

# 2018 SEDIV Restricted Time Trial & HillClimb Rulebook

NOTE: Events formerly categorized as SCCA "Level 3/Time Trials" are now referred to as "Restricted Time Trials".

The rules specified herein apply only to SEDIV Restricted Time Trial events and HillClimb events, and do not apply to "Unrestricted Time Trials", formerly categorized as Club Trials/Level 2 events.

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# **SECTION I - SEDIV Safety Rules and Regulations**

**PHILOSOPHY:** SCCA Restricted Time Trials (TT) are timed competitive events where the drivers vie for the fastest individual lap time in their class. SCCA HillClimbs (HC) are timed competitive events where the drivers vie for the fastest individual elapsed time in their class. Neither TT nor HillClimbs are designed to be wheel-to-wheel racing.

Motorsports are inherently dangerous. These rules are intended to assist the orderly conduct of a motorsports activity and are in no way a guarantee against injury or death to participants, spectators or others. You can reduce risk by driving well, by properly using superior safety gear, by paying attention, and by reporting unsatisfactory issues to the event officials.

For all SEDIV Restricted Time Trial and HillClimb events, the safety regulations stated herein shall apply. SEDIV has chosen not to adopt the SCCA TTR for the 2018 season, as the rules are not yet complete, and do not satisfy what SEDIV considers to be minimum acceptable safety standards at this time.

# **DRIVER ELIGIBILITY:** Drivers should meet *one* of the following:

- Those who hold a SCCA Time Trials Competition license, or
- Those who hold a SCCA Time Trials Novice permit, or
- Those who hold a SCCA Competition License (Novice, or Full), or
- Those who hold a racing license from a recognized motorsports organization.

All drivers aged 15 to 17 must contact event officials before the event. A completed Annual Parental Consent, Release and Waiver of Liability, Assumption of Risk and Indemnity Agreement and a completed Minor's Assumption of Risk Acknowledgment is required (note: forms vary by state and witnessing method). A SCCA Time Trials or Competition License is not required. Current SCCA membership (weekend memberships are available) is required.

**REQUIRED DRIVER SAFETY EQUIPMENT:** Owing to the competitive nature of these events, driver's personal safety gear is required: Driving suits carrying FIA standards (8856-1986 or 8856-2000) or SFI 3-2A/5 or higher (e.g., /10, /15, /20) certification; Suits carrying SFI 3-2A/1 certification may be worn only with fire resistant underwear; Gloves made of leather and/or accepted fire resistant material containing no holes; Socks made of accepted fire resistant material; Face coverings (balaclavas) of accepted fire resistant material for drivers with beards or mustaches; and Shoes, with uppers of leather and/or nonflammable material that at a minimum cover the instep. Window safety nets or arm restraints are required. Arm restraints are required on all open cars. Closed cockpit cars may use either arm restraints or a driver's side window net. Crash helmets meeting Snell Foundation standards (SA2015, SA2010, SAH2010, SA2005), SFI standards 31.1A, 31.2A, or FIA standards shall be used. The use of a head and neck support system is highly recommended.

There is a considerable gap between a minimum standard and the best protection that current technology can provide. It is recommended that seats, restraint systems, roll bars, and helmets meet the highest safety standards possible.

**ELIGIBILITY OF VEHICLES:** All vehicles meeting the minimum vehicle safety equipment standards:

- All current GCR (both National and Regional) classes
- Solo Street Prepared and Street Mod classes
- Vintage-legal (SCCA, HSR, SVRA, etc.) cars
- Other classes (such as Specials, Rally, Legends, other race series, etc)
- Any class listed in Section II of these rules
- Automatic transmissions and hand controls are allowed.

**MINIMUM VEHICLE SAFETY EQUIPMENT:** All vehicles must have the following safety equipment at a minimum: driver restraints, roll bar or cage, fire extinguisher. Vehicles shall meet the safety requirements for the class in which they are logbooked.

**ROLL BAR SPECIFICATIONS:** A roll bar is defined as a main hoop and diagonal placed behind the driver and supplemented by two braces. The roll bar must be designed to withstand compression forces resulting from the weight of the car coming down on the roll structure, and to take fore-and-aft loads resulting from the car skidding along the ground on the roll structure. The basic purpose of the roll bar is to protect the driver in case the vehicle rolls over.

- One continuous length of tubing must be used for the hoop member with smooth continuous bends and no evidence of crimping or wall failure.
- The top of the roll bar must be above the top of the driver's helmet when the driver is in normal driving position.
- The two (2) vertical members forming the sides of the hoop must be more than fifteen (15) inches apart (inside dimension), and it is desirable that it extend the full width of the cockpit.
- An inspection hole of at least 3/16 inch diameter to facilitate verification of wall thickness might be required. It must be drilled in a non-critical area of a roll bar member at least three inches from any weld or bend.
- All bolts and nuts shall be SAE Grade 5 or better, 5/16" minimum diameter.
- Braces and portions of the main hoop subject to contact by the driver's or passenger's helmet, as seated normally and restrained by seatbelt and harness, must be padded with a non-resilient material such as Ethafoam (R) or Ensolite (R) or other similar material with a minimum thickness of one-half inch. Padding meeting SFI spec 45.1 or FIA 8857-2001 is strongly recommended.

