



2022 Rules Version: 2022.2.1



**MISSION: World Racing League delivers a pro-racing experience on an amateur racing budget.**

We, as racers, believe that concise rules, consistent enforcement, sportsmanship, respect, and camaraderie make for a great racing series. Each WRL event is designed to offer teams of drivers hours of cost-effective track time, going wheel-to-wheel with those who share their passion for clean competition, strategy, and fun.

**World Racing League is defined by five simple ideas:**

- Provide true, multi-class endurance racing with classes defined by power-to-weight ratio.
- Host Competitive races with experienced drivers and properly prepared race cars.
- Enforce a no-contact philosophy with a driver tracking system to help promote clean racing.
- Remain open to most cars built for clubs and series across North America regardless of budget.
- Keep racing fun and affordable for enthusiasts who are passionate about the sport.

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## **THE PRIMARY RULE**

Because WRL intends to provide fair competition while preventing cost creep, rules creep, and cheating, and with the realization that no set of rules can cover all situations and possibilities, WRL authorizes our officials to enforce both the letter and intent of the rules. This means that no matter how many loopholes you think you've found the officials always rule in the interest of fairness and safety for all. To that end, the decisions by the officials are final and are not subject to negotiation, interpretation, etc. We welcome your input, but ultimately the officials' interpretation of the rules is the only one that matters. If you have questions relating to interpretation contact [race@racewrl.com](mailto:race@racewrl.com) for clarification before proceeding.

# **PLEASE READ THE ENTIRE RULEBOOK**

*If after reading this rulebook you find that you still have questions, please contact us at [race@racewrl.com](mailto:race@racewrl.com)*

## **A. RACE REGISTRATION**

1. **Schedule:** Go to RaceWRL.com to see all events, entry fees, deadlines, race length(s) and other information.
2. **Entry Limits:** Entries will be limited to 25 cars per track-mile +/-10% based on track design or other factors.
3. **Registration Process:** All teams and drivers must be pre-registered online at <https://www.motorsportreg.com/orgs/world-racing-league>
  - a. Team registrations received within **21** days of the Event Date are subject to a \$150.00 late fee.
    - **Teams added to the waitlist prior to the 21 day window will not pay late fee at time of registration.**
  - b. At-the-event driver registration will incur an additional \$25.00 charge.
4. **Refunds & Credits:** Fees and Deposits are non-refundable unless an event is canceled. All cancellations are subject to a \$250 cancellation fee. With the exception of Deposits, Late Fees, Membership Fees or where otherwise noted, payments are eligible for a credit towards a future event if cancellation is received in writing more than 21 days prior to the event date (exception applies if a car is rendered inoperable at another WRL event within the 21-day window). **Cancellations received within 21 days of the first event date are not eligible for refunds or credits of any kind.**

## **B. DRIVERS AND CREW**

1. **Participant eligibility:** Drivers and crew must be at least 16 years old at the time of the event and in good general health, not under the influence of alcohol, controlled substances or prescription medications that may impair judgment and/or coordination. Driver must be a WRL member in good standing. WRL memberships can be purchased via registration system at [www.RaceWRL.com/membership](http://www.RaceWRL.com/membership). **Only those over the age of 16 will be permitted on the cold-side of pit road or in garages during hot-track.**
2. **Personal safety gear:** All drivers and any crew involved in fueling must wear the specified protective gear.
  - a. Helmet: Full-face with visor (face shield). No structural damage. Rated Snell SA/SAH-2015 or 2020 for drivers. Crew may substitute open face helmet per rule D.3.a. **Helmets meeting current FIA standards are permitted.**
  - b. Suit: Fire retardant racing suit rated FIA 8856-2000 (or later), or SFI 3.2A/5, or higher. SFI 3.2A/1 suits may be worn with SFI 3.3 rated underwear top and bottom. The suit must be in good condition - no holes, oil stains, etc.
  - c. Nomex Balaclava: A SFI 3.3 or FIA 8856-2000 rated balaclava is required for fueling and firebottle crew personnel.
  - d. Gloves and Shoes: SFI 3.3/5 & FIA 8856/2000 rated gloves & shoes are required for all drivers and crew members involved in fueling.
  - e. Socks: SFI 3.3 or FIA 8856/2000 rated socks are required for drivers and crew members involved in fueling.



- f. **Neck Protection:** Drivers must wear a FIA 8858 or SFI 38.1 rated Head and Neck device and must carry an in-date certification.
3. **Driver Eligibility:** Any of the following are accepted as sufficient racing credentials by World Racing League:
  - a. A racing license issued by SCCA, NASA, BMWCCA, PCA, NARRA, Vintage or other org with approval.
  - b. FIA, IMSA or other professional sanctioning body license.
  - c. License from a recognized motorcycle road racing organization (AMA, CMRA, etc.) with prior approval.
  - d. Competition karting license (WKI, IKF etc.) - NOT recreational karting – with approval.
  - e. Completion of a WRL licensing program with WRL or approved partner.
  - f. HPDE advanced status: Instructor, solo or open passing qualification
    - Requires series approval (see website for approval form, submit to Race@racewrl.com)
  - g. Completion of other nationally recognized racing schools (Roos, Bondurant, Barber, etc.)
  - h. Budget/entry-level (Chump/Champ, LeMons, etc.): 8 hours or more of seat time, with proof of races, or less seat time combined with additional HPDE or Time Trial experience.
    - Requires series approval (submit race resume with references to race@racewrl.com)
4. **Minors:** must submit a racing resume, have a signed parental consent and minor waiver form on file, and a parent or legal guardian must be present at the event.
5. **Probation:** Drivers currently on probation with another series must obtain a waiver from WRL to race.
6. **Credentials:** WRL reserves the right to demand proof of experience/license credentials at any time.
7. **Novice Drivers:** Drivers without the required wheel-to-wheel experience, or written series approval meeting one of the above conditions will not be allowed to race.
8. **Alcohol:** ABSOLUTELY NO OPEN ALCOHOLIC BEVERAGES DURING HOT TRACK - This includes spectator areas, pits, paddock, garages, etc. This extends to all family, crew, drivers, etc. Failure to follow this rule will result in immediate removal from the track facility and potential suspension / ban from WRL.

## C. LOAD IN AND INSPECTIONS

1. **Load In:** Check the event info page on the WRL website or app for specifics related to arrival time, parking, etc.
2. **Vehicle Inspection:** Vehicle inspection will be on an annual basis unless item “c” below is applicable. Vehicle inspection consists of two parts
  - **DISCLOSURE FORM:** All teams must bring 2 copies of disclosure sheet and dyno printout to **each race**. One copy must be presented to tech and another copy should be kept to present in post-race impound.
  - **SAFETY INSPECTION** will be on an annual basis and will be recorded in the car’s digital logbook.
  - **PREPARATION AND CLASSING INSPECTION** will be completed prior to a car’s first race with WRL or as needed thereafter (see section d. below). You must disclose all modifications that are not compliant with Appendix A Section A & B. Intentionally undeclared modifications or attempts to hide modifications will result in steward action up to and including **a lifetime ban depending on severity. Qualifying sessions will be DQ until a car has current WRL classing inspection completed.**
  - a. A car undergoing inspection for any reason must submit a Disclosure Worksheet (available on the WRL website) to the officials. Disclosure worksheets should be emailed to race@racewrl.com
  - b. Issuance/update of Logbook: Upon passing scrutiny, WRL officials will update or complete your digital logbook and assign your car to the appropriate Class (See Appendix A, Section E). An ID tag will be affixed to your roll cage, this is your digital logbook identifier, do not remove or obscure it.
  - c. A car that has been modified in any way, wrecked, undergone major repair or a weight change since its last inspection must be re-inspected.
  - d. Officials may suspend your car from racing at any time until any outstanding issues are resolved.
  - e. Rulings of the officials made at the event are final and cannot be appealed until after the event. See Appendix A, Section E.5. “Petition Process”
3. **Check-In:** Each Team Captain and driver must report to the Check-In desk at each event for credentials.





