



★ CHAMPIONSHIP ★
OFF-ROAD

2020
**OFFICIAL
RULE BOOK**

CHAMPOFFROAD.COM

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CHAMP OFF-ROAD GENERAL RULES

SECTION 1 – RULE BOOK

- 1.1. **Effective Date** – The CHAMP OFF-ROAD rules are effective upon the date of publication regardless of when a competitor receives actual notice.
- 1.2. **Amendment** – CHAMP OFF-ROAD rules may be amended or changed by written notice from CHAMP OFF-ROAD headquarters at any time. The amendment/change is also effective upon the date of publication.
- 1.3. **Interpretation and Application** – If there is a disagreement regarding the meaning or application of the CHAMP OFF-ROAD rules, the interpretation and application by the CHAMP OFF-ROAD officials at the event shall prevail. This decision is final and non-appealable.
- 1.4. **Finality of Interpretation and Application** – All participants, including but not necessarily limited to competitors, team owners, sponsors and officials, expressly agree that determinations by CHAMP OFF-ROAD officials as to the application and interpretation of the rules are non-litigable, and covenant that they will not initiate or maintain litigation of any kind against CHAMP OFF-ROAD or anyone acting on its behalf with respect to such determinations, unless it is determined that the CHAMP OFF-ROAD officials made such determinations for no other purpose other than a bad faith intent to harm or cause economic loss to the participant or official. In the event that a participant violates this covenant and initiate litigation, it is agreed that the participant will reimburse CHAMP OFF-ROAD for all litigation costs and that the right to a trial by jury will be waived. CHAMP OFF-ROAD reserves the right to take any other action hereunder, including suspension or termination of license/membership for violation of this covenant not to sue.

SECTION 2 – SAFETY

- 2.1. **Responsibility** – Off road racing is a dangerous sport. Each participant assumes the risk of bodily injury, death, or property damage when he/she participates in an event. Although safety is a concern, CHAMP OFF-ROAD cannot be held responsible for the safety of participants.
 - A. CHAMP OFF-ROAD considers safety a top priority and works with competitors, track owners, manufacturers, and outside experts to exchange useful information regarding safety designs, products, practices, and procedures and to publish and amend rules to reflect the latest safety practices as needed. CHAMP OFF-ROAD is not and does not claim to be an expert in safety standards, designs, practices, or procedures, nor is CHAMP OFF-ROAD a standards organization or a designer, manufacturer, or seller of safety-related products, facility, or vehicle designs.
 - B. All officials and participants are obligated to inspect the racing facilities, safety personnel, equipment, and conditions at the track on a continuing basis throughout the event. Any inadequacy should be reported to senior CHAMP OFF-ROAD officials immediately.
 - C. Participants are solely responsible for their own safety when performing duties as a driver, owner, or crew member and should carry out these duties in a way that ensures minimum amount of risk or injury to themselves and others.
 - D. Neither CHAMP OFF-ROAD nor the track owner will be responsible for the adequacy of a participant's race vehicle, equipment, or racing activity.



- 2.2. **Injury Reports** – Any participant involved in an accident while on the racing premises must report to a CHAMP OFF-ROAD official before leaving the premises if able to do so, or as soon as the participant is physically able.
- 2.3. **Testing in unauthorized areas** – No race vehicles are permitted to “Test”, “run through the gears”, “Drive at any speed over 7 mph” at any time on any event grounds / facility when not on the racetrack in a controlled environment. There will be NO designated testing area at any event and no competitor or team member should assume any area is permitted to do any of these actions. No team member or driver is permitted to drive any vehicle at any speed faster than 7 miles per hour in the pits or on the grounds, and any adjoining properties at any event except when on the actual racetrack. Any time any race vehicle is taken out of the designated pit area it must be on a trailer and not driven outside of the main pit area for any reason.
- 2.4. **Track Walk** – Any authorized track walks must be done with small vehicles (pit bike, UTV, golf cart) and no official race vehicles, no large vehicles. Track walk should be done carefully at all times and no one should be driving / riding any faster than the 7 miles per hour limit. No one should be roosting or pulling wheelies or any other similar action during track walk activities. No team member or driver is permitted to go onto the racetrack at any time other than authorized track walk times or with explicit permission from the Competition Director.