• The size of tubing to be used for the main hoop, braces and diagonals shall be determined on the basis of the weight of the car. The following minimum sizes are required and are based upon the weight of the car without the driver. Dimensions are nominal. 0.005" variation in wall thickness is allowed.

Over 1500 lbs. 1.50 x .120 or 1.75 x .095 Over 1000 lbs. 1.25 x .090 Under 1000 lbs. 1.00 x .060

- The roll bar hoop and all braces must be of seamless or DOM mild steel tubing (SAE 1010, 1020, 1025) or equivalent, or alloy steel tubing (SAE 4130 or Docol R8). For cars logbooked before 1/1/16, existing ERW tubing is acceptable.
- All welding should be of the highest possible quality with full penetration. Craters should be filled to the cross section of the weld, and undercut be no more than 0.01 inch deep.
- All roll bars must be braced in a manner to prevent movement in a fore-and-aft direction with the braces attached within the top one-third of the roll hoop. At a minimum, two braces must be used, parallel to the sides of the car, and placed at the outer extremities of the roll bar hoop. Such braces should extend to the rear whenever possible. Diagonal lateral bracing must be installed to prevent lateral distortion of the hoop. In most cases, a lateral brace from the bottom corner of the hoop on the side to the top corner of the hoop on the other side is sufficient. Although installing the diagonal lateral brace in the main hoop is the strongest (and hence most preferable) alternative, there may be instances where such an installation is not practical. In such situations, the installation of the diagonal brace running from the bottom of the fore/aft brace on one side to the top corner of the hoop on the other side is acceptable.
- Removable roll bars and braces must be very carefully designed and constructed to be at least as strong as a permanent installation. If one (1) tube fits inside another tube to facilitate removal, the removable portion must fit tightly and must bottom on the permanent mounting, and at least two (2) bolts must be used to secure each telescope section. The telescope section must be at least eight (8) inches in length. One bolt is required if one end is welded to the main hoop.
- Roll bars and braces must be attached to the frame of the car wherever possible. Mounting plates may be used for this purpose where desired.
- In the case of cars with unitized or frameless construction, mounting plates may be used to secure the roll bar structure to the car floor. The important consideration is that the load be distributed over as large an area as possible. A backup plate of equal size and thickness must be used on the opposite side of the panel with the plates through-bolted together.
- Mounting plates bolted to the structure shall not be less than 0.1875 (3/16) inch thick and the use of a back-up plate of equal size and thickness on the opposite side of the panel with the plates through-bolted together is recommended. A minimum of 3 bolts per plate is required for bolted mounting plates.

- Mounting plates welded to the structure shall not be less than .080 inch thick. Whenever possible the mounting plate should extend onto a vertical section of the structure such as a door pillar.
- It is recommended that all cars utilize a roll cage as defined in the current GCR. All vehicles running a non-DOT tire/full racing slick shall utilize a roll cage as defined in the GCR. For closed cockpit cars which do not conform to a GCR class, roll cages which meet Improved Touring specifications at a minimum will be considered acceptable, unless otherwise specified by the SEDIV class rules.

**FIRE SYSTEMS:** All vehicles shall meet one of the following minimum requirements:

- On-board fire systems per GCR
- Halon 1301 or 1211, two (2) pound minimum capacity by weight.
- Dry chemical, two (2) pound minimum with a positive indicator showing charge. Chemical: 10 BC or 1A10BC Underwriters Laboratory rating.

The fire extinguisher shall be securely mounted. All mounting brackets shall be metal and of the quick-release type.

**DRIVER RESTRAINTS:** All drivers participating in TT or HillClimb Events shall utilize either a five, six or seven point restraint harness meeting one of the following: SFI specification 16.1 or 16.5, FIA specification 8853/1985 including amendment 1/92 or FIA specifications 8853/98 and 8854/98. All harnesses shall bear labels bearing either SFI or FIA certification. Shoulder straps shall be separate. Two inch shoulder straps shall only be used with head and neck devices. SFI and FIA harnesses are not subject to a time constraint but shall be in good condition (no cuts, abrasions, abnormal wear, etc.).

**SEATS:** It is highly recommended that the driver's seat be replaced with a one-piece bucket type race seat. If used, the one-piece bucket type race seat shall be securely mounted, so as to provide fore/aft and lateral support.

**VEHICLE PREPARATION AND INSPECTION:** The entrant is responsible for insuring that the vehicle being used is properly prepared for operation under elevated acceleration, braking and cornering forces. Cars must have a SCCA Time Trials or Road Race Logbook or a logbook from an accepted racing organization. Annual Inspections are allowed. Car numbers shall be at least 8 inches high and class letters shall be at least 4 inches high. Vehicles and/or logbooks will be inspected by the SCCA tech inspector at each event.