- a. Team Captain will verify payment, car number, and transponder number at the Check-In desk.
- b. All team members must be listed along with their emergency contact information.
- c. Drivers not properly registered will not receive credentials and will not race. Anyone discovered on track without proper credentials will be ejected from the premises and team will be disqualified.
4. **Driver's Safety Gear Inspection:** All drivers new to WRL must present the gear self-check form and helmet prior to their first race and annually thereafter. New helmets will require a new ID tag.
  - a. An ID tag will be affixed to the driver's helmet. Drivers without ID tag will not be allowed on track.
  - b. Drivers must wear the required safety gear while on track and when fueling. Gear must be in serviceable condition - no holes, tears, cracks, oil/fuel stains, etc. Non-compliant drivers will not be allowed on track.
  - c. Drivers may not share helmets.
5. **Driver's Meeting:** There will be a mandatory Driver's meeting on Friday evenings. See the event info page on the WRL website for event schedule including social activities, meetings, briefings, seminars, etc. All other meetings will be listed on the event info page. **ATTENDANCE AT DRIVER'S MEETING IS REQUIRED.** Attendance will be checked. Failure to attend driver's meeting may result in loss of driver's credentials for the weekend. If you cannot attend contact Race@RaceWRL.com in advance.

## D. RACING RULES AND PENALTIES

1. **Race Formats:** World Racing League runs two-day or three-day endurance races lasting up to 24 hours as well as combined HPDE/enduro weekends. Events will include Friday qualifying where available. The specific race format, qualifying format, fees and schedule for each race will be outlined on each event's page accessible from the WRL website.
2. **Racing Conduct:**
  - a. WRL does not tolerate drivers who do not respect the safety and equipment of other drivers.
  - b. **Contact:** World Racing League is a non-contact racing series. We believe that most contact is avoidable. To avoid contact, all drivers will maintain racing room at all times. "Racing room" is defined as allowing all competitors room to maneuver their car on the racing surface—more simply put, giving your competitor a lane to race in. World Racing League defines contact in three categories:
    - Incidental Contact: Minor contact incidental to close quarters racing that leaves minimal damage and/or does not move a car off its line.
    - Unavoidable Contact: Any contact that damages a car or moves a car off its line, but where one or more drivers could not reasonably be expected to avoid the contact.
    - Avoidable Contact: Any intentional contact, repeated contact, contact resulting from reckless or careless driving, or any contact where a driver could have taken reasonable measures to prevent or avoid contact.
  - c. **Drivers involved in contact MUST report to race control before getting back into the car. Drivers should not leave the facility grounds until a final determination has been made on the contact and the driver has consulted with WRL officials. Failure to report may result in an indefinite suspension from WRL.**
  - d. **Passing:** Safe passing requires that everyone adhere to the following rules. For the purpose of defining at-fault contact while passing, the passing rules are weighted in the following order:
    - **Drivers attempting a pass are responsible for planning and executing a safe pass. Unless given a point-by, faster cars shall pass off-line.**
    - **Drivers being passed shall stay on the racing line so that drivers closing from behind can predict where all cars will be as they overtake.**
  - e. **Position:** For the purpose of determining position, a car attempting a pass is considered to have established position once the front axle has pulled even with the rear axle of the car being passed.
  - f. **Safe Pass:** A safe pass is defined as a pass where no contact takes place and no car involved in the pass spins or leaves the racing surface because all parties maintained racing room at all times. If a car has position and you deprive it of racing room by causing contact or "squeezing" it off the track, you have violated safe passing etiquette and will be **penalized for contact.**



- g. Unsafe maneuvers: “Dive-bombing” into corners, chopping, and blocking are unsafe maneuvers and may result in a penalty.
  - h. Loss of control: Drivers are always expected to maintain control of their vehicle at all times.
  - i. Reckless/dangerous behavior on course is a black flag offense. The penalty will be at Steward’s discretion.
  - j. Emergency Vehicle (EV) etiquette will vary by track and be outlined in Supplemental Rules and/or Driver’s meetings, but in all circumstances, racers must be single file & reduce pace when passing EVs.
  - k. Driving Stints: **4 hours maximum**. Race officials will observe drivers for signs of fatigue, deterioration of judgment, etc. and will act accordingly. **Minimum 1 hour break between stints**.
  - l. Timing/scoring: Only AMB/Mylaps equipment will be used for timing and scoring WRL events. You are responsible for the proper installation and operation of your car’s MyLaps transponder. WRL does not accept team-submitted timing in lieu of transponder under any circumstances (data, etc).
  - m. Race or track-specific rules can be found in the event supplemental rules on the website or wrl app.
3. **Fueling:** Fueling will take place on Pit Road only during hot track. Driver change is allowed during fueling, or driver may remain in car. **All spills shall be cleaned up immediately.**
- a. “Fueling” begins when the first fuel jug crosses the plane of the pit wall. Fueling is finished when the last fuel jug crosses back over the plane of the pit wall. Fueling rules are in effect during this time. **Fire bottle operator must be in-place before fueling begins.** Vent / overflow jugs are excluded but must be clearly marked with bright tape and “vent only” and may serve no other purpose.
  - b. **During fueling**, all persons on the “hot” side of the pits wall must wear approved fire-retardant suits, gloves, shoes, and helmets with face shields down. Pit-crew type or open face helmets are allowed with FIA or SFI 3.3 rated full face balaclava and goggles for crew members not involved in fueling. Fuelers and fire bottle operator must wear full-face helmets and FIA rated balaclava. No air gaps or exposed skin around goggles.
  - c. No one may cross the Pit Wall onto hot pits until their car comes to a complete stop in the pit box.
  - d. **No more than five team members may be over the wall at any time during a pit stop. NO EXCEPTIONS.**
  - e. The Fireman’s sole function is to man a fully charged and inspected 10lb fire bottle while **fueling is in process**, standing 10’ from the fuel port on the hot side of the pit wall facing oncoming traffic if possible.
  - f. **Fueling shall not begin until the engine is off.**
  - g. With the exceptions of servicing cool shirt boxes, radios, driver drink bottles, cameras or cleaning windshield no work may be performed on the car and no equipment may be staged on pit road with fuel port open. Due to static discharge, windshield tear-offs shall not be removed until fueling is completed and fuel port is closed.
  - h. A team cannot have more than one fuel jug over the wall at a time - no staging of jugs on hot pits or wall.
  - i. Only fuel jugs designed for storing and transferring gasoline by hand may be used to fuel the car. Dry-break fittings are permitted. Jugs will be clearly marked at the 6 US gallon level and will not be filled beyond that point. The narrowest point of the hose, nozzle or funnel spout must be no larger than 1.000” inside diameter and made of a solid material. **Fuel jugs determined to be noncompliant via go/no-go gauge will result in a 1 lap penalty per fueling stop from the beginning of the race until the jugs are in compliance.** Fuel shall not be at or past point of restriction while being transferred between the cold and hot side of pit wall. Jug vents may be modified but must not spill fuel. Fuel jugs must be leak free at all times.
  - j. A quick disconnect (QD) or dry break (DB) may be used to collect fuel vapors/overflow. This shall be it’s only purpose and the fitting must be rated for fuel. Vent QD/DB must terminate into a container rated for fuel and must not leak. For any cars utilizing a QD/DB for overflow no larger than 1.000” restriction must be in place between QD/DB and container. **Vent jugs must be clearly marked per D.3.a**
  - k. **NO PRESSURIZED SYSTEMS.** Any fuel delivery system found by officials to be unsafe will not be used.
  - l. No Spill Rule: Fuel spills are not permitted on the pavement. A catch pan, drip pan or absorbent mat must be used where fuel may spill onto the ground. Pans or mats must cover a minimum of 3 sq. ft. in area and/or have a minimum capacity of 3 gallons. **All pans must contain an absorbent material covering the bottom of the pan.** Spills will be cleaned up immediately. Liquids will be disposed of properly. Teams may



