



## **H2R Challenge Miata Class**

Rules 1.9 - 4/8/2017

### **The “SPIRIT” of this H2R Challenge Miata Class is as follows:**

A real sprint and/or endurance-racing event open to Harris Hill Members only.

A racing event as inexpensive as possible while maintaining all recognized safety regulations previously established by the larger sanctioning bodies.

A friendly competition between drivers in “like” machines and not vice versa.

### **The “SPIRIT” of this class is as follows:**

Stock OEM 1989-1993 1.6L Miatas.

What we would *like* to see are \$500 - \$1500 100% OEM 1989-1993 1.6L Miatas with over 100,000 miles on the drive train, outfitted with safety equipment specified in the H2R Challenge General Rules.

If any questions arise from the interpretation of these rules, or during an event, the SPIRIT of the rule will be the guideline for the final decision by the race committee.

Driver's whose cars do not meet the OEM or performance rules MAY or MAY NOT race but will not be scored or earn points for the event or series. See "Spirit" sections above.

Harris Hill is a club. It is not the SCCA. After an SCCA event, the drivers all go home to different parts of Texas and surrounding states. Sometimes never interacting with each other again. Here at Harris Hill we all know each other and see each other sometimes on a weekly basis. The safety rules, performance rules and driving rules herein are designed to promote entertaining real competition without the overhead of who spent more or overly aggressive driving and contact racing. This is why the "spirit" of the rules is listed and will be referred to when casting judgment. Knowing this available disparity, the *smart* builder or driver should err well within the boundaries of the rules rather than pushing the edges.

### **Expense Mantra:**

Racing costs money.

Spec Miata costs a lot more.

This event costs a lot less.

Used parts are extremely affordable and easy to find.

Racing costs money.

When asked to make changes to your car or safety gear to comply with these event rules, please refer to the racing expense mantra. If the costs of this event offend your sensibilities or exceed your budget, then racing this event is not for you and we are sincerely sorry.

### **Performance 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 to 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.

Noted requirements of the performance rules:

>The exhaust must be OEM 1989-1993 Mazda Miata from the header to the tail pipe. The muffler may not be altered internally or externally in any way.

> The shocks and springs must be OEM 1989-1993 Mazda Miata.

>The above items assure that ALL H2R Challenge Miatas will have the same exhaust and shocks. The only variation will be the wear present due to the age of the parts.

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

H2R Allowed performance changes to the car:

>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, cams must be OEM 1989 - 1993 Mazda Miata.

If there is ANY question on this, consult a race steward FIRST.

- >Brake pads must be OEM 1989 -1993 Mazda Miata spec but the brand/manufacturer is open.
- >Brake rotors must be OEM 1989 -1993 Mazda Miata spec but the brand/manufacturer is open.
- >Brake fluid, engine oil, transmission oil, rear diff oil is open.
- >Engine coolant is open, but WATER is recommended (waterwetter or equivalent ok). Spilled coolant is hard to clean off the track!
- >Power steering and A/C system removal is open.
- >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 but may not exceed the length of the OEM catalytic converter by more than 6 inches total.
- >The differential may be from either a 1.6 or 1.8 cars. Torsen differentials are NOT allowed.
- >The clutch pressure plate must be OEM or OEM spec.
- >The clutch disc is open.
- >Fuel must be “pump” fuel, 93 octane or less.
- >An OEM hard top is optional but must be attached at all 4 OEM points.  
Note: Using the hard top negates the open cockpit 2” helmet to cage clearance rule. 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 to the body to prevent it from deploying during a crash or catastrophic event. If the car has only the folding frame and no vinyl top, it **MUST** be removed from the car.

>Wheels may be replaced with 15X7 units no lighter than 12.7 lbs. 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. E.G. Use the correct offset.

> Tires – For 2017 the series will allow only the tire and size listed below.

**205/50-15 -- Dunlop Direzza Sport ZII Star Spec**

>The H2R Challenge does allow complete interior plastic, carpet, switch assys, wiring, heating, A/C and non-metallic item removal 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. E.G. you cannot 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, mud flaps may be removed.

>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.

> Rubber/Silicone/urethane/similar (NOT solid) replacement bushings for suspension components are open. The spirit of this rule is that the aftermarket bushings are cheaper than the OEM by quite a bit.

>Stainless brake lines at the calipers are open.

>Parking brake removal is open.

>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. The measurement will be done with a wooden 2X6 “Go/No-Go” gauge cut to 4 3/4". No-Go, no race.

> Suspension modifications:

1) Racing Beat springs will now be a spec'd option. Springs can be purchased through Danny Benzer at Roger Beasley Mazda Central (off Burnet).

NOTE: SPRINGS are NOT "open", they are spec'd items. Therefore, you have the option to run the configuration listed or stock springs cut to meet minimum ride height.

2) KYB OE replacements shocks with fixed collar locations, and non-serviceable (non-rebuildable!). Available at a discount from Danny Benzer. PN = (I need to look this up, but Danny knows what we need).

3) Stock OEM bump stops are required (no substitutions).

The minimum weight of the car and driver is 2350lbs post race. Driver's will be responsible for making minimum weight to obtain points for that race. A maximum of 100lbs of ballast may be added to achieve minimum weight. If it requires more than 100 pounds to bring the car up to minimum weight, the entrant needs to revisit what has been removed from the car and reinstall as needed to bring the car back to minimum weight. All ballast must be securely and safely attached to the passenger side floorboard. Creative attempts to disguise ballast in other parts of the car will result in disqualification or worse. Each car is subject to inspection during post race weighing. When possible, Harris Hill will have scales available pre-race for participants. Additional ballast may be allowed for drivers weighing less than 100lbs.

> Overall horsepower of the car will be a tech item when possible. The "Spirit" of the rules is to run a stock 1.6L Miata engine. Benchmark (stock) power curve and max HP will be tested on the dyno. **100HP is the maximum allowed.** Cars above the benchmark, will be subject to disqualification.