# **GENERAL RULES OF THE ROAD:**

- No driver, entrant, or crew may consume alcohol until all practice, racing, or track time for his group is finished for the day. Anyone who has consumed any alcohol on the day of an event, other than following the conclusion of his activities, shall not participate on that day, may be excluded from the balance of the event, and may be penalized. Alcohol may not be consumed in the pits until after all the day's on track activities are concluded. Performance impairing substances are prohibited at all times.
- Unless specifically authorized by the Chief Steward, passengers are not allowed in a vehicle unless an instructor is driving.
- Procedures will be defined by the operating officials and communicated to the participants during the drivers' meeting and in the supplemental regulations.
- The SCCA provides event liability and participant accident coverage for those who are properly registered (including waivers and credentials if necessary). Access to some areas require SCCA membership (weekend memberships are available).
- Everyone in attendance must properly follow applicable rules and regulations of the event.

# **SECTION II - SEDIV Class Designations:**

# The classes eligible for the SEDIV TT Points Championship are as follows:

- 2 All classes listed in the 2018 SCCA General Competition Regulations (GCR).
- 2 All Street Prepared classes listed in the 2018 SCCA Solo Rules.
- 2 All classes listed in the 2018 SEDIV Regional Class Rules.
- 2 All SEDIV Time Trial and Solo classes defined in this document.

# As of 2/8/2018, these classes and their class designations are:

#### **GCR Classes:**

Formula: Atlantic (FA), 1000 (FB), Continental (FC), Enterprises (FE), Vee (FV), F (FF), 500 (F5),

Mazda (FM), S (FS), First (FST)

Grand Touring (GT1, GT2, GT3, GTL)

Improved Touring (ITR, ITS, ITA, ITB, ITC)

Super Touring (STU, STL)

Production (EP, FP, HP)

American Sedan (AS)

**B-Spec** 

Spec Miata - See below in SEDIV Regional Classes

Sports Racing (ASR, P1, P2)

Spec Racer Ford (SRF)

Touring (T1, T2, T3, T4)

Spec MX-5 (SM5)

#### **Solo Classes:**

Street Prepared (SSP, ASP, BSP, CSP, DSP, ESP, FSP)

Classic American Muscle (CAM)

# **SEDIV Regional Classes:**

Improved Touring O (ITO)

Club Formula Ford (CF)

Improved Touring 7 (IT7, IT7R)

Spec Miata (SM) Note:SEDIV Time Trials Spec Miata incorporates any SEDIV regional

amendments to the National rules.

Super Production O (SPO)

Super Production U (SPU)

GTA-Southeast (GTA)

Spec Miata SouthEast (SMSE)

#### **SEDIV Time Trial Classes:**

Improved Touring E (ITE)

Improved Touring X (ITX)

Vintage Open (VO)

Vintage Closed (VC)

Showroom Spec Miata (SSM) (CCR Regional Class) Street Unlimited (SU) Specials (SP)

Classes not listed above may be offered by the hosting region, but they will not be eligible for SEDIV TT Points.

# **SECTION III - SEDIV Regional Class Rules:**

# **Street Unlimited (SU):**

NOTE: This class was formerly called Street Modified in SEDIV TT. To avoid confusion with the Solo class of the same name, the class name changed to Street Unlimited in 2010.

#### A - PURPOSE AND INTENT

Vehicles in this class should be titled and registered for use on public roads or have the ability to do so. It is intended as a class for street type cars whose modifications prevent them from finding a place in one of the historically available street type classes.

#### **B - ELIGIBILITY**

Vehicles with an existing SEDIV SM Solo1/TT level 3 or 4 logbook are grandfathered into SU per the owner's decision to change to this class, and an inspection by a licensed Time Trial inspector. Vehicles in this class must have working brake lights and windshield wipers. With the exception of kit cars entering the class prior to 1/1/1999, a safety glass windshield is required. All lights required for street registration must be present and functional.

#### C - SAFETY

Safety equipment should match performance potential. At a minimum, safety equipment must meet the requirements specified in Section I of these SEDIV Restricted Time Trial Rules.

# **D** - TIRES

Tires - Vehicles in this class must use a DOT rated tire.

#### **E - INTERIOR**

Interior – Dashboard must remain intact. Kit type cars must have a dashboard. Carpet, insulation, passenger seating, etc. may be removed. No sharp edges should remain within driver's reach. Doors may be gutted only if cage is installed and side bars protrude into this area. Additional bulkheads or modifications to bulkheads to seal passenger compartment are allowed. Unsealed holes in the floorboard or firewall are not allowed.

#### F - EXHAUST

Mufflers – Mufflers may be modified, substituted or removed for events. This does not supersede event noise requirements.

# <u>Vintage Open (VO) and Vintage Closed (VC):</u>

#### A - PURPOSE AND INTENT

To allow two vintage classes, VO (All open wheel cars) and VC (All closed wheel cars), to race at SEDIV Restricted Time Trials Events.

#### **B - ELIGIBILITY**

Drivers in these classes will have in their possession the "Vintage and Historic General Competition Rules and Specifications" (SCCA p/n 5684R) which can be purchased from SCCA, as well as the current GCR and Time Trials Rules. Cars entered in VO or VC must meet all applicable regulations and specifications listed in the above mentioned vintage rulebook as well as the safety requirements specified in Section I of these SEDIV Restricted Time Trial Rules.