SECTION 3 – LICENSES

- 3.1. **License Required** – Any person who desires to participate in a CHAMP OFF-ROAD sanctioned event as a driver, crew member, or spotter must apply for, purchase, and receive a valid, current CHAMP OFF-ROAD license. No person will be allowed in the hot pit or spotter area without the proper license.
- 3.2. **Eligibility/Requirements** – To secure a CHAMP OFF-ROAD driver’s license, a person must:
 - A. Age eligibility is determined for entry to a class as of the persons actual birthday. Maximum age eligibility or “Age Out” will be determined by using the persons age on the 1st of June. Racer must be 15 years of age by this date. CHAMP OFF-ROAD will use the age as of that date for the entire season of racing.
 - B. Be at least 16 years of age for the Pro 4, Pro 2, Pro UTV classes.
 - C. Be at least 14 years of age and have prior approval from CHAMP OFF-ROAD for the Pro Lite and Pro Buggy and all Sportsman or Pro Lite UTV classes
 - D. Be at least 8 years of age for the Kart classes in accordance with the CHAMP OFF-ROAD Kart Rule Book.
 - E. Be approved by CHAMP OFF-ROAD officials prior to competing. Drivers may be removed from competition, qualifying or testing any time at the sole discretion of CHAMP OFF-ROAD.
 - F. If required by CHAMP OFF-ROAD officials, submit list of prior racing experience, pass driving ability tests and/or compete in specified number of regional events conducted by and at the discretion of CHAMP OFF-ROAD officials.
 - G. Be physically fit in the sole discretion of CHAMP OFF-ROAD. CHAMP OFF-ROAD reserves the right to require an applicant to pass a physical examination by a qualified physician at the applicant’s expense.
 - H. Execute and deliver all authorizations, releases, applications, consents, waivers, and other documents as may be required by CHAMP OFF-ROAD.



- 3.3. **Application Process** – Application forms must be fully executed, signed, and submitted to CHAMP OFF-ROAD Headquarters accompanied by the requisite fee. Receipt of an application does not guarantee a license will be issued. Applicants will receive a license following CHAMP OFF-ROAD approval of their application. CHAMP OFF-ROAD reserves the right to reject a license application for any reason.
- 3.4. **Minors** – Any applicant legally considered a minor under the laws of his/her state must also submit a fully executed and signed minor’s release. This release must be signed by the applicant’s legal guardian.
- 3.5. **License Non-Transferable** – A CHAMP OFF-ROAD driver’s license is non-transferable. Any attempt to transfer, lend, or permit any other person to use any license shall result in a penalty imposed on the licensee and/or the driver that licensee is affiliated with. CHAMP OFF-ROAD will not be responsible for any damages arising in connection with such unauthorized use of a license.
- 3.6. **Suspension/Termination** – CHAMP OFF-ROAD may suspend or terminate a license in the interest of off-road racing or CHAMP OFF-ROAD. The participant will not be obligated to a refund of any license fees submitted.
- 3.7. **Expiration** – A license automatically expires on the last day of the calendar year in which it was issued.
- 3.8. **Ejection** – A CHAMP OFF-ROAD official may eject a licensed participant from an event or from the racing premises to promote the orderly conduct of an event. An ejection is final and not appealable.
- 3.9. **Interim Review of Qualifications** – CHAMP OFF-ROAD may review the qualifications of a licensee at any time and may require the licensee to submit to additional physical exams, to pass additional driver tests, to submit a resume of experience, or take any other action that CHAMP OFF-ROAD deems appropriate to determine whether the licensee continues to qualify for a license.



CHAMP OFF-ROAD EVENT PROCEDURES

SECTION 1 – MEMBER OBLIGATIONS/AGREEMENTS/RELEASES

- 1.1. **General Agreements** – By submitting an entry blank and/or participating in any activity related to a CHAMP OFF-ROAD event, a participant agrees to the following:
 - A. All rules set forth in the CHAMP OFF-ROAD rule book and its amendments are applicable and will be followed.
 - B. All decisions of CHAMP OFF-ROAD officials are final, non-appealable, and non-litigable
 - C. All participants voluntarily assume the risk of damage to the race vehicle, the driver, pit crew, or any other person and have no claim for said damages against CHAMP OFF-ROAD, track owners, officials, agents, or employees of CHAMP OFF-ROAD.
 - D. All participants assume full responsibility for any and all injuries sustained, including death and property damage, anytime they are in the racing areas or en-route to or from the racing areas.
 - E. All participants understand the risk of serious injury or death, which may result from racing, and that participants solely assume that risk when choosing to participate in a CHAMP OFF-ROAD event.
 - F. No participant may enter the racing areas (to include the hot pits) unless he/she has personally signed all required entry forms, waivers, release of liability forms, and pit permits applicable to the event.