be penalized and/or fined for excessive fuel and oil spills on the asphalt.

m. Cars leaving their pit boxes with improperly attired or strapped-in drivers will be penalized, 1 lap minimum.

4. **Tire Changes:** Tire Changes in the hot pit are restricted as follows. The Chief Steward may waive these restrictions if weather conditions change during the race (i.e. rain):

a. Only one tire tool or one impact wrench allowed in the hot pit (excluding torque wrench).

b. Only manually operated floor jacks may be used.

c. Only two wheels may be lifted off the pavement at a time.

d. A total of 5 tires may be in the hot pit at any given time, including tires mounted on the car.

e. **GT class cars may use air jacks. \*Cars no longer need to be lowered and re-raised during tire changes.**

5. **Compliance:** Regardless of podium status, and at any time during the event, Teams may be required to verify compliance with the rules including but not limited to: making parts available for inspection, installation of black box, verification of jug restriction, etc. Failure to comply with scrutineering may result in disqualification. Teams must be prepared to pump out vehicle fuel system post race (means to pump out, fuel to fill completely, etc).

6. **Radios:** In car radio communication to the pits/team is required. Teams should also scan (only) official WRL team frequencies for information, penalties, etc:

**Primary:** 461.2 DPL 432 | **Secondary:** 464.6 DPL 631

## 7. Penalty Schedule

VIOLATION	BASIC PENALTY	MAXIMUM	NOTES
Contact, Incidental	none	1 lap	Repeated incidental treated as Avoidable
Contact, Avoidable*	2 laps	Ejection	Mandatory driver change, possible probation or ejection
Contact, Unavoidable	None	Driver change	Multiple incidents by the same driver may initiate probation
Cutting Course	1 lap	2 laps	Includes passing in the grass, exceeding track limits, etc.
Pit/Paddock Speeding	1 lap	Ejection	Depends on severity
Fueling/Pit road violation	1 lap	1 lap	Per infraction
Unsafe/Reckless Driving	Driver change	Ejection	Driver change will be required
Passing Under Yellow	1 lap	- - -	Per car passed
Missed Black Flag**	1 lap	- - -	Per lap missed, after 1st missed lap
General Rules violation	- - -	- - -	Official's discretion
<b><u>Lap penalties will be assessed in the Timing system by deducting the penalty lap(s) from the team's count</u></b>			
* Includes intentional contact which may result in immediate ejection from the series.			
** Sending a team member to the Black Flag station to ask why the car is being black flagged may incur a lap penalty in addition to the "laps completed after being black flagged" penalty.			

8. **Cameras:** Forward facing cameras are Required. Video may be requested by officials at any time for the purpose of reviewing incidents to determine fault (spare SD required). Video is required to dispute lap/contact penalties with officials. Video must be presented to an official within 2 hours of the incident no later



than 1 hour before race finish. If an incident occurs within the last hour videos must be presented in impound. Teams involved in an incident that fail to provide video may be found at fault if available evidence is inconclusive / incomplete. Teams must have a 2<sup>nd</sup> SD card to install should video be requested. If a team brings video to race control to dispute a call, video must be queued to the correct time and team must be able to prove video correlated to the incident. (clock in view of camera recommended). WRL will not search your video files to prove your innocence. See supplemental rules for additional information regarding submission.

## 9. Driver Probation

- a. A driver may be placed on probation for car-to-car contact if the corner workers, safety crew and/or officials determine they are at fault and if the contact results in one or more vehicles being towed, causes damage to any vehicle that requires repairs to continue or to retire from the race at steward's discretion.
- b. Drivers involved in contact that disables their vehicle must report to the Chief Steward immediately upon returning to the pits or paddock unless under the care of medical staff.
- c. A driver may be placed on probation or suspended at WRL discretion if he/she has a history of contact or exhibits a pattern of reckless driving.
- d. Probation period: One year from the date of the incident unless otherwise mandated by WRL.
- e. Probation terms: Driver may continue to race while on probation but must meet the following.
  - The driver on probation will not cause car-to-car contact during the probation period.
  - The driver on probation may NOT start the race (first stint)
  - The driver on probation will meet any other condition(s) provided in writing by WRL.
  - The driver on probation must request reinstatement by WRL at the end of the probation period.
- f. Failure to meet the probation terms will result in a suspension from racing with WRL for a period of at least 3-months and up to lifetime ban based on Official's discretion. If suspended by failing to meet probation Terms, probation re-starts at the end of the suspension period. A second violation of a continuous probation Term will result in a minimum one-year suspension and up to a lifetime ban based on official discretion.
- g. Suspension/Ban: In addition to the above, a driver may be suspended or banned from racing with WRL for gross violation of the WRL rules (i.e. blatant cheating) intentionally causing contact especially where the officials feel there was intent to harm or damage, or for physically or verbally abusive behavior toward any official, safety worker, driver, guest or track employee.
- h. "Official discretion": the stewards will assess the violation objectively, applying their experience and insight, using the information at hand, and levy a fair penalty that is commensurate with the severity of the violation.

## 10. Finish:

- a. The checkered flag will be shown to the overall leader once time expires. Lap counts end as cars cross the timing loop after that point in time.
- b. To score an official finish, a car must have completed at least 50% of the class leader's lap count.
- c. Podium is per class, finishing order will be determined by total laps completed in the allotted time.
- d. Impound: Podium cars will be impounded after each race at the discretion of the Race Steward. Cars will be inspected by World Racing League officials and competitors for a period determined by the race officials.
  - Podium cars will go straight to impound upon exiting the track. Failure to do so will result in immediate disqualification.
  - "Parc-ferme" rules apply during impound. Teams are not to open doors, trunk, hood or otherwise touch the vehicle for any reason while in impound without the permission and supervision of a WRL official.
  - Impounded cars may be weighed without driver and weight verified against their log book. The car must weigh the minimum for the class it is entered in based on POWER (See Appendix A Section C) and modifications.
  - Impounded cars may have fuel capacity checked by pump-out. It is the responsibility of each team to provide a means for completely emptying the fuel system into a fuel container. Cars that cannot pump from within 36" of the fuel rail will be inspected to ensure there is no additional capacity. It is strongly



recommended that teams add a quick-disconnect (Jiffy-Tite or similar, must be rated for fuel) under hood to speed fuel pump-outs.