#### **C - SAFETY**

All vehicles shall meet the safety requirements specified in Section I of these SEDIV Restricted Time Trial Rules, except as noted below:

If a car is running in a Vintage or Historic class and prepared to those specifications, they may run only a roll bar if no cage was used at the time the car was originally raced. This applies to all the cars with cage requirements, including Formulas (cars) and Sports Racers. Competitors are encouraged to use full roll cages if at all possible. The purpose of this tolerance is to allow for original race cars to be raced in original form (or as close as possible) without devaluing the vehicle by installing a full roll cage. This shall NOT be interpreted to apply to kit cars, special constructions, replicas, or any car that has been significantly modified from its condition as originally raced. Vintage and Historic cars may upgrade to current tires, batteries, incidental items, and other unavailable items to return the car to racing condition.

# **Specials (SP):**

#### A - PURPOSE AND INTENT

To allow vehicles which do not otherwise meet an eligible SEDIV Regional, Time Trials, GCR, or Solo classification to race at SEDIV Restricted Time Trials Events.

#### **B-ELIGIBILITY**

Vehicles that meet the requirements of Specials as defined below may compete in the Specials class, designated SP. In addition to these requirements, the vehicle must meet all applicable requirements of Section I of the SEDIV Restricted Time Trial Rules regarding construction and safety equipment (Note: Close attention shall be paid to roll bar/cage and fire system requirements specified in Section I and paragraph C below.)

Cars not otherwise classified, which meet the following minimum specifications, are considered as Specials.

#### C - BODYWORK

- a) Must be made of metal, fiberglass or other suitable fire resistant materials. The sides, front and back of the cockpit area must be at least as high as the driver's waist.
- b) Full and unobstructed access to the driver's seat must be provided.
- c) Firewall and floor shall prevent the passage of flame and debris to the driver's compartment. Belly pans shall be vented to prevent the accumulation of liquids.
- d) Fenders are optional and design of same are free. Sharp edges are not allowed.
- e) Minimum of one seat, capable of supporting the driver in an upright or semi-reclining position is required. Location of the driver's seat is unrestricted.

#### **B-CHASSIS**

- f) May be of any construction deemed safe.
- g) Minimum wheelbase is 72 inches.
- h) Minimum track (front & rear) is 42 inches.
- i) Minimum wheel diameter is 10 inches.
- j) All four wheels will be sprung from the chassis.

#### C - SAFETY

- k) Brakes must conform to those specifications listed in the Solo Rules, Section 3.3.3.B.13. The brakes shall be a dual system, arranged in a manner to provide braking for at least two wheels in the event of failure in part of the system.
- l) A roll bar or cage, conforming to the Section I of these SEDIV Restricted Time Trial Rules, shall be above the driver's helmet in the normal seated position and a head restraint keeping the driver's head from going under or behind the roll bar is required.
- m) Five- six or seven-point driver restraint systems are required.
- n) Vehicles shall have a Master Cutoff switch complying with GCR, Section 9.3.34.

#### D - AERO

- o) Aerodynamic devices may not have an overall width greater than 75".
- p) No aerodynamic device may extend more than 66" above the ground.
- q) The total area of all wings, when computed as described in Section 18.0 of the Solo Rules, shall not exceed 20 square feet.
- r) Movable side skirts are allowed.

# **Classic American Muscle (CAM):**

#### A - PURPOSE AND INTENT

It is the intent of these rules to allow GM, Ford, and Chrysler front-engine/rear-wheel-drive vehicles conforming to both the SCCA Solo Classic American Muscle (CAM) and safety

requirements of Section I of these SEDIV Restricted Time Trial Rules to race at SEDIV Restricted Time Trials Events.

#### **B - ELIGIBILITY**

Vehicles prepared for CAM competition shall meet all of the requirements set forth in the SCCA National Solo Rules for the CAM class, as augmented by the safety requirements specified herein.

#### **C-SAFETY**

All vehicles **must** have the minimum safety equipment specified in Section I of these SEDIV Restricted Time Trial Rules, which includes but is not limited to driver restraints, roll bar or cage, and fire extinguisher.

# **Improved Touring E (ITE):**

#### A - PURPOSE AND INTENT

It is the intent of these rules to allow closed wheel cars (mass produced, kit cars or others), prepared to the safety standards of the General Rules of Competition's (GCR) Improved Touring rules, to race at SEDIV Restricted Time Trials Events.

# **B - ELIGIBILITY**

Any closed wheel car shall be eligible for inclusion in SEDIV's ITE classification. Eligible cars include, but are not limited to, manufactured production cars, closed wheel sports racers, kit cars, replicas, or other race series derived cars. SEDIV will specifically recognize cars prepared in accordance with any other regional ruleset containing safety requirements similar to those in Improved Touring Category Specifications (ITCS) of the GCR.

#### **C - SAFETY**

All cars prepared for ITE competition shall be prepared in accordance with the safety standards set forth in the ITCS section of the GCR (including those references in the ITCS to other portions of the GCR), except as modified herein. The roll cage shall not be limited to eight points of attachment to the chassis/body (i.e greater than 8 points is permitted). All ITE cars may run an approved fuel cell.

