unmodified BP05/BP4W/BP6D long blocks to remain competitive in SuperSpec Cup races. The max WHP (power), max WTQ (Torque), and Power Area values are all easily achieved with the aforementioned OEM long blocks. Aftermarket and modified internal engine parts are allowed only to improve reliability and cross-compatibility with other racing classes. All non-OEM engines must be detuned to meet SPM power output restrictions and dyno graphs submitted in order to be eligible for championship points. Any competitor utilizing aftermarket or modified engine internals may be disqualified or excluded from racing if their car is found to be outside of SPM power restrictions.

Competitors are encouraged to submit dyno reports. SuperSpec Cup officials may dyno your car at any event and disqualify results obtained with a non-compliant car.

1. All cars must comply with Power Cap and Power Area regardless of weight or power.
2. Update/backdate, mix and match of any years 90-05 USDM Miata engine components allowed. Intake manifold may be ported and emissions equipment modified deleted. Non USDM “square top” intake manifold allowed.
3. Power Cap: Maximum allowable power measured at the wheels on a Dynojet 248 or 288 with onboard weather station active, spec tire inflated to no less than 30psi, 4th gear: 140 horsepower, 130 torque SAE corrected, smoothing set to 5.
4. Power Area: WHP limited to a maximum “power area” as follows: Add WHP at 5000, 5500, 6000, 6500, and 7000rpm. Total value must not exceed 665.
5. Maximum rev limiter setting: 7000rpm.

6. Long block can be 100% OEM Miata from any country. Suggested modifications for increased reliability (not mandatory): forged rods of stock dimension, between 520g ~ 545g each; stiffer valve springs for over rev protection; ACL Race engine bearings or equivalent.
7. ECU is free.
8. Intake piping, filter, and location are free. OEM MAF/AFM may be modified or removed.
9. Entire exhaust system is free but must exit behind rear axle centerline.
10. Oil cooler may be added and is recommended.
11. Engine mounts free but engine must remain in stock location.
12. Cooling system free. Radiator must retain OEM location and approximate size.
13. Any single throttle body allowed provided it is no larger than 64mm. OEM throttle plate and shaft may be modified to improve strength.
14. Allowed fuel: up to 100 octane unleaded gas, E85. Leaded gas, methanol not allowed.
15. Non OEM internal engine coatings not allowed. Headers and exhaust may be coated with thermal insulation coating, wrap, or paint.
16. Ignition system free.
17. Wiring harness may be lightened and/or simplified.
18. Emissions equipment, miscellaneous brackets, and equipment in engine bay may be removed to lighten car provided minimum weight and power cap are observed.
19. Launch control and traction control not allowed.
20. Engine coolant must be water. No more than 6oz combined of antifreeze or water wetter solution may be used.

Suspension & Drivetrain

1. Update/backdate, mix and match of any years 90-05 USDM Miata suspension components, subframes, braces allowed provided the part(s) bolt directly on without modification.
2. Coilovers with a maximum of one damping adjustment allowed.
3. Spring rates free.
4. Spec tire is 225/45/15 Hankook Ventus RS4.
5. Tire shaving is not allowed.
6. Wheels are free but must be one piece pressure cast aluminum. Wheels must display VIA certification stamp. No forged or multi piece wheels.

7. No spoke portion of the wheel may protrude beyond the bead face. The circumferential flange at the outer diameter of the wheel may protrude no more than 3mm. This is measured by holding the wheel vertically, placing a straight edge across the face of the wheel, resting on vertical bead flange. Wheels must be compliant to this rule by January 1, 2020
8. Diff mounts free.
9. Any one piece sway bars allowed.
10. End links free provided they attach in OEM locations
11. Any polymer suspension bushings allowed. No metal bushings or bearings allowed.
12. Eccentric offset control arm bushings for camber correction allowed.
13. Brakes may be updated/backdated in any combination of 90-05 components. Pads free. Brake ducts free. Adjustable proportioning valves may be used.
14. Final drive ratio can be 3.9, 4.1, 4.3.
15. Unmodified OEM Torsen or Tochigi-Fuji differential allowed. No aftermarket diffs allowed.
16. Clutch disc must be no less than 200mm outside diameter (same size as OEM 1.6). Single disc only.
17. Pressure plate must be cast steel. Clutch cover must be stamped steel. No aluminum pressure plate or cover. Flywheel free.
18. OEM 5-speed transmission only. 6-speed or non-OEM trans not allowed.
19. ~~Rain tires: Any 205/50/15 or 225/45/15 200tw tire with at least 3/32 minimum tread depth at start of race or 225/45/15 RC-1 at any tread depth allowed once Wet Race is declared. Race will be declared as "Wet Race" no later than 30 minutes prior to start.~~

