20223 SuperSpec Cup Regulations

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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, they must undergo the licensing process: 1. The driver must have prior open passing experience in Speed Ventures', or other approved club's Advanced groups. A "check ride" must be given by a nominated SuperSpec Cup driver, testing their awareness in multiple different scenarios on track. The driver must also attend all drivers meetings on that first day. If their outings are successful, they may race the second day but cannot race the first day. . 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. Speed Ventures will have the final determination regarding racer eligibility.

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

- 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 <u>must have a dyno report on file with Speed Ventures less than one year old</u> <u>at the date of any race.</u> <u>are encouraged to submit dyno reports</u>. SuperSpec Cup officials may dyno your car at any event and disqualify results obtained with a non-compliant car.

 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.
- 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 bushings allowed other than spherical bearings.
- 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.

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.
- 16. Vehicles are required to have front and rear tow points. Tow points cannot extend dangerously from the car and must not extend beyond the bodywork. They also must be readily accessible and accommodate large hooks.

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 according to the Penalty Schedule.

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.

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).

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.

7. 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. Drivers who are racing for their first time in the series, or who are 7 or more seconds off of the fastest qualifying time, will not be allowed to invert and must denote this with an X on the rear of their car.

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.

Race 1 (or 3): If a racer enters the hot pits during the race, the racer will be held for the remainder of the race and is deemed DNF for the race, but will be allowed to rejoin for Race 2 (or 4), but will not be allowed to invert.

Race 2 (or 4): If a racer enters the hot pits during the race, the racer will be allowed to rejoin immediately.

DNF is a failure to cross the start-finish line at the checkered flag.

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. All drivers that have placed first in once race in the season are eligible to win the overall 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. In the case of DNF, the last place finisher will get 1 point more than the sum of all DNFs. In the case of DNF/DQ (not DNS), the last place finisher will get points in the same increasing convention including the DNF/DQ drivers.

30-minute races will have the above points doubled. .

Qualifying points are awarded as outlined in the table below.

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

Schedule of Infractions, Penalties, and Fines

Infraction	Definition	Penalty	Fine
Course cut (or cutting an apex)	All 4 wheels off of the racing surface on the inside of a corner delineated a white line, dirt, or kerbing.	During qualifying: lap time deleted. During race: Time penalty TBD at the discretion of the Race Director depending on the location, if spots gained and not relinquished.	<u>n/a</u> No fine
Pass Under Yellow flag	Track position gained between the corner station waving a yellow flag and the next manned corner station without a yellow flag regardless of passing the incident that caused the yellow, i.e. passing between these two stations	Disqualification for the race when the pass occurred. No exceptions, a safety violation.	n/a\$25/\$50/\$100_first/second/third occurrence, discretionary thereafter
Racing Under Yellow	Failure to sufficiently slow under caution. This includes "racing to the yellow flag station."	Disqualification for the race when the infraction occurred. No exceptions, a safety violation.	n/a\$25/\$50/\$100_first/second/third-occurrence, discretionary thereafter
False start	Any forward movement before the green flag is waved at Start/Finish line. Green flag is considered waved when flagger moves arm/shoulder/hand that has the green flag.	10 second time penalty assessed for the race it occurred.	n/a\$25/\$50/\$100_first/second/third occurrence, discretionary thereafter
Missing the Checkered Flag		Disqualification for the race when the infraction occurred. No exceptions, a safety violation.	n/a\$25/\$50/\$100_first/second/third occurrence, discretionary thereafter

Re-entry in first lap	Any driver going 4 wheels off-course in the first lap of the race must allow the entire racing grid to go by before re-entering the racing surface, with the exception of rearward cars that significantly slowed for any reason. The goal if this rule is to enforce safe reentry and deescalate the urgency in the first lap; the marshal will have the ultimate say.		n/a\$50/\$100/\$150_first/second/third- occurrence, discretionary thereafter
Unsafe Re-entry	Any driver going 4 wheels off- course at any time during the race must re-enter safely. The marshal will have the ultimate say on what constitutes an unsafe re-entry.	TBD at the discretion of the marshal	n/a\$50/\$100/\$150_first/second/third- occurrence, discretionary thereafter
Sandbagging	The appearance of sanbagging will be reviewed and decided by the marshal, giving weight to all factors presented and the context of the situation.	Driver will start last of the next 2 races, not inverting	n/aNo fine
No Video	Failure to provide viewable race footage to the marshal for viewing at any time. Being able to view the video is responsibility of racers involved, not the marshal. For drivers involved in reported contact, it is required to sumbit video in a way to view it within 30 minutes after race session has ended, which usually is	n/aWhen there is any doubt in marshaling, the call will go against the driver without video by default.	n/a\$50/\$100/\$150_first/second/thirdoccurrence, discretionary thereafter