#### **D - ENGINE AND TRANSMISSION PLACEMENT**

Engine and Transmission Placement. Engines and transmissions shall be confined within the bodywork.

# **E-TIRES**

Open Tire Rule.

# **Improved Touring X (ITX):**

#### A - PURPOSE AND INTENT

It is the intent of these rules to allow cars prepared for the ChampCar, LeMons, or similar series to race at SEDIV Restricted Time Trials Events. ITX is intended as a "fun run" class, without any promise of intent of performance equability. Cars which meet ITE requirements but are otherwise at a significant performance disadvantage to other ITE cars may be suitable for the ITX class.

#### **B - ELIGIBILITY**

- a) Cars must be a "mass produced" gas or diesel powered, four wheel passenger car.
- b) Minimum weight of 1800 lbs and a maximum weight of 4000 pounds.
- c) Engines must be production-based.
- d) Preparation regarding brakes, suspension, and engine must meet either ChampCar rules or SCCA Improved Touring rules.

## **C - SAFETY**

- e) All cars prepared for ITX competition shall be prepared in accordance with the safety standards set forth in the ITCS section of the GCR (including those references in the ITCS to other portions of the GCR).
- f) Vehicles may race with prior accident damage, provided that prior damage does not create a danger to the driver of that vehicle or fellow competitors.
- g) Non-functional additions to vehicles, whose primary purpose is to express creativity, themes, etc., are allowed only if they do not create a potential safety hazard to the driver or fellow competitors.

#### **D** - TIRES

h) Tires must conform to applicable Improved Touring rules, I.e., must be DOT rated tires, and sizes must be consistent with allowable dimensions per the GCR. 180 UTQG tires are not mandated, but may be used if the racer prefers.

### **Showroom Spec Miata (SSM)**

#### A. PURPOSE AND INTENT

Showroom Spec Miata (SSM) was conceived as an entry-level Regional class with an emphasis on simplicity, equality and low cost.

SSM vehicles shall conform to SCCA GCR Section 9, (Cars and Equipment), and Section 9.1.7 (Spec Miata Class), with the exception of the following restrictions or specifically allowed modifications. These rules are not intended as guidelines or suggestions and they will be vigorously enforced.

The Showroom Spec Miata (SSM) class is intended to provide the membership with the opportunity to compete in a production-based car with limited modifications, suitable for racing competition. The rules are intentionally designed to be more open than the Showroom Stock class but more restrictive than the Spec Miata Class.

The vehicle identification number (VIN) shall correspond with the model-year automobile classified. VIN plates or stampings shall remain in place. There must be a minimum of two (2) VIN plates or stampings that correspond with the model year automobile classified.

#### **B. CLASSIFIED CARS AND WEIGHTS**

- a- 1990 1993 Miata 1600 cc @ 2275 lbs.with driver.
- b- 1994 1997 Miata 1800 cc @ 2400 lbs with driver. 1800 cc cars must be homologated to these rules prior to December 31, 2017.
- c- The class designation of SSM shall be displayed as specified in the GCR.
- d- MARRS SSM is allowed to compete in the Carolinas SSM class. MARRS SSM shall conform to their rule set in its entirety.

#### C. AUTHORIZED MODIFICATIONS

The following items represent the only modifications and safety items permitted and/or required on Showroom Spec Miata automobiles other than safety items as required in the current GCR. No permitted component/modification shall additionally perform a prohibited function. No updating or backdating of cars, models, specifications, and/or components thereof shall be permitted except as specifically authorized. A Mazda Factory Service Manual for the specific make, model, and year of automobile is required to be in the possession of each entrant. The manual is intended to aid a Scrutineer in identifying parts and the configuration of the automobile. Overhaul procedures that in the slightest way would increase performance are not to be utilized, for example, porting. Blueprinting and balancing are inconsistent with the philosophy of this class and are not permitted. The application and/or use of any painting, coating, plating, or impregnating substance (i.e. anti-friction, thermal barrier, oil shedding coatings, chrome, anodizing, etc.) to any internal engine surface, transmission, differential, internal or external surfaces of the exhaust manifold or downtube, is prohibited. All adjustments shall be at the manufacturer's specification and/or within the manufacturer's specified tolerances except as permitted within these rules. Stock replacement parts may be obtained from sources other than the manufacturer provided they are the exact equivalent of the original parts. The intent of this rule is to allow the competitor to obtain parts from standard industry outlets, e.g., auto parts distributors, rather than from the manufacturer. It is not intended to allow parts that do not meet all dimensional and material specifications of new parts from the manufacturer. Note that OEM "replacement" is not necessarily the same as OEM "equivalent".

