



H2R Challenge Competition Rules

February 2023

Introduction

H2R Challenge – H2R Challenge is a motorsport activity offered to Harris Hill members. Drivers must be members of Harris Hill Raceway. The Challenge is a series of sprint races at Harris Hill Raceway. The goal of the series is to create classes of racecars that are affordable to both own and maintain, and to focus on driving skill rather than horsepower.

Harris Hill is a club! At Harris Hill we all know each other and see each other frequently. The safety rules, performance rules and driving rules are designed to promote entertaining real competition without the overhead of who spent more or overly aggressive driving and contact racing. We expect you to understand, accept and embrace these rules and the Challenge series in everything you do. In all your decisions (driving, building, etc.), always err well within the boundaries of the rules and with a focus on safety and respect for all.

Rules, rules enforcement, safety, driving etiquette and race/series administration will be handled by Harris Hill staff with the assistance of member volunteers. Harris Hill management will have the final say on all aspects of the H2R Challenge series. H2R staff, with the assistance of volunteers, will handle race operations. While the race is being run, no one may interfere with the race operation. Suggestions, requests, demands are all considered interference. If someone has a concern or issue it needs to be addressed after the race has concluded. Interference may result in the team being disqualified. Bottom line: please do not talk to race workers during the race.

Race format – The race series will be 9 Events per season. The Series points will accumulate for the 9 months February through December (no point races in July and August). A series winner for the year will be determined following the December event. Race events will be two 45-minute sprint races (one clockwise and one counterclockwise).

Races classes - The intent is that race classes will match very similar cars (same make and model) such that race competition will be close, exciting and fun for participants and spectators. Multiple classes may run in a single race if on track interaction between the classes will improve the overall event. Additional classes may be added, subject to the approval of Harris Hill Raceway.

Drivers whose cars do not meet the class specific performance rules, which are detailed both here and in separate, class-specific documents, may or may not be allowed to race but will not be scored or earn points for the event or series. This will be up to the discretion of track management.

General Safety Rules and Driver Rules of Behavior

Safety First! Our primary concern and the fundamental motivation for most of the rules described in this document is to promote safety for everyone involved in racing – drivers, staff, safety personnel, volunteers and spectators. ***At all times, the behavior exhibited by all racers should clearly demonstrate a full commitment to this principle.*** Drivers who drive in a reckless or dangerous manner will be made ineligible for further racing. The term of this ineligibility will vary and be determined by Harris Hill management.

There are three mechanisms utilized at Harris Hill raceway that enhance control and safety for all drivers. These three are physical flag stations, the Flagtronics in-car control and communication system, and radios. It is imperative that all drivers maintain awareness and focus on all three. To do this successfully implies that drivers race at a level of speed that allows them to reserve attention on these mechanisms. ***If you are driving at a speed that requires your undivided full focus on car operation at the expense of awareness of race control then you are driving too fast.*** All drivers must ensure that they are fully aware of flag station flag operations, Flagtronics indicators, and radio transmissions at all times.

Driving Safety Rules

The spirit of the driving rules at the H2R challenge is that all racers should have a fun and safe racing experience. On any part of the track, if you even THINK that there MAY be a portion of another car next to any portion of your car you must give that other car 1 full car's racing room on the hard surface of the track. If you are the car being given the 1 car space, be aware that this space is unlikely to be the optimal racing line and is very likely to be a line with less grip than you may need at full speed.

At H2R contact may happen but rubbing is NOT racing here.

The following rules are copied directly from the NASA and SCCA driving rules. They are established, tested rules used for governing drivers of all calibers and classes across the country.

Blocking (Chopping)

A driver may choose to protect his or her line so long as it is not considered blocking. Blocking is defined as two (2) consecutive line changes to "protect his/her line," and in doing so, impedes the vehicle that is trying to pass with each of the two (2) consecutive movements. Drivers are encouraged to check with the Race Director for a full explanation before the start of the race.

One example of 2 consecutive line changes would be that after consecutive laps the lead car chooses a different line down the straight (as protection) and then, specifically in front of the trailing car, crosses the track to retain the race line used in previous laps to enter the next corner.

Right to the Line

The driver in front has the right to choose any line, so long as not to be considered blocking. The driver attempting to make a pass shall have a **right** to the line when their front wheel is next to the driver of the other vehicle.

