



H2R Challenge Miata Class

Rules 2.3 - 01/12/2020

The “SPIRIT” of this H2R Challenge is as follows:

This series is a real racing event open to Harris Hill Members only, designed to be as inexpensive as possible, while maintaining recognized safety regulations previously established by the larger sanctioning bodies.

Harris Hill Raceway is a private club that promotes a culture of friendliness, support, and camaraderie among its members. The H2R Challenge is designed to be an extension of that culture, despite its nature as a competitive event.

Therefore, the safety rules, performance rules and driving rules are designed to promote entertaining, healthy competition, while discouraging overly aggressive driving and contact between cars while racing. They are also intended to keep the cars as similar in performance ability as possible, thereby rewarding driving and racing skill, and minimizing the effect of budget disparities between competitors.

With this in mind, the smart builder or driver will err well within the boundaries of the rules, rather than pushing the edges.

The “SPIRIT” of the H2R Challenge Miata Class is as follows:

The original intent of the series was for members to take \$500 - \$1500 100% OEM 1989-1993 1.6L Miatas with over 100,000 miles on the drive train and outfit them with safety equipment specified in the H2R Challenge General Rules.

The reality is that most of the cars in the series now are former Spec Miatas from SCCA or NASA series. In order to keep the H2R Challenge competitive and affordable for everyone, please pay close attention to the rules outlined below, as they will likely involve removing some after market items and replacing them with OEM or equivalent parts.

Drivers whose cars do not meet the OEM or performance standards set forth below MAY be allowed to race in limited circumstances with permission of the H2R staff, but will not be scored or allowed to earn points for the event or series.

As an H2R Member, the cost of your participation in the H2R Challenge Series is included in your membership dues, with the exception of a small annual fee, which helps cover insurance and safety crew costs. That annual fee usually runs between \$200-\$300 per racing member, and it will be assessed at the beginning of each season. Harris Hill Raceway reserves the right to levy additional fees to cover race series expenses, should they be necessary.

Please keep in mind that the H2R Challenge is possibly the best value in motor racing you will find anywhere. If you find the costs of participating in this series and keeping your race car up to date with current specifications to be unacceptable, this series is not for you.

The H2R staff and H2R Challenge Series stewards will have final judgement regarding any questions that may arise from the interpretation of the rules documents.

Miata Car and Parts Rules:

This is an OEM stock production based class.

All parts of the car must be OEM stock as equipped on the greater majority of 1989–1993 1.6L production Mazda Miatas.

NO changes, additions, removals or modifications are allowed unless specifically addressed in the rules.

NO “Mazda Speed” replacement parts are accepted unless specifically mentioned.

If the rules do not specifically say you can do it, you are not allowed do it.

*If you cannot determine the difference between a safety and performance rule, consult a race steward BEFORE making the purchase, change or modification.

Miata Specific Clarifications and Allowed Modifications:

Suspension:

Shocks- The shocks must be OEM 1989-1993 Mazda Miata or KYB OE replacements shocks with fixed collar locations, and non-serviceable (non-rebuildable!).

Springs- The springs must be OEM 1989-1993 Mazda Miata or Racing Beat springs. If you choose to use OEM springs, you may cut them so that your car meets minimum ride height.

*KYB shocks and Racing Beat springs can be purchased at a discount through Danny Benzer at Roger Beasley Mazda Central.

-Minimum ride height is 4 3/4". Ride height will be measured at the non-crushed pinch weld of the driverless car immediately behind the front tires and immediately in front of the rear tires at all 4 points.

-Rubber/Silicone/urethane/similar (NOT solid) replacement bushings for suspension components are open.

-The factory bump stops may be replaced with 5X Racing Sport Bump Stops, available at 5xracing.com, SKU: 5XRNA46/36

-The factory sway bars, links and associated hardware may be replaced; specification is open.