# 1. Engine Modifications

- A Induction System
- 1 All air entering the intake tract shall pass through the fuel injection air inlet.
- 2 All cars must use the stock air box. An OEM style filter element must be present.
- 3 1600 cc cars shall use and may open and adjust, but not modify, the OEM airflow meter.
- 4 1800 cc cars shall use but not modify the OEM airflow meter.
- 5 1800 cc cars shall use an air restrictor. The throttle restrictor shall be placed between the throttle body and plenum. All intake air shall pass through the restrictor plate. Restrictor plates must be the proper size as listed below, cannot be modified and must be from MAZDASPEED Motorsports Development or SCCA

Enterprises. The restrictor plate opening must be centered in the throttle body opening. 6 - Cylinders may be over bored to 3.086" (+0.010" over). Must use the Mazda OEM piston B6Z2-11-SB0C if over bored.

1994 through 1997 1800 cc SSM must use a 45 mm. throttle restrictor. The restrictor shall be MAZDASPEED part # 0000-06-9945 or SCCA Enterprises part # SMRP-45.

## B - OEM equivalent specifications

Fluid hoses and clamps, oil filters, fuel filters, and belts (fan, alternator, etc.) may be substituted with others of equivalent OEM specifications.

# C - Fuel System

- 1 Unleaded fuel filler trap door and restrictor plate in filler neck may be removed.
- 2 Refer to current GCR for permitted fuel specifications and for the required fuel sample acquisition port.
- 3 The current GCR Section is further restricted for SSM to limit fuel to a maximum of 94 octane. Fuel must be from a commercially mass marketed supplier (e.g. Sunoco, Exxon, Mobil) or independent mass marketer (e.g. Sheetz). Limited use race fuels are not permitted. Pump fuel may be purchased at the track.

# D - Ignition/Electrical System

- 1 Ignition timing is limited to a maximum of 15 degrees BTDC and a minimum of 8 degrees BTDC.
- 2 Batteries may be replaced with those of an alternate manufacturer provided they are of similar amp-hour capacity, size, and weight and are fitted in the standard location. Additional battery hold-down devices may be used, and are strongly recommended.
- 3 Master cut-off switch may be used and recommended. Installation per current GCR.
- 4 Spark plugs are restricted to the:
- 1.6L NGK BKR6E-11 (Mazda part number BP03-18-110).
- 1.8L NGK BKR5E-11 (Mazda part number BP01-18-110)
- 5 Ignition wires are restricted to stock NGK(Mazda part number 0000-18-121A, NGK part number 9160), or Taylor (Mazda part number 0000-10-5301).

# E - Exhaust System

- 1 Catalytic converter shall be removed. All other exhaust components will remain OEM stock with the exception of item 2 below.
- 2 Exhaust shall be MBS Performance Exhaust for Spec Miata Model # 9093SME. Exhaust is

available at <a href="http://mandrelbendingsolutions.com/spec-miata-race-exhaust/">http://mandrelbendingsolutions.com/spec-miata-race-exhaust/</a> and elsewhere and shall not be modified. Mazdaspeed Motorsports spec exhaust part # 0000-06-54253 (no longer available) as manufactured by Bosal is allowed.

3 - Original exhaust system heat shields may be removed. Heat wrapping of any kind is prohibited.

# F. Clutch System and Flywheel

- 1 All cars shall use either the stock OEM pressure plate for the appropriate model year, or the ACT pressure plate (Mazdaspeed part #0000-0205401-SS (1.6L cars) or 0000-0205404-AC (1.8L cars). The unmodified pressure plate shall be bolted directly to the appropriate stock, unmodified flywheel. The 94 model year may utilize the flywheel from the 95-05 model years. Any clutch disk may be used. Clutch lines may be replaced with steel lines or Teflon lined metal braided hose.
- 2 The OEM flywheel may be resurfaced, but the minimum flywheel weight (including the pilot bearing) is 17.6lbs for the 1.6L and 17.1 lbs for the 1.8L.

#### G. Lubricant

1. Any lubricant may be used. Oil additives are unrestricted.

#### H. Camshafts

1. Camshafts shall comply with the Official Spec Miata Camshaft Data as supplied by the SCCA Tech Department.

# I. Engine claim rule

Engine may be claimed for \$3000.00. This fee includes cost of claimed engine and RR labor for competitor that engine was claimed from.

#### 2. Cooling System

Any radiator may be used, provided it is mounted in the original location, maintains the same plane as the original core and requires no body or structure modifications to install. New openings created by fitting an alternate radiator must be blocked and may not be used for the purpose of ducting air to the engine.

- 1 The stock cooling fan shall be maintained. Secondary AC condenser fan may be removed.
- 2 The aftermarket radiator shall be modified, if necessary, to mount the stock OEM cooling fan in the original mounting location(s).
- a Thermostats may be modified, removed, or replaced.
- b All cars may install the Upper Radiator Seal, part # NA75-50-0K7A, or close off the same area to create the same effect.
- c A radiator screen of one-fourth (1/4) inch minimum mesh may be added in front of the radiator and contained within the bodywork.
- d The factory air conditioning systems may be removed. Items that serve a dual purpose, such as the alternator/air conditioning compressor bracket, may not be substituted.
- e Engine coolant fluid, coolant/heater hoses and clamps may be substituted. Heater core may be bypassed, but it may not be modified or removed. Heater water control valve(s) may be added or substituted.

#### 3. Transmission/Final Drive

1 - Transmission and final drive ratios must remain stock for the year of car.