- 1.2. **Advertising and Promotion Release** – Each participant by entering a CHAMP OFF-ROAD sanctioned event, grants to CHAMP OFF-ROAD and authorized agents and assigns a license to use and sub-license on an exclusive basis with regard to the products/services of the series sponsors, and otherwise a non-exclusive basis his/her name, likeness and performance, including photographs, images and sounds of the participant and/or any of the participant's race vehicles in any way, medium, or material for promoting, advertising, and publicizing any CHAMP OFF-ROAD sanctioned event or related telecast or programming. Each participant hereby relinquishes to CHAMP OFF-ROAD in perpetuity all rights there to for such purposes.

- 1.3. **Telecast and Other Rights** – Each participant, by entering a CHAMP OFF-ROAD sanctioned event, acknowledges that CHAMP OFF-ROAD, and licensees and assigns, exclusively and in perpetuity own any and all rights to broadcast, transmit, film, tape, capture, overhear, photograph, collect, or record by any means, process, medium or device whether or not currently in existence, all images, sounds, and data arising from or during any CHAMP OFF-ROAD sanctioned event or the participant's performance in the event, and that, except for works created pursuant to the fair use doctrine or the CHAMP OFF-ROAD Media Access Policy, CHAMP OFF-ROAD is and shall be the sole owner of any and all copyrights, intellectual property rights, and proprietary rights worldwide in and to these works and in to any other works, copyrightable or otherwise, created from the images, sounds, and data arising from or during any CHAMP OFF-ROAD event or the participant's performance in the event. Each participant agrees to take all steps reasonably necessary and all steps requested by CHAMP OFF-ROAD, to protect, perfect or effectuate CHAMP OFF-ROAD' ownership or interest in these rights. Each participant agrees not to take any action, nor cause others to take any action, nor enter into any third-party agreement that would contravene, diminish, encroach, or infringe upon these CHAMP OFF-ROAD rights.

- 1.4. **Substance Abuse** – No CHAMP OFF-ROAD participant (Driver or crew member) may use or be



under the influence of alcohol, drugs or any other controlled substance while competing. The Series reserves the right to require drug testing in order to assist its enforcement of the Series' no alcohol and no drugs policy. Decision on drug testing and disciplinary action (which may include but is not limited to immediate ejection from an event, a fine of \$1000.00, a 90- day suspension, and/or a denial of further entry to any CHAMP OFF-ROAD events is at the sole discretion of the Series.

- 1.5. **General Conduct** – No CHAMP OFF-ROAD participant or team member is allowed to act in an unprofessional manner towards any CHAMP OFF-ROAD official at any time during the race event time. Any discussion or communication during a race weekend with the Competition Director will be done in a reasonable manner.

SECTION 2 – ENTRIES

- 2.1. **Entry Requirements**– In order to compete in a CHAMP OFF-ROAD event, a participant must complete and submit an official entry blank for each event by the deadline specified. CHAMP OFF-ROAD is not responsible for forms not received or filled out incorrectly.
- 2.2. **Entry Approval** – Acceptance of any entry is at the discretion of CHAMP OFF-ROAD. A participant is not eligible to compete until entry blank is received and approved by CHAMP OFF-ROAD headquarters regardless of fees submitted.
- 2.3. **Late Entries**– In the event an entry is submitted after the specified deadline, CHAMP OFF-ROAD may accept the late entry with a late registration fee. An Entry will not be allowed on competition day. All entries must be submitted by 9pm before the event day for that specific class.
- 2.4. **Refund Policy** – All refunds must be requested through CHAMP OFF-ROAD Headquarters within 7 days of the scheduled event. Once a vehicle enters the racecourse, whether in practice or competition, a refund can no longer be issued.

SECTION 3 – ELIGIBILITY

- 3.1. **Vehicle Eligibility** – Only vehicles, parts, components, and equipment determined by CHAMP OFF-ROAD officials to meet the specifications set forth in the stated rules are eligible to compete in a CHAMP OFF-ROAD event. Determinations can be made at any time before, during, or after an event.