Passing General

The responsibility for the decision to pass another car, and to do it safely, rests with the overtaking driver. The overtaken driver should be aware that he/she is being passed and must not impede the pass by blocking. A driver who does not watch his/her mirrors or who appears to be blocking another car seeking a pass may be black-flagged and/or penalized. The act of passing is initiated (in play) when the trailing car's (Car A) front bumper overlaps with the lead car's (Car B) rear bumper. The act of passing is complete when Car A's rear bumper is ahead of Car B's front bumper. Once the trailing car has its front wheel next to the driver of the other vehicle, it is considered that the trailing car has the full right to be there. And, that the leading driver must leave the trailing driver enough "racing room".

"Racing room" at the H2R Challenge is one full car's width on the hard surface of the track.

"NO PASSING" Yellow flag at a flag station or Flagtronics or yellow flag radio call means a pass cannot even be initiated. Any overlap in a NO PASSING area is considered illegal.

Vehicle Safety Rules and Requirements

The safety rules below are the minimum safety requirement. Each driver/participant is responsible to build to this level of safety, and certainly is free to add additional safety equipment above the minimum as they see fit. Eligible cars must comply with all safety requirements outlined here AND those contained in the class specific performance rules for their class which are published in a separate document. Please ensure that you consult the relevant document for your class.

Good builders will be familiar with these rules. Harris Hill has many qualified builders to ask questions of before you build or buy something that is not legal. There will be zero tolerance or exceptions to any of the rules described here.

Drivers Equipment

A full-face, Type SA helmet, Snell SA2010 or newer is required. A HANS or similar racing neck brace or foam racing collar is mandatory for all drivers. Full SFI 3.2/A- or FIA 8856-2000-certified fire-retardant driving suits must be worn by all drivers at all times while on the track. Suits may be one- or two-piece. Fire-retardant FIA- or SFI-rated socks, racing gloves and shoes are also required.

Cabin Safety

Full roll cage with door bars that meets safety tech review by H2R. Tubing must be 1.5" x .090 DOM as a minimum (Chumpcar.com rules are good reference). Body sheet metal may be removed/modified as required to accommodate roll cage installation. Ask questions and get guidance prior to building your cage.

The driver's seat pan may be replaced and/or lowered up to 2" or not beyond the lowest point of the OEM frame rails currently under the seat pan (whichever is less). The lateral dimensions of the lowered pan may not extend beyond the base of the seat and/or seat mounts by more than 2" in any direction. The lowered seat pan must be made from .060" steel or thicker and welded to the surrounding sheet metal 100% around its perimeter. The spirit of the lowered seat pan rule is to allow comfortable SAFE seating under the roll cage for taller drivers. Five- or Six-point seat harness is required and must be in perfect working condition.

Fire Suppression

On Board Fire suppression system. New for 2023, we now require an on-board fire suppression system that complies with the following specifications:

- 3-liter capacity
- 4 nozzles (2 driver, 2 engine bay)
- 2 pull cables (1 driver, 1 first responder)

We suggest drivers meet this spec as soon as possible, but to allow for time to purchase and install the system, this system will not be required until the September 2023 race weekend.

One example system that is in compliance with our spec, provided here simply for reference, is the [Lifeline Zero 2020 3-liter system](#).

If you have not installed a fire suppression system, then a working fully charged fire extinguisher must be reachable by the driver while strapped in the car (2 1/2lb minimum). The mount must be all metal and strong enough to withstand the extremely high force encountered during a crash, rollover or similar catastrophic load.

Starting with the September 2023 race you will not be permitted to enter without an on-board system in full compliance with these rules.

Additional Safety Measures

Master Switch (Kill Switch): Cars shall be equipped with either an aftermarket master kill switch OR the OEM ignition switch. The outside of the car near the switch must be labeled with minimum 6" lightning bolt. If an aftermarket master kill switch is installed it shall be in a position easily reachable by the driver when he/she is fully strapped into the racing harness and outside emergency crew. If the OEM ignition switch is used as the master switch; The OEM ignition switch, wiring, key, lock tumbler assembly and body shall remain unmodified and retained in their OEM location, appearance and operation.

Note: In either case above, the steering column lock must be carefully removed from the OEM assembly and the proper master switch markings need to be on outside of the car.

Insure there is a securely mounted battery in box or with insulated battery terminals. Any steering wheel and/or quick release assembly may be used. Tow hooks front and rear are required. Window nets may be added.

Headlight and side window glass must be removed. Plastic headlight covers may stay. If you claim to be racing a street legal car, you may tape the headlight glass and retain the side windows, with proof of current registration and inspection. You must have a minimum of TWO (2) working brake lights.