- Fuel density will be determined by weighing 1 gallon of a team's fuel in a certified 1-gallon container - the weight of this gallon of fuel will determine the density.
- Fuel capacity will be determined by filling the car entirely under WRL supervision and pumping the system dry into jugs which will be weighed. The total weight of the fuel will be divided by the determined fuel density figure. The density of the fuel used to fill the car may also be checked.
- Impounded cars may have POWER verified by dyno. Cars will be operated by a WRL appointed official without exception and run to fuel-cut/redline. WRL is not responsible for damage to vehicles while on the dyno. Failure to comply with the dyno verification process may result in disqualification. teams must be able to direct dyno operator on how to connect a tach lead during impound. If work is required to access tach lead (removal of engine cover, etc) teams must bring tools required to perform that work to post-race impound **and must be observed by an official and/or any party they deem fit during any mechanical or computer related process required to prepare a car for the dyno.**
- All podium finishing cars must provide a printed copy of the disclosure worksheet for review by the officials and other competitors while in impound. Failure to do so may result in disqualification.
- A competitor may protest a podium car if he/she finds any undisclosed modification or major rule violation. All protests will be made by filling out a protest form and submitting it to the Chief Steward along with a **\$100.00 fee** which will be refunded to the protesting party if the protest is upheld. **Each subsequent protest by the same team on the same weekend will double in fees IF the preceding protest is not upheld.** Protesters may remain anonymous.

#### 11. Awards:

- a. The top finishers in each class will receive a World Racing League team trophy. Individual trophies may be ordered after the event.
  - Podium teams may receive other awards based on sponsorships, contingencies or event type/duration.
  - Additional awards will be given as warranted. Recipients must be present to win.
- b. Season Points: WRL will use a points system for determining various season or regional championships. see "Season Points" under the **Event** tab on the WRL website for points programs, rules, and standings.

## **APPENDIX A - VEHICLE PREPARATION AND CLASSING**

### **A. CAR PREPARATION**

1. **Car Eligibility:** Most mass-produced passenger cars that are eligible for registration and use on public streets are eligible to compete in WRL General Production classes. Many purpose built race cars that meet the requirements of this appendix are eligible to race in Grand Touring Open. Vehicles with street counterparts lacking legal vin numbers may be petitioned for competition in the General Production classes. (ex: Mustang FR500c, TCA) but they must take all applicable PWR Modifiers beyond the BASE model of that street chassis. Inclusion of these vehicles is at the sole discretion of WRL. Email Race@Racewrl.com to petition for inclusion.
2. **Logbook:** World Racing League stores your logbook information digitally.
3. **Safety Requirements:** The following are the minimum safety requirements. All safety equipment must be properly installed and in good condition. Anything deemed unsafe by officials may prevent you from racing.
  - a. **ROLL CAGE:** A full roll cage is required, equivalent to those generally required by SCCA, NASA, LeMons, and others. Limited exceptions may apply. See APPENDIX B for WRL roll cage specifications.
  - b. **FIRE SUPPRESSION:** At a minimum, each car will carry a fully charged 2.25lb fire extinguisher rated B:C, mounted in the cockpit in plain view using a metal mounting system with a quick-release. No plastic allowed. A properly installed fire suppression system of at least 2.3 liters capacity is recommended for all cars and is required on any car with a fuel cell and all GTO-class cars. Any car with a fuel cell must have fire nozzles pointed towards fuel cell plate and fuel fill entry if located away from plate. All systems shall have a nozzle





pointed towards the driver and fuel rail areas. Electrically operated fire systems must be direct wired to the battery. "Circle E" extinguisher decal shall be displayed on the exterior of the car to indicate the general location/access to the fire bottle/trigger. Fire bottles / extinguishers must have an in-date certification.

(Plumbed-in fire suppression systems meeting SFI 17.1, FIA Tech List 16, or FIA Tech List 52 installed per the manufacturer's, FIA and SFI guidelines will be REQUIRED in all cars beginning in 2023. Reach out to series sponsor Discovery Parts for more information on the right system for your vehicle.)

- c. **MASTER SWITCH:** Switch location is open if it can be easily located and deactivated by the driver, crew member, or safety worker. The switch must isolate the battery from all circuits and must interrupt the ignition circuit. Positive terminals of the battery and switch must be insulated. A "Master Switch" decal with the universal "lightning bolt" and the word "OFF" must be displayed on the exterior as near the switch as possible.
- d. **BATTERY:** The battery shall be properly secured with a clamp or hold down. Ratchet straps and camlock straps are not permitted. The positive terminal must be insulated. If mounted in the cockpit, batteries other than AGM or LiFePO4 must be enclosed in a battery box (Marine style or similar).
- e. **HARNESS:** 5, 6, or 7-point racing harnesses with current FIA or SFI rating are required to be installed and used per manufacturer specifications. Webbing must not be stretched, cut, frayed, or deteriorated from weather. Sub belts and lap belts must be attached to structural members or bolted through the floor with 3" Dia. (minimum) backing washers or plates. Shoulder straps shall be properly secured to harness bar.
- f. **WINDOW NET:** Must be installed so that driver's head or arm cannot extend outside the plane of the driver's window while seated. Net must be secured to the cage and must be easily removed at the top using a quick release system. Do not attach a window net to the door. Arm restraints are an approved alternative and are required for open-top/convertibles. Window nets deemed to be unsafe will be an immediate black-flag offense.
- g. **SEAT:** One-piece seat with a rigid shell, designed specifically for auto racing is required. The seat must be securely mounted at a minimum of four points at the base. If bolting through the floor, 3" Dia. (min) washers or backing plates are required. Seats that don't have a current FIA rating must have a seat back brace installed if the seat back will be more than 3" from the harness bar for any driver. Back brace can be adjustable and must not present a risk to the driver by its design or installation.
- h. **OEM SAFETY:** Ignition and steering locks shall be disabled. Airbags shall be removed.
- i. **MIRRORS:** One functional side view mirror on each side of the car and one interior rearview are required.
- 4. **GENERAL REQUIREMENTS:** Cars may be "freshened" with OEM/equivalent drivetrain internals, bushings, bearings, etc. so that they are generally safe and reliable as when new. You are encouraged to make your car look presentable (50/50 rule).
  - a. **CHASSIS:** Shall be structurally sound. All body panels must be in place. Aftermarket panels and body kits are acceptable. Panels made of alternate materials must resemble the OE panel.
  - b. **GLASS:** Except for mirrors, and headlights, any glass used must be the OEM (laminated or tempered). Front and rear glass must be in place OR MAY BE REPLACED with polycarbonate/lexan. Front windows will be removed or fully down during the race. Windshields should be free of large cracks or damage that could compromise its integrity. Windshields that sustain minor damage may be allowed at the discretion of WRL. Cars that sustain windshield damage that compromises its ability to protect the driver may not be allowed to continue.
    - **GTO/GTU:** Polycarbonate/lexan driver/passenger door windows may be run in factory produced race cars that were delivered with polycarbonate/lexan door windows AND (functional) air conditioning as part of the FIA certification. Cars that wish to run front windows and meet the conditions above will take a .1 PWR modifier per installed window. Teams wishing to avoid modifier may remove lexan from windows or replace with street car doors with window glass removed. No other method may be used to cover window areas.
      - **GTU - Same as GTO - for cars without removable lexan/poly side windows and NO factory installed air conditioning, windows must be removed OR a minimum opening of 8"x14" must be cut into the windows.**
  - c. **EXHAUST:** Shall be secure, leak-free and exit behind the main hoop of the roll cage. Noise restrictions listed in any event's information must be met.