SECTION 4 – INSPECTIONS

- 4.1. **Time/Manner** – All vehicles, parts, components, and equipment are subject to inspection by CHAMP OFF-ROAD officials at any time and in any manner. Decisions made in regard to the time or manner of inspection are final, non-appealable, and non-reviewable.
- 4.2. **Inspection Area** – Only those persons permitted by CHAMP OFF-ROAD officials are allowed in the inspection area.
 - A. Technical Inspection area will be restricted to a maximum of 2 crew members in the Technical Inspection area at all times. Tech Director may allow additional team members



to assist for advanced tear down in special circumstances.

- B. Staging area will be restricted to the driver and 1 crew member at all times. Once vehicles have cleared pre- tech no modifications / adjustments are allowed for any reason while in staging or on the way to staging after leaving the tech area.
- 4.3. **Competitor Obligations** – A participant must take whatever steps requested by CHAMP OFF-ROAD officials, including tear down of the vehicle to facilitate inspection. This may include but is not limited to installing inspection holes, inspection ports, and any other means of inspection deemed necessary. Any inspection that requires tear down or dismantling of any assembly to inspect components is the sole financial responsibility of the competitor and or team. CHAMP OFF-ROAD is not in any way financially responsible for any tear down or disassembly or reassembly of components to ensure rules compliance. In passing a vehicle through technical inspection, CHAMP OFF-ROAD does not warrant that vehicle’s adherence to all rules. The participant is responsible for ensuring his/her vehicle is in compliance with all CHAMP OFF-ROAD rules at every event.
- 4.4. **Pre-Race Inspection** – All vehicles must pass a technical inspection before entering the racetrack.
- A. If a vehicle does not pass this inspection it will not be allowed to compete unless, in the opinion of the CHAMP OFF-ROAD official, the deficiency: Is not safety related, presents no danger to the driver, other competitors, crew or race personal. Will not adversely affect the race, cannot be corrected in time for qualifying for the race or it is insubstantial and does not warrant disqualification from the race. All trucks must pass through a final pre-race tech inspection prior to entering the racetrack. Any and all deficiencies must be fixed and approved by tech prior to entering the racing surface.
 - B. If technical inspection is passed but a deficiency is noted on the inspection sheet, it must be corrected by the date and time specified or a penalty may be imposed.
 - C. All helmets and driver gear to be used during the weekend must be presented for pre-race inspection with vehicle. All gear must be clean.
- 4.5. **Post-Qualifying/Race Inspection** – All vehicles must either be inspected or released from inspection by a CHAMP OFF-ROAD official at the conclusion of each race/qualifying session. If a vehicle fails to arrive at or leaves the inspection area without being cleared by a CHAMP OFF-ROAD official a penalty may be imposed. No one including Team members or drivers are permitted to “tamper” with the vehicle in any way in preparation for pre-technical inspection or post technical inspection.
- 4.6. **Technical Penalties** - Penalties imposed for technical infractions are final, non-appealable, and non-reviewable.
- 4.7. **Equipment/Parts Failing Inspection** – CHAMP OFF-ROAD can confiscate any illegal parts and/or equipment found during any inspection. Any items/parts confiscated will not be returned. No compensation will be made by CHAMP OFF-ROAD for illegal parts that are seized.
- 4.8. **Sealing/Impounding** – CHAMP OFF-ROAD has the right to seal or impound race vehicles or parts for inspection purposes. CHAMP OFF-ROAD assumes no responsibility for those parts or vehicles.