A road racing fuel cell may be added provided it is located in the same location as the OEM tank and does not change the center of gravity or weight balance of the car.

Fluid leaks are considered a safety issue. Cars unable to contain their fluids may not be allowed to compete. Catch cans are encouraged.

Communications

Flagtronics communication is new for 2023!

To enhance the safety for everyone and to improve race control and our racing experience, Harris Hill has invested, at considerable cost, in a full course Flagtronics system, a track-wide flagging system. This system will increase safety and race awareness both inside and outside the vehicle. Flagtronics has been successfully used and tested in ChampCar races (including Harris Hill events) with very positive reviews. The Flagtronics system is a significant enhancement to the 2023 season.

A Flagtronics device must be installed and fully operational in order to participate in a race, starting with the March 2023 race weekend. It is the driver's responsibility to obtain and properly mount this device inside their car.

Note: H2R has arranged to buy a large number of devices to be made available for drivers to purchase. Devices can also be purchased directly from Flagtronics. Contact them at <https://www.flagtronics.com>

Please review the information in the Safety Rules section that follows for additional details on Flagtronics operations and how it will impact our racing activities.

Radio communication will be required. All drivers must have a working Raceceiver FD1600+ Fusion Plus in order to participate in a race.

Competition Transponder – All cars must have a properly installed and functioning transponder in order to participate and be scored. H2R Challenge specific transponders are available for purchase from H2R.

Track Safety Rules and Enforcement Protocols

The Harris Hill Challenge series is a Safety First series! Any driver not adhering to the rules above will subject to a Black Flag penalty, expulsion from the race, or any disciplinary action deemed appropriate by track management.

SAFETY VEHICLES

In most all cases if tow or safety vehicles are on the track then the track will be under a full course yellow and driving behavior will follow full course yellow behavior as described in the following section. Regardless of flag conditions, always take absolute care and consideration whenever approaching a tow or safety vehicle parked on or off track, regardless of whether or not safety workers are outside of the vehicle. Slow down and safely move to the opposite side of the track. There will be zero tolerance for any violations of this critical safety policy and violators harsh penalties including prolonged suspension or complete revocation of racing privileges.

INCIDENT AND MECHANICAL PROBLEM PROTOCOLS

If you are a driver involved in an incident or mechanical problem that renders your car undrivable, pull to the side of the track, if possible, and wait for a tow vehicle. DO NOT get out of your car unless it is on fire, or you have been instructed to do so. DO NOT pull off-track unless you are able to make it to a concrete run-off area. If you need to be towed back to the pits, you may not re-enter the racetrack until the race is over.

If you are a driver involved in an incident that causes you to leave the racing surface, but your car is still drivable, you are responsible for making a safe re-entry. Drivers have a responsibility to wait until there are no cars approaching or near your re-entry position before re-joining the racing surface. Drivers re-entering the racing surface must not cross the track upon re-entry. Failure to observe these practices will result in a black-flag penalty.

FLAGS – Flag Station Flags and Flagtronics Flags

Flags will be displayed at manned stations whenever possible and will be indicated in-car using the Flagtronics system. In most situations the flags will be the same in both systems. DRIVERS MUST ADHERE TO FLAGS INDICATED IN EITHER SYSTEM. As example, if there is a yellow flag in a manned flag station but not indicated on Flagtronics, it must be obeyed as a yellow. If there is a yellow indicator on Flagtronics but not in a flag station, it must be obeyed as a yellow.

In addition, driver radios will be used as a means of communication between Race Control and the drivers.

Below are summarized standard Flag rules all drivers must obey.

Local Waving Yellow Flag

Incidents that may cause a Yellow Flag to be deployed include, but are not limited to:

- a car that has spun out on the track
- a car that has gone off track
- a car that is re-entering the track
- a car that is disabled on the track
- a collision between two or more drivers that has left them stopped on track
- dangerous debris or fluids on the track
- A safety or tow vehicle on track

When a racing or safety incident occurs on track, the flagger in the corner stand at or before the incident will wave a Yellow Flag, indicating a Reduced Speed/No Passing Zone. Generally, the more serious the incident, the more actively the flagger will wave the flag. Flagtronics will display a flashing yellow light. A verbal notice of a Yellow Flag condition in a particular corner may also be given over the radio.

The Reduced Speed/No Passing Zone starts at a perpendicular line across the track from the waving Yellow Flag and ends at a perpendicular line across the track from the last component of the incident causing the yellow flag. All drivers must slow to and maintain 50% current race speed throughout the Reduced Speed/No Passing Zone.