- d. **TOW HOOKS:** Must be installed securely on the front and rear of all vehicles and easily visible. Hidden or folding or otherwise obscured tow hooks must be marked with a "TOW" sticker. IF YOU DO NOT HAVE A TOW POINT AND YOUR CAR BECOMES DISABLED, CREWS WILL USE ANY MEANS NECESSARY TO MOVE YOUR DISABLED VEHICLE WHICH MAY CAUSE DAMAGE TO BODY, SUSPENSION, ETC.
- e. **FUEL TANKS AND LINES:** Fuel cells are allowed if properly installed and maintained. Fuel, brake, or oil lines passing through the passenger compartment must be rigid metal tubing or steel-braid armored with properly installed AN fittings, free of damage, kinks or leaks. Fuel cells must be designed for automotive use, consist of a deformable bladder or rotary-molded plastic vessel with a metallic enclosure and be manufactured by recognized manufacturers approved by WRL. All removable fuel and vent caps shall lock securely when closed. Spring loaded "Monza-style" are not allowed. Cell must be properly protected, plumbed and vented. WRL officials will make the final determination on what is a proper and safe installation. Onboard fuel storage is recommended to be limited to 1 factory fuel tank plus 0.5 gallons (max) surge tank OR 1 fuel cell plus 0.5 gallons (max) surge tank. However, an auxiliary tank may be used with WRL approval (photos/description of aux cell must be submitted to [race@racewrl.com](mailto:race@racewrl.com) at least 30 days before event) If an auxiliary tank is used, both primary and auxiliary tanks must be vented independently, include a check valve, if check valve is not designed as a rollover valve, a rollover valve must also be installed. A fill neck spill collector shall be fitted for non-factory fill locations so as to prevent fuel from being spilled inside the car. At no time may either the main or auxiliary tank become pressurized or leak fuel. If there is any doubt, please ask before arriving at tech.
- f. **FUEL CAPACITY:** Any increase to OEM fuel capacity must be disclosed.
- GENERAL PRODUCTION (GP) FUEL: The fuel capacity of any GP1-GP3 car will be physically limited to the maximum fuel capacity offered in any USDM variant of the same make/model/generation plus 15% (115% of OEM capacity). GP1-GP3 cars also have a .5 gallon allowance for installed surge tanks.
  - GRAND TOURING OPEN (GTO & GTU) FUEL: Fuel capacity in Grand Touring classes will be determined by using Horsepower and the formula below. The formula generates total pump out capacity for GT cars. GT cars do not receive additional capacity allowances beyond the capacity generated by the formula. HP is the actual dyno horsepower found on the dyno plot per Appendix A, Section D:1 and must match the HP number on your disclosure.
    - GTO & GTU: Capacity (US gal) = (HP\*.07)-2
  - MINIMUM FUEL: For GP cars where factory fuel capacity + 15% OR GT class cars OR for GT cars where the GT formula falls under the below thresholds, teams may increase capacity to the below minimum fuel capacities. Minimum fuel capacities are total pump out capacities and do not receive 15% or surge tank allowances. Increasing to class minimum fuel capacity is not a requirement. Adoption of "Minimum fuel" rule must be disclosed.
    - GTO: 16.5 US gallons
    - GTU: 10.5 US gallons
    - GP1: 17.5 US gallons
    - GP2: 16 US gallons
    - GP3: 14.5 US gallons
- g. **FIREWALLS:** Must be present between the fuel cell/fuel tank/fuel filler neck and the driver, and between the engine and driver. Any holes or gaps 1/4"Dia. or larger must be closed or sealed.
- h. **LIGHTING:** Cars must have at least two BRIGHT functional red brake lights, and at least one BRIGHT red, rear marker/rain light. Marker/rain light(s) can be the OEM running (parking) lights. Rain light must be disabled if not raining & at night. It is recommended that OEM brake running lights remain in place and functional. Headlights may be OEM or aftermarket. Mounting points will be no higher than the base of the windshield. There are no limitations on the type and number of lights, however, non-OEM lights should not be aimed directly ahead. WRL officials may require teams to alter lighting if they present a safety hazard to other



competitors.

- i. **CAR NUMBERS:** Numbers must be 8" or taller required on both doors. 4" high numbers (minimum) are required on both the front and rear of car (deck, bumpers and glass are acceptable). All numbers must be high contrast and clearly legible for track workers. Non-compliant numbers will not be allowed on track.
    - **NUMBER RESERVATIONS:** Car numbers may be reserved for the season by purchasing WRL number boards from the registration system on a first-come first-served basis. Non-reserved numbers will be reserved on a per-event basis based on registration date. Duplicate numbers will not be permitted.
    - Duplicate numbers are not allowed. If a duplicate number is found priority goes to number reservations first, followed by registration date/time. Compliance with number change requests is required.
  - j. **DECALS:** WRL-provided class badges must be placed on the front and rear of the car on the bumper or vertical surface **as well as one per side of the vehicle**. Series sponsor decals, if available, are required
  - k. **APPEARANCE:** Cars should not have excessive body damage. Body panels including hood and trunk/hatch lid must be in place (or opening properly covered). Non-OEM exterior parts including aero must be completely secure and not present a safety hazard to you or other drivers or cars.
  - l. **WIDTH:** No part of the car may extend further than the widest point of the stock side mirrors, or the widest point of the stock body plus 6" total, whichever is less.
  - m. **TIRES:** DOT rated with a UTQG (tread wear) rating of 180 or higher, may not protrude further than 1" from the fender opening/flare as viewed from the top. **Must be commercially available: prototype tires or those not available to the public for purchase will not be permitted.**
5. **TRANSPONDERS:** Teams are responsible for providing their own MyLaps Transponder, and for providing an accurate transponder number to WRL at registration. Mount the transponder as low to the ground as possible with an unobstructed view of the track below. Do not mount near heat sources. NOTE: WRL is not responsible for any fault, misapplication or failure of transponders. Laps missed due to transponder failure will not be credited back under any circumstance. Transponders may be checked during Friday practice, where available.

## B. BASIC PREPARATION RULES (BPR)

- 1. **Open, Allowed or "Free" Modifications:** All cars are allowed to make the following modifications to build reliable, cost-effective, and competitive cars. Cars prepped above this level are still legal to race but will be subject to additional scrutiny, classing modifiers, dyno plots and possible class change. NOTE: OE-Originally equipped. OEM - Original Equipment Manufacturer.
  - a. Engine: Open. Engine Modifications are addressed by dyno testing as described in section D.
  - b. Brakes: Stock master cylinder or OE equivalent. For General Production (GP) Classes, caliper/rotor may be upgraded to any caliper/rotor offered in a USDM variant of the same make/model/generation. OE Calipers or non-OE calipers with 4 or fewer pistons, single piece metallic rotors, and pads are open. Proportioning valves are allowed.
  - c. ABS: Any ABS system from a mass-produced, non-motorsports specific vehicle is allowed. Must retain original programming.
  - d. Springs: Metallic springs open, may heat or cut.
  - e. **Shocks/Struts: Shocks, struts, and coil overs with non-adjustable dampening characteristics are allowed. Adjustable shocks with adjustment knobs removed are still classified as adjustable and shall take the associated modifier per the modifier table.**
  - f. Other Suspension: Sway bars and Panhard bars/Watt's linkage open. Camber and toe adjustment through camber plates; eccentric bolts, bushings, or ball joints; or adjustable control arms are allowed if these components attach to the OE mounting point(s) and serve no other purpose. Adding reinforcement to suspension attachment points to gain durability is allowed.
  - g. Bushings: Open
  - h. Any factory, **OE** aero that was sold for the make/model/submodel of the chassis is open. Added aero items specific to factory prepared race cars, even if it is the same model, will be assessed as



aftermarket aero.