Body & Aero

1. Vertical front air dam allowed. Air dam must originate no higher than forward most point of OEM bumper skin. Air dam may extend to left and right ends of bumper skin but not beyond. Air dam can deviate no more than 5° from ground plane when car is parked w/o driver and any fuel level. No splitters, aftermarket curved air dams, front spoilers, canards or other front downforce producing modifications allowed.
2. Under tray may extend from front axle centerline to air dam. Undertray must be flat, have no more than 2° angle and have no curvature.
3. Trunk mounted ducktail spoiler of no more than 13″ in length may be mounted at any angle. Ducktail must be 2D only, no significant curvature, and have no

fences or gurneys. Ducktail must not extend beyond rear quarter panels and must be mounted within 4″ of trailing edge of lid. Ducktail must be of translucent polycarbonate. Acrylic or glass not allowed. Tinted OK but must be able to count fingers on hand when viewed through the material.

4. Windshield may be substituted for .187” or thicker polycarbonate. OEM or equivalent safety glass OK.
5. Any hardtop material and window thickness allowed. Must retain OEM shape. Hard top must be mounted flush on rear deck. No gap greater than 3mm must be measurable or observable on rear deck.
6. Lightweight body panels allowed: hood, trunk, hard top, front fenders only. Must retain OEM dimensions.
7. Vents may be added to hood provided no portion of vent protrude beyond 10mm of OEM hood surface
8. Hoods and trunk lids may be pinned. Aero catches allowed.
9. Radiator ducting may be added/modified to improve cooling provided it creates no additional downforce.
10. Interior, doors, trunk may be gutted of all bolt on panels and components provided safety guidelines and minimum weight are observed.
11. Rear window may not be vented or removed.
12. Hard top must not be mounted in such fashion as to allow air gaps at any mating surface while on track. Venting hard tops in this way may result in a DQ from that race or qualifying session.
13. Cars are required to be in presentable “50/50” condition. While show quality paint is not desired, major blemishes, mismatched panels, dents, and damaged graphics should not be readily apparent once the car is in motion. Drivers will be given warnings and have the span until the next event to correct cosmetics. Failure to keep the car a satisfactory appearance may result in not being allowed to compete.
14. Front bumper skin may be cut, removed, or modified below upper edge of air dam. This modification results in minimal weight loss as additional ducting and support structure must be added. It is intended to facilitate better radiator and oil cooler air flow to improve cooling.
15. Ballast weight must be secured as follows: At least one 5/16″ grade 8 nut/bolt with 2.0″ diameter washer/backing plate of .090 thickness for each 15lb of weight.

3. Driver Conduct

The primary responsibility of every driver while driving their SuperSpec Cup car on track in practice, race, or non SuperSpec Cup events, is to avoid contact. This responsibility and obligation overrides all other track position “rights” and etiquette. Just because you reached a corner first and have “established position” does NOT allow you to hold your line if you know it could result in avoidable contact. Failure to take corrective action to avoid contact will result in a penalty on your record as well as the other driver(s) “Involved”.

General Infractions are safety and/or sportsmanship violations including but not limited to: disregarding flags, unsafe driving, disregard for track protocols, and disobeying or disrespecting marshals, safety crew, and other drivers.
Penalties for general infractions will be determined by Speed Ventures marshals and may include, but are not limited to: fines, loss of season points, disqualification for up to one year.

4. Onboard Video

Onboard video for the entire race is a requirement of all race drivers. Video taken during race must be submitted to marshals upon request. The requirement to submit race video applies to all drivers whether or not they were involved in an incident.
Any driver who fails to provide on board video at the request of race marshals will penalized as follows in any given race season:

1st Infraction: $50 minimum
2nd Infraction: $100 minimum
3rd Infraction: $200 minimum
4th+ Infraction: $400 minimum

5. Passing

The first rule of passing in SuperSpec Cup is that it is always the responsibility of the overtaking driver to complete a pass safely and without contact. This will never be superseded by any other rule.

The overtaking driver earns the right to the line when any part of their car overlaps any part of the leading car. The intent and wording here is to leave no ambiguity on the part of either driver. Driver being passed knows there is a car there. Driver attempting pass makes sure they are seen before asserting their position.