If a flag stand is not manned, but a Yellow Flag condition is indicated on Flagtronics or announced the radio, the Reduced Speed/No Passing Zone begins 300 feet before the incident and ends at a perpendicular line across the track from the last component of the incident causing the yellow flag.

If an incident which would normally cause a Yellow Flag condition occurs, and drivers come upon the incident before a Yellow Flag is deployed or announced, those drivers must, upon sight of the incident, immediately abide by all Yellow Flag condition rules until past the incident.

If a driver purposefully passes another car under Yellow Flag conditions, that driver will receive a Black Flag. If a driver accidentally passes another car under Yellow Flag conditions, the driver must immediately wave the passed car by and resume position behind it, or he/she will receive a Black Flag. If a driver feels he/she was passed under Yellow Flag conditions, and the passing driver does not yield the position, the passed driver may notify Race Control after the race. In such cases, it will be up to the race steward's discretion whether the violating driver is penalized or disqualified.

Local Standing Yellow Flag

A corner worker may choose to show a standing Yellow Flag if a hazard remains, but is off track, and enough time has passed that all drivers are aware of the hazard. Yellow Flag conditions still exist in such cases, and drivers must abide by all Yellow Flag rules.

Full Course Yellow

From time to time, an incident may cause Race Control to announce a Full-Course Yellow condition. The manned-flag stations and Flagtronics will display a full-course yellow. The Flagtronics system gives us some very special capabilities which we will take advantage of. All drivers will safely and expeditiously decrease their speed to 35 miles per hour. This means everyone should maintain their exact position on the race course, keeping the distance to the car in front of them the same. This is a change from previous years. You will not catch up to the driver in front of you and reform a single pack of cars. You will maintain your position in the race.

<p>Please be very aware of this – Flagtronics has a very advanced capability in a full course yellow and race control will be able to detect anyone that is exceeding the required 35 mhp speed limit. <i>Race control will black flag each and every participant that violates this rule. There will be no exceptions and no grace period.</i> Once the full course yellow is thrown it is expected that almost immediately everyone is down to the prescribed speed.</p>

Once the incident is cleared and safety vehicles have exited the track, Flagtronics will go green, manned flag stations will drop their yellows, and an announcement will be made over the radio that the track is green and racing can begin again.

Black Flag

Race Control may determine a car will receive a Black-Flag based on the following criteria:

- Unsafe driving/racing, putting other drivers and cars at risk
- A driver puts a total of 8 wheels off in the same race
- A driver passes under Yellow Flag Conditions and does not resume his/her correct position
- Significant contact between cars (in such cases, both drivers will receive a Black Flag)
- A mechanical issue with a car that may cause damage or unsafe conditions for other drivers

If Race Control decides to Black Flag a car, it will notify one or more of the corner workers to display the flag and point it at the offending car as it passes by and Flagtronics will display a black flag to the specific car. The car must enter pit lane at the first opportunity and see the track marshal on pit lane to discuss the infraction. If the Black Flag is displayed to the driver three times, either at different flag stations or the same flag station, and the driver does not respond, Race Control will call out the Black Flag and car number on the radio. A driver who ignores Black Flag displays and notifications for three or more laps will receive a DNF for that race and be required to work at a corner station the next opportunity in order to be qualified to race again.

In any given race, a driver's first Black Flag infraction will result in a one-minute stop penalty on pit lane. If the same driver receives a second Black Flag in the same race, that driver will receive a two-minute stop penalty on pit lane. The stop penalty minutes will be for green active driving time. If drivers come in for black flag infractions under full course yellow they should understand that the penalty timer does not start until the race track is green.

If the same driver receives a third Black Flag in the same race, that driver will be expelled from the race and will need to meet with H2R management to discuss the circumstances, and face possible suspension for one or more races at the discretion of management.

All-Field Black Flag

If Race Control determines conditions on track warrant the need to bring the entire field back to pit lane, all flag stations will display a Black Flag, and an announcement will be made over the radio declaring an All-Field Black Flag condition. All cars must slow to 50% current race speed, exit the track at the first opportunity, and line up on pit lane, unless otherwise instructed.

Red Flag

If a particularly dangerous or complicated condition exists on track, Race Control may announce Red Flag conditions. Red flags will be displayed at all manned flagging stations, and an announcement will be made over the radio. Unless otherwise instructed, all drivers are to pull to the right side of the track, stop, and wait for further instructions.

