

Washington DC Region (WDCR), Sports Car Club of America (SCCA)
Mid Atlantic Road Racing Series (MARRS)
Showroom Spec Miata (SSM) Class Administrative Policy effective Jan 1, 2012

The SSM class is designed as a self-administrative, self-policing class, as nearly as is possible within the SCCA GCR framework. It is the objective of these administrative rules to provide written procedures by which the class is to be regulated.

Voting

Any SSM driver who has qualified in at least two MARRS sanctions in the previous 12 months, and has filed his name, address, and e-mail address with the Administrator is eligible to vote.

Administrator

The eligible SSM drivers shall elect a regional Class Administrator. If there is more than one candidate, the election shall be by secret ballot unless all candidates specifically waive this provision.

The Administrator shall be responsible for conducting the annual SSM election.

The Administrator shall administer the SSM rules and regulations of the class.

The Administrator shall be responsible for annually submitting rules for approval to the SCCA National Office, via the WDCR Club Racing Committee and the NEDIV Executive Steward.

The Administrator shall appoint a Technical Administrator.

The Administrator shall serve as the SCCA WDCR MARRS SSM Driver's Representative on the WDC Club Racing Committee.

The Administrator may be recalled by petition. The petition must include a minimum of 2/3 of the drivers who are eligible to vote. It must also include the name of a successor who would serve as the Administrator for the remainder of the term.

Technical Administrator

The Technical Administrator will interpret SSM rules on behalf of the class. Any interpretation may be appealed through procedures consistent with the GCR.

The SSM Technical Administrator may appoint assistant SSM Technical Administrator(s).

The SSM Technical Administrator shall assist WDCR Tech as required.

The SSM Technical Administrator, or his representative, will be available to assist the stewards with any mechanical protest. Should the technical administrator be involved in the protest as a witness, protestor, or protested party, the Class Administrator or his representative shall be available to assist the stewards with the protest(s).

The SSM Technical Administrator shall inspect each vehicle for specifications compliance on an annual basis and shall keep a logbook with information on all cars including SCCA logbook number, annual inspection, any rule violations, and dyno tuning results.

It is recommended that the Technical Administrator obtain a Regional Scrutineer License.

The SSM Technical Administrator shall relinquish his duties if so demanded by the Class Administrator, or if recalled by 2/3 of the eligible voters.

Inspections

All inspections will be conducted under the auspices of the WDCR Chief Scrutineer. Inspections are fundamental to rules compliance, and compliance is the essence of fair competition. Beyond that, SSM is equally concerned with the cost of being competitive. Each SSM must be presented for annual tech inspection to certify its compliance before its first MARRS race of the season. Ideally, this will be accomplished at the time of completing the required GCR annual tech inspection. Competitors are responsible for notifying the Tech Administrator and arranging for this inspection prior to qualifying. The Tech Administrator may conduct additional compliance with minimally-invasive tests and inspections as deemed necessary; i.e. removal of intake or exhaust manifolds, starter, valve cover etc.

Cars must be sealed as per the 2012 SSM engine sealing program (see Appendix A). This process is **mandatory** to compete for SSM points in MARRS events. Visiting competitors are welcome and may enter one MARRS event per season without sealing, but will be subject to all other WDC specifications and Administrative Rules. Except as specified above, non-sealed Miatas will not be allowed to compete in SSM, and a change in registration to SM (or any other class for which the Miata is eligible) will be required. Dyno certification and sealing is available during MARRS events by contacting RP Performance at Summit Point Gasoline Alley.

Extensive data compiled by the class has revealed a level of performance achievable by a legal motor. The sealing program is designed to limit performance to a pre-determined level by dyno testing, adjustment of timing and air/fuel ratio, and subsequent sealing of components. Every car presented at the sealing must compete in the same configuration that existed at the dyno. The intent of this procedure is to limit the use of expensive high performance parts, high cost fuel/fuel additives, or engine adjustments that may produce power but limit the longevity of components. Therefore post race/qualifying inspections may include fuel testing, dyno testing or the retrieval of performance information using data acquisition systems or any other installed device. Random compliance dyno testing may be conducted, but will be at no expense to the entrant or the region, and may be required to be done offsite. Data acquisition may be conducted by the temporary installation of a Traqmate data system as well as other systems. Acquired data will be used to compare speed, acceleration, and segment times to determine unusual performance advantages. A numbered seal will be placed on the valve cover, AFM, and ECU.