- i. Wheels: Open
  - j. Tires: DOT approved with tread wear (UTQG) rating of 180 or higher.
  - k. Powertrain Cooling: Transmission, engine and other oil coolers allowed.
  - l. Factory and aftermarket limited slip differentials installed in OE differential housings that do not fit the differential modifier criteria in Appendix A, Section F are allowed.
  - m. Exhaust: Open, must meet any sound restrictions listed in Race-specific information and/or supplementals.
  - n. Weight reduction: Open, but exterior skin, and chassis structural integrity must be retained. Fenders, hoods, trunk lids, firewalls, floors, and inner wheel wells must remain intact. Alternate bodies must be approved.
  - o. Driver comfort/information: Cooling, gauges, control devices, data and telemetry systems are open.
2. **Additional Modifications:** Modifications not listed in Section B:1 above are allowed, but must be fully disclosed and may require a classing modifier as listed in Section F below based on the discretion of the Officials after a thorough inspection of the number and extent of the additional modifications.
  3. **Engine and Drivetrain Swaps:** Engine/drivetrain swaps are allowed and must be fully disclosed.
  4. **Multiple / Switchable tunes:** Any device, switch, software program, boost controller, etc. that alters ECU or other engine parameters to change tunes, whether mechanical or electrical, shall not be installed within reach of the driver. If one exists within reach of the driver it must be disclosed, disabled and inspected by tech officials. Under hood manual boost controllers must be disclosed and will be taped with tamper-evident tape prior to the event. Compliance will be verified by black box, radar, physical inspection or other means at WRL official's discretion. **Power sticks, or any empty port that can accept changeable ECU maps must be inspected and security taped by WRL officials. TEAMS MUST SELF-REPORT THESE FOR TAPE BEFORE GOING ON TRACK.**
  5. **Failure to Disclose:** Any team that does not fully disclose modifications outside of the scope of this section may be subject to disqualification. Teams that blatantly subvert the classing rules may be banned from competing in future WRL events.

## C. POWER TO WEIGHT CLASSING OVERVIEW

WRL allows a wide variety of cars to be raced, including cars already racing in most other clubs and series. In order to be as inclusive as practical while maintaining competitiveness, WRL has adopted a classification system based on the POWER to WEIGHT ratio.

**For the purposes of determining class, POWER shall be defined as the greater of peak dyno horsepower OR .89 x peak dyno torque as collected using the process described in D.1**

A car's Class is determined primarily by its Power to Weight Ratio (PWR) as defined in this Appendix, less any classing modifiers for modifications not allowed in Section B above. Also see the WRL Disclosure Worksheet (found on [www.racewrl.com](http://www.racewrl.com)) for help in determining class.

## D. DETERMINING POWER OUTPUT

1. **Dyno Guidelines:** Dyno testing and the resulting plots must conform to these guidelines:
  - a. Must be produced on DynoJet chassis dynamometers and include shop name and contact information.
  - b. All readings must be corrected to SAE J1349 Rev JUN90 (29.23 in/hg, 77F, zero humidity) and the dyno plot smoothing factor must be set to 5.
  - c. Plots must show both engine torque and horsepower on one axis and engine RPM on the other axis.
  - d. **Entire plot must be visible and must not be obscured by text boxes, logos, etc.**
  - e. Testing must be performed at operating temperatures and with the same engine modifications, specifications, and configuration as will be used in competition.
  - f. 3 pulls must be plotted on the dyno graph for official classing. The highest POWER result of the 3 pulls will be used for classing and GTO fuel considerations.





2. **Flat Horsepower Curves:** Flat horsepower curves will incur a modifier whether by detune or natural shape as outlined below. The duration of a flat curve will be defined as the cumulative rpm that the curve remains within 3% of peak horsepower from the disclosure sheet rounded to the nearest 500 rpm (Ex: 1250-1500 = 1500 rpm).
  - a. The only curve/run that will be analyzed for “flatness” is the curve/run that produced the peak HP figure matching the HP figure from your disclosure sheet.
  - b. Any horsepower curve that remains flat for 0-999.9 rpm will NOT incur a flat curve modifier.
  - c. Any horsepower curve that remains flat for 1000.0+ rpm will incur a PWR modifier of .2
  - d. Any horsepower curve that remains flat for 1500.0 rpm will incur an additional modifier of .2 (.4 total)
  - e. Any horsepower curves that remain flat for more than 1500.0 rpm will incur an additional .1 per 500 rpm  
Example: 2000 rpm of flat curve = .5 PWR modifier
  - f. Teams must submit dyno sheets but may also submit the CSV export from the dyno run in 100rpm intervals to assist in this determination if they feel their curves may be ruled as flat. Flatness may be determined by the “ruler method” and your paper dyno sheet or .CSV or .wp8 runfile analysis. Contact your dyno center for more information about obtaining .CSV files or .wp8 DynoJet run file for submission.
  - g. This modifier applies regardless of which method you use to determine POWER. If you think you might have a flat curve, please email [race@RaceWRL.com](mailto:race@RaceWRL.com) for an official ruling before you arrive in the tech line.
3. **Re-submission of Plots:** If any changes or modifications are made to the car, a new dyno plot must be submitted before the car is eligible to compete for a podium finish or season points. Examples include, but are not limited to: Replacement of any part with a different part that could have an impact of performance such as fuel injectors, headers, intake, camshafts, etc. Engine replacement or rebuild. Any change to tune, cam timing, boost, etc.
  - a. Officials may require a team to provide an updated dyno plot before their next event based on several criteria including performance, protests, and modifications.
  - b. Dyno plots must be included as part of the disclosure worksheet and provided to WRL officials, and the peak wheel horsepower & torque must be recorded on the first page of the disclosure worksheet form.

## E. DETERMINING CAR CLASS

1. **Calculating PWR:** The car’s peak POWER (See Section C) will be divided into the weight of the car, as weighed by WRL at the track with fuel tank full, no driver, no cool shirt water and no undisclosed ballast. The result will be rounded to the nearest tenth and represents the car’s Base POWER to Weight ratio (Base PWR). Modifications not allowed in the BASIC PREPARATION RULES will be assigned a modifier value based on the tables in section F below to arrive at the Adjusted PWR which is then used to determine the car’s class.

**Example:**

$$([WEIGHT] / [POWER]) + [MODIFIERS] = PWR$$

$$(2350lb / 150) + (-0.2) = 15.5 PWR$$

2. **Competition Classes:** Cars are classed into one of the following groups per their PWR rating which includes any PWR modifiers assigned.
  - a. **GENERAL PRODUCTION (GP):** Any mass-produced car offered for sale and operation on public roads. GP-class cars are subject to the Basic Prep Rules and Modifiers in Section F below. Cars with a PWR of 18.0 or above will not be allowed to race. See APPENDIX A, A.1 for information on non-vin carrying race versions of production cars.
    - **GP3** - Cars with a PWR of 15.1 to 18.0
    - **GP2** - Cars with a PWR of 12.8 to 15.099
    - **GP1** - Cars with a PWR of 10.5 to 12.799
  - b. **GRAND TOURING (GT):** Any race-prepared car, including mass-produced, tube-frame, purpose-built,



factory homologated, etc. will fall into one of the GT classes below. Cars that, with or without modifiers, are below 10.5:1 PWR will be categorized in one of the below GT classes.