- a- Transmissions with part numbers superseding those of the 90-93 transmission may be used.
- 2 May use the stock, unmodified viscous limited slip differential or the MAZDASPEED Motorsports Development limited slip differential, part # QN10-64-A00 (previously TOY1-27-200 & 0000-02-5501).
- a The 90-93 Miatas may convert to the 99-05 differential housing and the 4.3 differential gear ratio from the 99-05 model years. This conversion includes the driveshaft and half-shafts. The original 90-93 model rear suspension uprights must be retained.

#### 4. Chassis

Suspension modifications are limited to the addition of the MAZDASPEED Motorsports Development "Spec Miata kit" and those modifications detailed in this area.

a - MAZDASPEED Motorsports Development Spec Miata kit.

1990-93 1.6 DOHC K-SPEC-M5-SUSP

1994-97 1.8 DOHC K-SPEC-M5-SUS8

The following is a breakdown of components supplied within these kits. All parts numbers are MAZDASPEED Motorsports Development parts numbers. No substitution of parts is allowed. The kits must be used in their entirety.

#### 1 - Shocks

Front Bilstein part # 0000-04-5225-BL Rear Bilstein part # 0000-04-5226-BL

# 2 - Springs

Front Eibach ERS 700 lbs/6" part # 0000-04-9700-06 Rear Eibach ERS 325 lbs/7" part # 0000-04-9325-07

#### 3 - Coil-Over kit

Front/Rear part # 0000-04-5402AW

The originally supplied Mazdaspeed coil-over kit Part # 0000-04-5402 manufactured by Ground Control is grandfathered.

#### 4 - Anti-Roll Bars

1600 cc: Eibach kit – part # 0000-04-5302-EB Front 24mm Adjustable Rear, 15mm Adjustable 1800 cc: Eibach kit – part # 0000-04-5303-EB Front 27mm non-Adjustable Rear, 15mm Adjustable

- b All cars shall use the unmodified Mazdaspeed bump stop part # 0000-04-5993AW. Cars built with the original procedure of welding a 63.5 mm centering ring to the outside diameter of 58 mm are grandfathered if the logbook was issued prior to 01/01/2003.
- c Sub-frame braces may be updated to stock 1997 configuration utilizing the MAZDASPEED Motorsports Development Spec Miata kit.
- d Anti-roll bar links may be replaced and may be adjustable, but the attachment points must remain stock. The control arms and specified anti-roll bar may not be modified. One end of the sway bar(s) may be disconnected as a suspension tuning aid. The bar must remain in place and be solidly attached to the suspension on one end.
- e Suspension alignments caster and toe are unrestricted within the limits of the unmodified factory adjustments. Minimum ride height is unrestricted.

Camber: Front: Maximum 2.5 degrees negative

Rear: Maximum 3.0 degrees negative

- f No relocation or reinforcement of any suspension component or mounting points is permitted.
- g Hardware items (nuts & bolts) may be replaced by similar items performing the same fastening function(s).
- h Manual or power steering racks may be used. Power steering racks may be converted to manual by removing all power steering components.
- i Towing eyes per current GCR Section are required. Stock towing eyes may be modified or replaced.
- i Hubcaps and wheel trim shall be removed.
- k All chassis/structural/electrical repairs, if performed, shall be in concurrence with factory procedures, specifications, and dimensions. Unless specifically authorized by the manufacturer for repair or allowed by these rules, no reinforcement, i.e., seam welding, material addition, etc., is permitted.

#### 5. Brakes

- a. 1 Backing plates and dirt shields may be removed.
- b. 2- Brake lines may be replaced with steel lines or Teflon lined metal braided hose.
- c. 3- Cars with antilock braking systems must have the system disabled or removed as specified in current GCR.
- d. 4- Parking brake mechanisms and actuating components may be removed.
- e. 5- Brake pads and brake fluid are unrestricted

## 6. Wheels/Tires

All wheels must be used in matched sets of 4 and may be used within the following limitations:

- a Required rim diameter is fifteen (15) inches by seven (7) inches width.
- b Minimum weight of wheel shall be 13 lbs. Spacers are permitted providing the end result offset is either 30mm or 25mm. All four wheels must have identical offset.
- c All wheels must be one-piece metal castings (not multi-piece wheels, bolted, riveted or welded together).
- d After market wheel studs are permitted.
- e The spec tire is the Toyo RA1 205-50-15, shaved or unshaved.
- f Tire tread (that portion of the tire that contacts the ground under static conditions) shall not protrude beyond the fender opening when viewed from the top perpendicular to the ground. To determine compliance, the vehicle should be rolled through a powdered substance, as raced with driver, in order to indicate the tire tread contact patch under static conditions.

# 7. Body/Structure

- a Fenders and wheel openings shall remain unmodified. It is permitted to roll under or flatten any interior lip on the wheel opening for tire clearance. Non-metallic inner fender liners may be removed.
- b Body repair shall be performed using every reasonable effort to maintain stock body contours. Any body repair modification having as its purpose increased clearance is prohibited. Cars shall meet the requirements of current GCR Section, Vehicle Preparation, at all times.
- c No air dams, wings, or spoilers are allowed other than the "R" package Miata chin spoiler provided it is mounted in the OEM location.
- d Windshield Clips/Rear Window Straps per current GCR Section are permitted and recommended.