	Saturday's Race 2 and Sunday's Race 4.		
Sponsor Stickers	Lack of sponsor stickers when they are available and not remediated before the race	First weekend no penalty; DQ on subsequent weekends where stickers are not in compliance.	\$50/\$100/\$150 first/second/third occurrence for each day of racing where the green flag is taken and stickers are available, discretionary thereafter. Provision of duplicate stickers may incur a fee.
Dyno Sheet	Lack of current dyno sheet (within one year) that clearly shows HP, TQ, and RPM so that compliance can reasonably be checked	Driver is not eligible for points; must start in back without inverting and display orange "X" on front/rear to denote status. and abto race_n/a	First race is a warning, \$50/\$100/\$150 escalating per weekend
Scaling under the official weight of 2300 lbs	10 lbs. margin of error for first infraction, then strict enforcement of 2300 lbs for all future infractions.	1st infraction: DQ for all races on the day of infraction. 2nd infraction: DQ for all races and qualifying over the entire weekend if scaled on Sunday. 3rd infraction: DQ of current weekend and prior weekend where points were earned. 4th infraction: DQ of all points up to that point in the season, and suspension for next race weekend.	n/a\$25/\$50/\$100/Discretionary_thereafter.
Safety Tech Failure	Required safety items (car and driver) will be spot checked over the course of the season	It will be at the discretion of the marshal whether any deficiency noted will prevent the driver from	n/a

		competing, or remediating for the next weekend.	
Mechanical Tech Failure	Non-compliant mechanical items should be brought to the attention of the Race Director, who will inspect at the soonest opportunity.	At the discretion of the marhsal.	n/a
Insufficient Awareness	Driver in front must adhere to rules surrounding racing room	At the discretion of the marhsal; incidents will be tracked to note and address any patterns	n/aTBD
Overly Aggressive Driving / Loss of Control	The goal is to encourage cleaner racing with more high percentage pass attempts and more racing room generally. Overly aggressive driving can take many forms and will be assessed on a case-by-case basis.	At the discretion of the marhsal; incidents will be tracked to note and address any patterns	n/aTBD
Delinquent Fines	Driver has not settled fines from previous infractions	Driver will not be allowed to race	n/a
Contact during practice/qualifying		Mixed Session: Racer/Racer: driver at Fault cannot drive further that day. Racer/HPDE where racer is at Fault cannot further drive that weekend; HPDE rules apply in mixed session Race Group: penalties marshaled the same as Race	n/a
Contact During Race	Where a driver is deemed to be At-Fault or Involved, the former meaning corrective action should have been taken to avoid contact and was not, i.e. refusing to give		

	up a corner when overlap was achieved.		
Track Specific Rules, ACS: No Passing on the Apron	2+ wheels fully over the solid white line	Disqualification for the race when the infraction occurred. No exceptions, a safety violation.	\$25/\$50/\$100_first/second/third occurrence, discretionary thereafter
Track Specific Rules, ACS: No Passing between Turn 7-8	As stated	Disqualification for the race when the infraction occurred. No exceptions, a safety violation.	\$25/\$50/\$100_first/second/third-occurrence, discretionary thereafter
Track Specific Rules, CVR: No Passing between 2-1 when running CCW	As stated	Disqualification for the race when the infraction occurred. No exceptions, a safety violation.	n/a\$25/\$50/\$100_first/second/third-occurrence, discretionary thereafter

8. Prohibited Items

Vehicle:

4 point harnesses

Driver:

M (motorcycle) or non SA (kart) rated helmets

Engine:

Leaded gas, methanol Non OEM internal engine coatings Launch control and traction control

Suspension & Drivetrain:
Coilovers with more than one damping adjustment
Tire shaving
Multi-piece wheels
Forged wheels

Spherical Bearings (Bushings)
Any wheels with spokes protruding beyond bead face
Multi-piece sway bars
Aftermarket brake calipers and rotors
Aftermarket Differentials
Multi-disk clutches
Clutch friction disc smaller than 200mm outer diameter
Aluminum clutch pressure plates/covers
6-speed or non-OEM Transmission

Body & Aero:

Splitters, aftermarket curved air dams, front spoilers, canards or other front downforce producing modifications
Ducktail made of Acrylic or Glass
Ducktail longer than 13" in length, wider than rear quarter panels
Ducktail w/ significant 3D curvature, fences, gurneys
Non-OEM size aftermarket body panels