- GT class cars are not subject to the Basic Performance Modifications in Section B or to the Chassis and Drivetrain Modifications in Section F below.
  - See Appendix A, Section 4.b for information regarding lexan door windows and associated modifiers.
  - GT class cars that are not based on a mass-produced chassis/unibody will carry a modifier of .2. Any cars that are not based on a chassis/unibody mass-produced and certified for road-use must contact WRL for approval prior to registering for a race. Email [race@racewrl.com](mailto:race@racewrl.com) with any questions regarding eligibility or modifiers.
  - GT class cars must have an operational fire-suppression system installed per Appx A, A.3.b
    - **GTO:** Any cars weighing more than 2400.00 lbs per the guidelines in Appendix E, 1.
      - PWR of 9.0:1 or higher (9.0 – 18.0)
      - Minimum windshield height of 42” as measured from the top of the windshield (where glass/lexan meets gasket or windshield frame) to the ground as-raced.
    - **GTU:** Any cars weighing less than 2400.00 lbs per the guidelines in Appendix E, 1.
      - PWR of 10.0:1 or higher (10.0 – 18.0)
      - Minimum windshield height of 36” as measured from the top of the windshield (where glass/lexan meets gasket or windshield frame) to the ground as-raced.
      - Any cars with a windshield height less than 42” must have a front-facing light beacon of at least 3000 lumens mounted such that the centerline of the light is at a minimum height of 42” from the ground as-raced. Light should be white in color, diffused (IE flood light style) and have at minimum 8 square inches of illuminated surface area. Beacon light must be on at ALL TIMES.
3. **Ballast:** Teams may add ballast for the purpose of reclassing their car, with the following stipulations:
    - a. Any ballast amount (weight) must be disclosed to WRL officials and recorded in your log book.
    - b. Ballast may not exceed 200 pounds and must be safely secured.
  4. **Petition Process:** A team may petition World Racing League to allow a non-compliant car to compete. The petition must be made in writing at least 30 days in advance of the race and must include supporting evidence justifying the request. At the track petitions will not be allowed.
  5. **Reclassing:** Unless an oversight or omission occurred during the classing process a car will not be moved to another class during a race.
  6. **Enforcement:** WRL may require any team to submit their car for monitoring and testing at any time to verify performance. Methods include at-the-track dyno runs and/or installation of a WRL-provided black box.
  7. **Under-subscription:** For any given race, any class that has less than 4 entries may be combined with another class at race officials’ discretion.



## F. POWER TO WEIGHT MODIFIERS (PWR MODIFIERS)

The following values will be deducted from a car's PWR. The value on a given line is for EACH of the items in the list. Any missing items or gray areas will be dealt with at the WRL Officials' discretion and must be disclosed on the car's disclosure worksheet. **Modifiers in this section do not apply to GTO class.**

### AERO

Simple rear spoiler; side skirts; canards	-0.1*
Air dam and/or splitter; rear diffuser; flat underbody; fixed single element wing/airfoil	-0.2*
Multi-element wing; dynamically adjustable wing	-0.4*

*\*Assessed per item up to a maximum value of -0.6*

### BRAKES

2-piece brake rotors	-0.1
Aftermarket racing or multi-master cylinder system; racing/adjustable pedal boxes; any non-OE caliper with >4 pistons; ABS reprogram	-0.4
Rotors made from exotic materials (carbon ceramic, etc.); aftermarket or race-developed electronic ABS/traction control systems	-0.6

### SUSPENSION

Single adjustable shocks/struts; custom valved non-adjustable shocks/struts; minor changes in suspension members other than what is open	-0.2
Multi-adjustable shocks/struts; significant changes to suspension members with adjustable or lightweight parts in stock locations; non-metallic springs	-0.4
Remote reservoir or piggyback systems; significantly modified suspension mounting points; parts significantly different by design than stock; components made of lighter and/or exotic materials.	-0.6

### TRANSMISSION / CLUTCH

OE / OEM transmissions with electronic or hydraulic automated clutch(es); PDK, DCT, SMG or similar.	-0.2
Aftermarket, heavy duty and/or redesigned gears and internal components, incl. straight cut	-0.3
Aftermarket sequential gearbox	-0.6

### DIFFERENTIAL

Dedicated race differential unit (xtrac, quickchange or similar); significantly modified OEM differential that is lightweight, exotic in design, materials, installation method or location; externally adjustable differentials.	-0.6
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## APPENDIX B - ROLL CAGE DESIGN AND CONSTRUCTION SPECIFICATIONS

This section provides the generally accepted minimum roll cage design and construction requirements. Existing roll cages used in NASA, SCCA, and other national road racing sanctions, if properly built and inspected, should meet or exceed the standard below. If you are contemplating building a new cage yourself and do not have a proper tubing bender, welder and notch saw, don't know how to weld or don't understand why cardboard comes into play in the process, stop here. This is a safety issue and homemade cages **WILL FAIL** at the event if they are not built properly regardless of what other series passed the cage. Take this Appendix and the car to a reputable fabricator

### A. General Criteria

1. Professionally designed and built roll cages are highly recommended. This is not something the untrained or unskilled should attempt to do themselves.
2. Professionally manufactured bolt-in cages are allowed provided they are installed using the manufacturer provided or specified tools and hardware and meet the design criteria in Section B
3. Welds must be professional quality, 360 degrees around every tube joint, with full penetration
4. Minimum tubing size will be determined by the weight of the car. All tubing will be seamless mild steel or DOM, ERW is not acceptable unless a waiver is granted for an existing cage
  - a. Under 2500 lbs - 1.50" x 0.095"
  - b. 2501 and over - 1.50" x 0.120" or 1.75" x 0.095"
5. Tubing will be Rotary Drawn or Mandrel Bent and properly notched with appropriate tools. Bends must have a radius no less than 3 times the outside diameter of the tubing and will not show any signs of crimping, stretching or another potential failure
6. Any cut made in a firewall to accommodate tubing must be re-sealed once the tubing is installed
7. The use of gussets to strengthen connecting points is open
8. Any portion of the finished roll cage that may be contacted by the driver's helmet, body or limbs must be padded with roll bar padding
9. Vehicles not meeting the letter of this criteria but carrying a FIA homologation on the safety cell may petition for approval by emailing [race@racewrl.com](mailto:race@racewrl.com)