- e Convertible tops and attaching hardware shall be completely removed. Cars may compete with the Mazda factory detachable hard top or Snug Top in place (latches shall be replaced with positive fasteners), but it is not mandatory. When no top is used, driver shall wear arm restraints, and the cage must meet the helmet clearance rule.
- f Body side moldings, rocker panel moldings, and wheel opening trim pieces may be removed.
- $\ensuremath{\mathsf{g}}$  The plastic trim on the hood may be removed.
- h Hood and trunk clips are permitted. Stock hood latches and trunk latches may be disabled or removed.
- i Ducting may be added to provide fresh air to the driver compartment. This ducting shall be located in the driver and/or passenger vent window area with no modifications to the bodywork.
- j To improve driver exit through the window area, the driver vent window and vent window supports may be removed. If removed, ducting may be in the passenger side vent window only. k Radio antennas may be removed. Antennas for two-way radios may be added.

## 8. Driver/Passenger Compartment/Trunk

- a The driver's seat shall be replaced with a one-piece bucket-type race seat. All seat mountings shall be reinforced. Factory seat tracks/brackets may be modified, reinforced, and/or removed to facilitate replacement mountings provided they perform no other function. The OEM passenger seat must be removed, but a replacement seat meeting the specifications of the driver seat may be substituted.
- b Any steering wheel, except wood rimmed types, and its required mounting modifications may be used. Any shift knob may be used.
- c Gauges and instruments, including data systems, may be added, replaced, or removed. They may be installed in the original instrument(s) location using a mounting plate(s), or any other location using a secure method of attachment. The vehicle's "Check Engine" light shall remain functional. Other than modifications made to mount instruments and provide for roll cage installation, the remainder of the dashboard or panel shall remain intact.
- d Any interior mirrors may be used.
- e Carpets, center consoles, cargo bins, seat belts, floor mat, radio system, headliners, dome lights, grab handles, sun visors and their insulating and attaching materials may be removed. Other than to provide for the installation of required safety equipment or other authorized modifications, no other driver/passenger compartment alterations or gutting are permitted.
- f The driver/passenger side door window glass, window operating mechanism, and inside door latch/lock
- operating mechanism may be removed and the inner door structural panel may be modified, but not removed. The stock side impact beam and the outside door latch/lock operating mechanism shall not be removed or modified.
- g Two way radios may be used.
- h Spare wheels and tires, jacks and tools shall be removed from the cargo/trunk area. Spare tire covers and trunk mats and/or trunk carpeting shall be removed.
- i Modifications may be made to the foot pedals to improve the comfort and accessibility to the driver. Dead pedal/foot rest and heel stop may be added.
- i If ballast is required to meet the required weight it shall be added as follows:
- 1 All ballast shall be securely mounted on the passenger floor.

- 2 Each segment of ballast shall be fastened with a minimum of two (2) one-half (1/2) inch bolts and positive lock nuts of SAE Grade 5 or better and shall utilize large diameter, load distributing washers.
- 3 Holes may be drilled in the passenger floor pan for the purposes of mounting the ballast and the floor pan may be reinforced for that purpose only.
- k All cars shall run with both front door windows fully open (down).

# 9. Safety

- a Roll cages shall meet all requirements of current GCR Section 9. for cage configuration, tubing size, and material. Regardless of car weight, all Showroom Spec Miata autos may be constructed to the requirements for a <2200 pound car.
- b Steering lock mechanisms must be removed. See current GCR Section.
- c An electrical master ("kill") switch is required. See GCR Section 9.3 Master Switch.
- d Installation of a fire extinguisher or fire system is required. See current GCR.
- e Glass headlight bulbs shall be taped or removed. Rear brake lights may be taped with transparent tape. Turn signals, front parking lights, backup lamps, and side marker lights may be taped.
- f Air bag systems shall be disarmed and all airbag components may be removed.
- g In any automobile where allowed removal of seat belts, upholstery, etc., creates an opening between the driver/passenger compartment and an exposed gas tank, or part thereof, including the filler tube, a metal bulkhead which completely fills such opening shall be installed. See current GCR.

# **SECTION IV - SEDIV Information:**

#### **Useful links:**

SEDIV SCCA Time Trials Home Page: <a href="http://www.sedivtt.com/">http://www.sedivtt.com/</a>

SEDIV Time Trial Rules: http://www.sedivtt.com/rules/

Note: See "SEDIV TT Class Rules" for car classification, see "SEDIV TT Rules" for championship

series rules.

SCCA Solo Rules: <a href="https://www.scca.com/pages/solo-cars-and-rules">https://www.scca.com/pages/solo-cars-and-rules</a>

SCCA General Competition Regulations: <a href="https://www.scca.com/pages/cars-and-rules">https://www.scca.com/pages/cars-and-rules</a>

SEDIV Regional Road Racing Class rules: <a href="http://www.sedivracing.org/">http://www.sedivracing.org/</a>

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