STARTING PROCEDURE

Please note the new changes to grid position determination

The top 7 cars from the previous race will start in the top 7 grid positions in reverse order. Specifically, the 7th place finisher will start in Grid position 1, 6th place finisher will start in grid position 2, 5th place will start 3rd, and continue up to the 1st place finisher starting in the #7 grid position.

Following these 7 cars, the remainder of the field starting with grid position 8 will be in previous race finish order – 8th start in position 8, 9th starts in position 9, etc.

Any cars that started the previous race and did not finish (DNF) will grid after all those who completed the race. Cars that did not participate in the previous race will grid after all the DNF cars at the back of the grid.

The grid will open five minutes before the start of the race. The pace car will lead the field for one or two laps. Once the pace car leaves the track, it is the responsibility of the lead car to carry on the pace of the pace car.

Going into the last corner before the start/finish line, lead cars must slow to second gear to allow the rest of the field to catch up and properly form for the start. It will be at the discretion of Race Control as to whether the field is in proper formation. If so, the green flag will be waved and indicated on the Flagtonics unit, signaling the start of the race. If race control determines the field is not in proper formation, the start of the race will be delayed, and the lead car will lead the field around the track for another lap at pace car speed.

Vehicle Presentation

The H2R Challenge Series is fun and challenging for the participants, but also entertainment for spectators and potential Members. All participating race cars must have the required communication abilities and physical presentation as outlined below.

All cars racing in the H2RChallenge series must have a H2R Challenge windshield banner. Banners are available from H2R staff. All cars must have high contrasting digits easily discernable by race control (clearly readable by race control while parked on turn 6). As guidelines, numbers should be at least 10" tall with a minimum stroke of 1.5". The objective is clear, readable numbers. Car numbers may be 1 to 3 digits and may **not** begin with zero. Contact the track to select an unassigned number.

All race cars should be clean, well painted, and without any significant body damage.:

- No badly damaged body panels
- No missing body parts
- All parts properly secured
- Replacement panels and repaired areas painted to match

Racers are required to repair body and paint damage in a timely manner. All significant damage must be repaired and repainted within 2 months of an incident.

The determination of what qualifies as an acceptable level of presentation is at the discretion of track management.

CONTACT

Please avoid contact! The track and race officials reluctantly accept the fact that there may be occasions of slight and unintended contact between cars which should not result in a penalty. If there is contact between two or more cars, and if Race Control determines the contact was significant enough to warrant investigation or inspection of the cars, Race Control will black flag all involved drivers.

Criteria include, but are not limited to, contact incidents that result in a car leaving the track, spinning, or losing control. A notice for involved drivers to come into pit lane will be called out over the radio, using Flagtronics, and station flaggers may point black flags at the cars as reinforcement.

While cars involved in a contact incident may or may not be black flagged, if Race Control determines a driver or drivers is/are responsible for causing a collision that results in damage to another car, officials will record one strike to the driver(s) record. If a driver is determined to have caused such a collision twice in one season, that driver will receive a second strike, lose any championship points earned at that day's Event and be put on probation. If that driver is determined to have caused a third such collision in the same season, the driver will be prohibited from competing in the H2R Challenge series for the remainder of that season.

PROTESTS

The H2R Challenge series was established to be a wheel-to-wheel racing opportunity for club members/ friends who enjoy club style racing. As such, it should be rare that there would be a need to protest a fellow competitor. However, if a driver has a credible grievance against another driver, he or she must first talk with the other driver to see if a resolution is possible. If there are still concerns, the driver may discuss those concerns with an available race official. *At no time may crew members, family members, coaches, etc. get involved in the discussion with race officials.* Protests must be written by the protesting driver and specifically detail the infraction. Protests filed out of anger or not supported by fact may result the protesting driver being penalized. The protest must be delivered to a race official within 30 minutes of the conclusion of the race being protested. H2R staff can identify which H2R members are serving as race officials. Race Officials may consult with the protesting driver, the protested driver, or other drivers from the race in question to gather information before coming to a decision about penalties. All protests will be finalized on the day of the race.

2023 Championship Points

Points Scoring System

Finish points will be awarded from 1st to 20th place. Points will be awarded as follows.

Place	Points	Place	Points	Place	Points	Place	Points
1	30	6	16	11	10	16	5
2	25	7	14	12	9	17	4
3	22	8	13	13	8	18	3
4	20	9	12	14	7	19	2
5	18	10	11	15	6	20	1

Season Points Championship

The Season Championships will be decided by adding together the top 12 Finish Points.