Protests and Penalties

Entrants who are found non-compliant with any of the SSM class rules will be advised of the infraction and are expected to resolve the issue as soon as practical, but no later than the next scheduled MARRS event. Class Administrators may however file protests as necessary. All protests shall be handled per the current GCR. Class administrators may not impose penalties, but may recommend penalties to the Chief Steward or the Stewards of the Meet. Infractions found during impound will result in penalties determined by the Stewards. A minimum three position penalty is recommended for any specification violation.

Compliance Checks

Any competitor may request to have another competitor's car checked for compliance with the sealing process. The request must be made in writing to the SSM driver rep or his designated representative if the driver rep is not present. The cost for compliance check is \$150 to cover the expense of the dyno time, is not refundable, and must be paid by the driver requesting the check. The SSM rep will choose another 2 cars producing lap times comparable to the protested car. These cars will then be identically checked and must all be within 2% of each other. If any car exceeds the others by 2%, the seals will be removed and the competitor will need to have his car brought into compliance. The intent is to make sure the three cars are producing **comparable** power. The "at track" conditions in terms of temperature/humidity etc might make it difficult to predict the actual peak HP value and thus class maximums might be exceeded without corrections being required (for example, all three cars produce one HP over the limit).

Appendix A – 2010 Engine Sealing Process

- 1.) Cars may be sealed at York Automotive or RP Performance for the 2012 season.
- 2.) All vehicles previously inspected and sealed for 2011 (seals good for 2 years, 2011 Valve Cover seals are Blue in color) are good for 2012, 2012 seals shall be good for 2013. However, any car placing in the top 10 in the 2011 SSM MARRS Points Championship must be sealed before MARRS 1 (and maintain their seal for the 2012 season free of charge) and the top 5 in any race of MARRS 1, 2 or 3 must be sealed (and maintain their seal for the 2012 season) at York Automotive after Jan 1, 2012 prior to competing in their next MARRS event. Thereafter any competitor placing in the top 5 in any MARRS feature race must have a seal dated after Jan 1, 2012.
- 3.) The sealing process will be performed under the supervision of the Class Administrator, Tech Administrator, or their designated representative. Contact the SSM driver's rep to get an inspector assigned. Seals are not valid unless attached under the supervision of a class representative.
- 4.) Any competitor wishing to unseal his or her car to perform maintenance may do so, but must then present the car to be resealed. If seals are removed and maintenance performed under the supervision of a class representative, the car may be resealed without dyno testing at the discretion of the class representative.
- 5.) The SSM driver rep reserves the right to adjust the engine sealing process as necessary to maintain parity.
- 6.) The engine sealing process is as follows:
 - a. Each dyno will use a single set of wheels/tires for all dyno pulls.
 - b. Each car will be checked for alignment. Cars that are not aligned properly will not be sealed.
 - c. Cars will not be sealed if the ambient temperature is above 80 degrees Fahrenheit or if the ambient humidity exceeds 80%.
 - d. Each car will be warmed up and the water, intake, and drive line temperature measured using an infrared pyrometer to maintain consistency. Measures listed on the sealing checklist.
 - e. Timing will initially be set to 15 degrees BTDC. Cars will then be tuned by using A/F ratio to maximize the car's output not to exceed the limits listed below. If requested by the car owner timing may be adjusted to reduce power to prevent A/F readings below 12.0, or to improve power if optimum A/F settings produce HP/torque below limits. Timing is restricted to 10-16 degrees BTDC. Any deviation exceeding 1 (one) degree from the final timing setting in the sealing process will result in disqualification. Drivers are responsible for monitoring their timing setting, and class timing lights will be available to standardize the process.
 - f. Each car will be pulled 3 consecutive times and the peak HP and torque

numbers recorded. Ideally the maximum performance will be obtained in pull 2 as engine temperature increases to and then exceeds optimum parameters. HP and torque numbers may not exceed the following parameters.

York Automotive: 1.6L 96 HP and 93 ft/lbs torque

1.8L 102HP and 99 ft/lbs torque

RP Performance: 1.6L 107 HP and 103 ft/lbs torque

1.8L 113HP and 110 ft/lbs torque

Any A/F results outside of “normal” may result in additional inspections.

g. Any car that exceeds these limits will not be sealed and must be corrected and rechecked prior to competing.