Brakes:

-Brake pads must be 1989 -1993 Mazda Miata spec, but the brand/manufacturer is open. Racing compounds are permitted and encouraged.

-Brake rotors must be OEM 1989 -1993 Mazda Miata spec but the brand/manufacturer is open.

-Brake fluid is open

-Stainless brake lines at the calipers are permitted.

-Parking brake removal is permitted.

Power and Exhaust:

-Fuel must be "pump" fuel, 93 octane or less.

-Octane boost is not permitted.

-Minor repair and/or replacement parts for the engine and drive train may be aftermarket parts. The parts must be the same specification as OEM 1989 - 1993 Mazda Miata with no performance enhancement or appearance change. (Examples are water pump, timing belt, seals, gaskets, hoses, filters). Major parts, such as the crankshaft, block, head, and cams must be OEM 1989 - 1993 Mazda Miata. If there is ANY question on this, consult a race steward FIRST.

-100HP is the maximum allowed. The top three finishers and one random participant in any given race are subject to being tested on a dyno to measure benchmark (stock) power curve and max HP. Cars above the benchmark, will be subject to disqualification.

-The air intake must be OEM 1989-1993 Mazda Miata with no modifications or changes from the engine through the end of the intake snorkel on the OEM air box.

-Air filter brand is open.

-Engine oil and filter are open.

-Transmission oil is open.

-Engine coolant is open.

-The exhaust must be OEM 1989-1993 Mazda Miata from the header to the muffler. The muffler must be either stock or Bosal replacement, available from rockauto.com, part # 284567.

-The Catalytic converter must be either removed and replaced with a “test pipe” or cored out. This is for fire safety. The “test pipe” may be welded in place, but may not exceed the length of the OEM catalytic converter by more than 6 inches total.

Transmission and Drive Train:

-The differential may be from either a 1.6 or 1.8 Miata, open or limited slip.

-Rear differential oil is open.

-The clutch pressure plate must be OEM or OEM spec.

-The clutch disc is open.

Wheels and Tires:

- For 2020, the series will allow only:

205/50-15 ---Falken Azenis RT615K

-Wheels are open, but must be compatible with the tire specified above. Fenders may have the inner edges bent upward to clear the tires but the outer shape of the fenders may not be altered for clearance. Use the correct wheel offset.

-A “race” alignment adjustment is permitted and encouraged. Front wheel camber may not exceed 2.75 degrees negative. Replacement bushings to achieve camber within spec is permitted. Cars will be checked without driver in the car.

Body, etc:

-Power steering and A/C system removal is open.

-Front headlamps must be removed

-An OEM or fiberglass replacement hard top is optional but must be attached at all 4 OEM points. If a hard top is installed, the convertible top and frame **MUST** be removed from the car.

If the hard top is NOT installed, the folding convertible top may be up and secured while racing. If the top is folded down during the race, the frame must have at least 2 wraps/attachments (zip ties, wire) around the frame and the body to prevent it from deploying during a crash. If the car has only the folding frame and no vinyl top, it **MUST** be removed from the car.

-The H2R Challenge does allow complete removal of interior plastic, carpet, switch assemblies, wiring, heating, A/C and non-metallic items, including the plastic dash.

-Metal removal from the interior for the purposes of safety is acceptable, (ex: Roll cage clearance for rear shoulder belt mount) **BUT** must done at a minimum. For example, you may not cut off the seat belt towers when a notch or simple design change is possible. When in doubt consult a race steward **BEFORE YOU CUT!!!**

-Shift knobs, pedals, gauges and other driver “comfort” items are open.

-Fender liners and mud flaps may be removed.

-The **absolute** minimum weight of the car and driver is 2300lbs, post race. A maximum of 100lbs of ballast may be added to achieve minimum weight. All ballast must be **securely and safely** attached to the passenger side floorboard. The top three finishers and one random participant in any

given race will be subject to a weight check immediately following the race.
Cars below minimum weight will be subject to disqualification.