### B. Roll Cage Design

1. Main Hoop must be a single, continuous length of tubing with no more than 4 bends and should follow the B pillars and roofline as closely as possible with a rake of no more than 15 degrees off vertical. The Main Hoop will be tall enough so that any driver's helmet does not extend above a line connecting the centerlines of the Front Hoop and Main Hoop
2. A diagonal brace will be added in the same plane as the Main Hoop, with one end connecting at lower right of the Main Hoop at the mounting plate or as close as possible, and the other end connecting to the top left (horizontal) of the Main Hoop within 12" of the bend nearest the driver's head
3. The Main Hoop will be braced with two uncut, continuous tubes extending rearward from the top corners (bends) of the Main Hoop, or within 6" thereof, running straight to the floor, factory cross member or strut/shock towers. The rearmost point of the rear bracing must not terminate on another tube. Rear bracing will not have any bends and should be at a 30-60 degree angle to the plane of the Main Hoop.
4. Forward section of the main cage may be one of three configurations:
  - a. Side Hoops (aka "Forward Hoops"): Tubes extending forward from the top corners (bends) of the Main Hoop and down to the front floor, following the roof line and a-pillars as closely as possible, each with no more than 2 bends, and both connected by a tube running as close to the top of the windshield as possible. (SCCA Production cages that do not follow the original roof line may qualify, petition the officials before the race to gain approval), or;
  - b. Halo: A single tube bent into a "halo" that extends forward from either corner of the Main Hoop in a horizontal plane to the top of the windshield and follows the roof line as closely as possible. The front of the halo will be supported from the floor/sill by a continuous section of tubing that follows the A-pillar as closely as possible from each front corner of the halo to the floor.
  - c. Front Hoop: A single, continuous length of tubing with no more than 4 bends, which should follow the A-





pillars and roofline along the top of the windshield as closely as possible, mounted on either side to a floor plate or sill. The front Hoop and Main Hoop will be connected together on either side by tubing running from the top corners of each hoop and following the roof line as closely as possible.

5. Door Bars: A minimum of two door bars are required on the driver's side, x-bars are acceptable. Bars must be placed to protect the driver in the event of a side impact. Door bars may be bent to push into the door cavity, but S-bends are prohibited\* on new cage builds (2014 or later) unless the car has a valid log book from a club racing or higher-level organization and are approved by WRL officials. A minimum of one door bar is required on the passenger side. If you are unsure, submit pictures and descriptions to WRL BEFORE you show up to race  
\*S-bend bars may be submitted for exception to: [race@racewrl.com](mailto:race@racewrl.com) in cases where they are the only option..
6. Dash bar: A dash bar running horizontally between the front hoop a-pillar bars, and at the height of the original dash is highly recommended **and will be required for all cars beginning in 2023**
7. Harness Bar: A horizontal bar between the left down tube of the Main Hoop and the Diagonal Bar may be installed for shoulder harness strap mounting, at a height recommended by the harness manufacturer. Harness bar may have bends to accommodate aft seat travel
8. Seat Mount: A seat mount tube or tubes mounting the seat to the roll cage is highly encouraged, and does not count toward cage attachment points

### C. Mounting points

1. Cage must be mounted to the floor, frame, factory cross member, towers and/or sill plates at a minimum of 6 points (2 each at the Main Hoop, Rear Braces and Front Hoop). 2 additional mounting points may be used at the Front Hoop to the firewall or front wheel wells
2. The use of Body Tabs is open, but tubes added for no other reason than to increase chassis rigidity may be disallowed or penalized at the officials' discretion
3. Mounting plates must be at least 16 square inches at 0.080" thick and must be welded completely around the perimeter. If bolted in, the plate must be 3/16" thick minimum, bolted at a minimum of three points with Grade 5 hardware

Final Authority on whether your cage passes a safety inspection or not lies solely and completely with the race officials. It doesn't matter who you paid how much to build the cage, or what other series you've raced the car in or how many times it passed inspection elsewhere. If the cage is unsafe, if there are missing bars, missing/inconsistent welds, or any other issue that presents a safety hazard, the car cannot be allowed to race When in doubt, submit pictures and descriptions before you show up to an event.



### **General Example of a basic, WRL-legal cage (Halo style)**

Alternate designs meeting the rules above are allowed



## APPENDIX X - WARNINGS, DISCLAIMERS AND OTHER INFORMATION

**Racing involves inherent risk to life, limb, and property. You are participating of your own volition and at your own risk. World Racing League makes no guarantee, promise or assurance of, or in regard to your health or safety.**

Racing is physically, mentally and emotionally demanding and can aggravate or complicate existing or underlying medical conditions. Only you and your doctor can assess your physical fitness for road racing. If you know you have or have any reason to suspect that you may have any health-related issue that could be triggered or aggravated by this activity, seek your physician's advice before getting in a race car! Despite the extraordinary advances in safety technology and all industry-standard safety precautions, auto racing carries an inherent risk of property damage, personal injury and even death. Observance of, and strict adherence to safety requirements, instructions, rules, and precautions can help reduce, but not eliminate, these risks. Do not rely on inspections to ensure your car/equipment is safe. Any given safety item could be rendered ineffective at any time between inspections due to misuse, damage, negligence or other factors unknown to race officials. You and only you are responsible for your safety, including adhering to the safety regulations set forth in these rules and observing common safety practices. By attending a WRL event, all participants acknowledge that they are participating at their own risk, and hold harmless World Racing League Racing LLC, its owners, officers, officials, associates, contractors, venues, sponsors and assigns.

Everyone entering the premises where a World Racing League event is taking place will sign the Liability Release form before entering the property. By attending and/or participating in a WRL event, each person agrees, acknowledges and avows that he or she has read and understands this rulebook, and has signed the Liability Release form. In plain English: Under no circumstances should anyone participate in WRL event or any motorsports event without fully understanding the rules and risks; you understand, avow and affirm that the organizers are not responsible for anything that might happen to you during the event; and you agree that you understand and accept the risks involved and hold the organizers, officials, track, etc. harmless, accept all liability, and covenant not to sue the organizers, staff members, venues or safety workers. If the thought of that is not acceptable to you, your family and/or your attorney, please do not participate in motorsports.

World Racing League is in no way responsible for injury or loss. WRL does carry supplemental AD&D and hospitalization insurance, however, you, as an individual, are responsible for providing adequate medical insurance for yourself, or in the absence of such, you are responsible for any medical bills you may incur as a result of attending or participating in an event whether WRL carries any supplemental medical insurance or not. Likewise, you and only you are responsible for property damage caused by you and/or caused to you. World Racing League will not reimburse you for loss or damage to your car or other property or mediate between parties. If you damage the facilities at a venue rented by World Racing League, you may receive a bill. If you wreck someone else's car, that's between the two of you.

The Rules governing the series are subject to change at any time to address safety issues. Series officials will apply the Rules as evenly and professionally as humanly possible. There will invariably be times where an issue is not specifically covered by a rule. In that case, the officials will exercise their discretion and common sense in the interest of safety and fairness to all. See the "Primary Rule" on page 2.

World Racing League may deny entry to or eject from the premises any car, team member, spectator, or attendee at any time for any reason related to personal or public safety, illegal activity, risk or damage to the series, staff or participants, or the orderly conduct of the event.

Entry fees, rental fees, gate fees etc. are non-refundable. World Racing League reserves the right to change event dates, times, schedules and formats and/or cancel events for any reason within our control or outside of our control. If we cancel an event, we will transfer entry fees to another event, refund fees or otherwise do our best to make you whole. If you cancel you may receive a partial credit, but you will not receive a refund. However, no refund or credit will be given if you cancel after an event's registration is closed. This includes if your team falls apart, the car falls apart, or your car expires after the start of the race.

All World Racing League and WRL logos are trademarked and/or copyrighted material and may not be reprinted, reproduced or re-used for any purpose without the consent of World Racing League LLC. World Racing League reserves the right to use images, audio and video of you, your team and your car, taken by anyone at any WRL event, for the purpose of positive marketing, promotion, advertising, sales, magazine covers, merchandise, etc. without regard to royalties, fees or any other form of compensation. Images, audio, and video recorded at World Racing League events may not be used for commercial or for-profit purposes without the consent of World Racing League LLC.

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