The driver in front must leave one car width to edge of track to an overtaking car if there is any This means that if the leading driver loses track of the overtaking car, they must leave one car width to track edge. When in doubt leave room. If the track edge is fixed or will cause vehicle damage for exceeding it (hay bale, K wall, fence, etc.) the leading driver must allow 1.5 car widths. This does not mean that an overtaking driver will always be able to precisely place their car in the space. Because of this potential for imprecision, the responsibility once again falls on the overtaking driver to complete a safe pass without contact. We fully realize that this rule makes overtaking easier. Of course that works both ways, allowing the passed driver to counter attack in the next turn. The generous nature of this rule is to reduce the possibility of contact.

If it is clear, upon review of in car video that the leading car made an abrupt blocking maneuver that did not allow for the high closing rate of a car attempting a pass, fault will be placed on the leading driver. In other words, just because a pass attempt may be low percentage, does not give the leading driver the right to slam the door shut and initiate contact when it is otherwise avoidable.

If at any time during qualifying or race a driver cuts the course (one apex) whether due to a mistake or to avoid contact, that driver will be issued a 3s time penalty for that lap AND/OR their finishing position will be amended to reflect the number of positions illegally gained. This 3s penalty will be issued for every apex that is cut during that session. Cutting an apex is defined by all four wheels on or inside of white line, dirt, or kerbing delineating track edge. If tires closest to racing surface are overlapping track edge, that is considered a course cut. If the driver comes to a stop or has a complete 360° spin during the course cut, no penalty will be issued. If a 3s penalty is issued during a race, it will retroactively be added to total race time and could have an effect on finishing or qualifying positions.

6. Contact

Any driver who believes they were involved in contact at any point during the event must do the following within 30 minutes of contact or race end, whichever is longer:

1. Acknowledge contact with any and all drivers involved
2. Report contact to race director
3. Provide onboard video

Contact Definitions

Level 1 Contact: Assigned when one or more of the following conditions are met:

- one or both cars leave the racing surface
- one or both cars lose position
- one or both cars sustain significant or permanent damage

Level 2 Contact: Assigned when the following conditions are met:

- none of the conditions of Level 1 contact
- acknowledged contact between two cars at any time during even

Contact Responsibility

- Involved (I)
- At Fault (AF)

A Speed Ventures race marshal will attempt to assess fault. Contact will be reviewed and a fault determination made by race director with 1 hour of race end. If fault cannot be reasonably assessed, all parties will be considered Involved (racing incident).

Penalties

Penalties accumulate on an annual basis. Each driver starts each season with a clean slate. All financial penalties will be paid to Speed Ventures and added to the SuperSpec Cup bank to be used for driver awards and series expenses.

Level 1 AF
1st Incident: $50 minimum
2nd Incident: $100 minimum
3rd Incident: $200 minimum
4th Incident: $400 minimum

Level 2 AF
1st Incident: $25 minimum
2nd Incident: $50 minimum
3rd Incident: $100 minimum
4th Incident: $200 minimum

Appeals

Appeals, plus a $50 donation, are to be submitted via email to race director within one hour of receiving determination. The race director may recruit other drivers and/or safety workers and/or race observers for a hearing. It is up to race director's sole discretion to decide who hears evidence and votes in the appeal. Majority rules. No further appeal process shall be offered. If the driver submitting the appeal is found not at fault, their appeal donation will be refunded. If found at fault, the donation will be applied to the SuperSpec Cup BBQ fund.

Gridding, Points, and Series Championship

Race 1 will be gridded in qualifying order. Qualifying takes place in the final HPDE session before the race. Grids for races 2-4 will be based on a full inversion of the prior race.

Regarding inverted grids in the case of a DNF or DNS: A racer who did not start/finish the previous race will be gridded last in the subsequent race, or will start the subsequent race from hot pit where s/he will be held until the field clears hot pit exit. In the case of multiple DNF/DNS, DNF will be gridded first. DNF tiebreaker will be number of laps completed before DNF—more laps equals better gridding. DNS tiebreaker will be older driver first.

Driver must win at least one race with no less than 3 SSC-legal competitors to be awarded the series championship regardless of points earned.

Points total after dropping from lowest 6 scoring events will be counted towards championship.

Supersprint points will be awarded as follows: The last place finisher gets 1 point and points increase by one up through 11th place. Places ten through four increase by 2 points. Third and second places increase by 3 points, and first place increases by 4 points. Drivers who DNF will receive 1 point. Drivers who DNS will receive 1 point for each race not started on a paid-for race day. In the case of DNF/DNS, the last place finisher will get 2 points and points ascend as previously described.

Qualifying points are awarded as outlined in the table below.

Qualifying	
P1	6
P2	5
P3	4
P4	3
P5	2
P6	1