SECTION 5 – RACE PROCEDURES

- 5.1. **Finality** – All decisions made by CHAMP OFF-ROAD officials involving race procedures are final and may not be appealed – subject only to review if one or more officials determine that a review is required. If a review determines that action is required, officials reserve the right to revise race results, impose penalties, and/or award or subtract points. Race and Tech Directors have final say in all decisions.
- 5.2. **Driver/Crew Responsibilities** – The driver is ultimately responsible for the behavior and actions of all members of his/her team to include crew members, team owners, and spotters. Penalties can be imposed on drivers for actions taken by members of his/her team.
- A. Drivers must check in and attend all driver meetings.
 - 1. Drivers are considered late to Drivers meeting at the time his/her name is called at roll call. If a driver races in multiple classes, this applies to each class roll call.
 - 2. After 10 minutes of being late you are considered not showing up to the meeting at all.
 - 3. If a Driver is determined to be late for a Drivers meeting, he/she will be penalized by losing 2 positions for the start of that day's event after the inversion is drawn.
 - 4. If a Driver fails to show up at any mandatory Drivers meeting, he/she will not be permitted to qualify and may be permitted to start at the back of the pack for that next scheduled race.
 - 5. Any post qualifying technical inspection violations will start behind any drivers meeting violation penalties.
 - B. Drivers not able to attend a driver's meeting, must have a crew member stand in for them and most notify the Competition Director prior to meeting start. A driver will not race in an event if the driver does not have specified spotter in spotters tower.
 - C. Drivers must be on time to compete in events as scheduled. Any driver or vehicle that is not ready to compete at the designated race time may be sent to the back of the field or be disqualified from the race completely at the discretion of CHAMP OFF-ROAD officials.
 - D. An eligible driver may drive any qualified vehicle in any event. A class rookie driver must have practiced in the vehicle before driving it in competition. A racer must be approved by CHAMP OFF-ROAD official to further advance Off-Road classes.
 - E. A driver may not attempt to qualify more than one vehicle per race division.
- 5.3. **Engine Replacement** - Engines may be replaced during a CHAMP OFF-ROAD event only after the CHAMP OFF-ROAD technical director has been notified. Any engines removed for any reason must be brought to tech for inspection. Engine seal numbers will be tracked back to engine declaration sheets turned into tech.
- 5.4. **Starting Positions** – Qualifying positions for the first event will be determined by random drawing. Drivers who do not draw or enter after the close of registration for an event will be placed at the back of the field.
- A. All Classes must qualify to determine starting position for any race.
 - 1. All competitors will be offered a chance to qualify when possible for each event
 - 2. Each competitor will be given a joint session with other competitors on the track to record lap times. The fastest lap time will be the top qualifier for each class.
 - 3. The top qualifier will be eligible to have his/her spotter draw from the pill can for the inversion of the field. Inversion will be done on even numbers only being – 0,2,4,6 with the maximum inversion to be no greater than ½ of the total entries in each group and capped at 6 for the highest number (i.e. with 12 entries the maximum inversion would be 6. With 8 entries the maximum inversion would be 4)



4. In the event qualifying is not possible for reasons out of our control the grid will be determined by championship points standing. If no points are earned to set position, then grid position will be determined by the order in which the driver's registrations were accepted for the event. In the event that qualifying is not possible for reasons out of our control at the first event of the season the grid will be determined by the championship points from the prior year and any drivers that didn't have points from the prior year will be set at the back of the grid and in order in which position will be determined by the order in which the drivers registrations were accepted for the event.
 5. Any competitor that fails to qualify may still race but will be forced to start at the back of the starting grid behind all other vehicles
 6. In the event of an exact tie for fastest lap for qualifying the tie will be broken by 2nd fastest lap, if still an exact tie for the 2nd lap time we will use subsequent laps until the tie is broken.
- B. When there are less than 10 register in a class, one or more of the following may apply at the sole discretion of CHAMP OFF-ROAD.
1. May or may not use a random inversion when less than 10 in a class.
 2. May invert the whole field or any number of vehicles when there are 9 or less.
 3. May join classes and run them with another class of 10 or less.
- C. Last Chance Qualifier (LCQ) Procedures-
1. Any class may be selected to utilize the LCQ procedure at the discretion of the Race Director. It will be announced to the class at the Drivers meeting which classes will be utilizing the LCQ procedure if any.
 2. All competitors in a class utilizing the LCQ procedure will be given a chance to qualify for time as a normal qualifying session would be held. Depending on the size of the field and number of competitors the Race Director may split the field into 2 groups for qualifying.
 3. If the field is split into 2 groups, then each group will be given a chance to qualify in his/her group only. No competitor will be permitted to qualify outside of his/her designated qualifying session for any reason. Using the championship points competitors with odd number positions in championship standings will be in group 1 for qualifying. Competitors with even number position in championship points will be in group 2 for qualifying. Qualifying group 1 will occupy the inside (left row) of the main event starting grid and group 2 will occupy the outside (right row) of the main event starting grid.
 4. If split into 2 groups each group will have its timed session and at the end of the timed qualifying session approximately the top 8, to be determined by the Race Director qualifiers based on fastest times will automatically progress to the main event race. The spotter for the top qualifying time from both groups will be permitted to draw from the pill can determine the rotation / inversion for approximately the top 16 positions as determined by the Race Director.
 5. Rotation / Inversion will be done by rows and not positions. (i.e. if the inversion number drawn is a 3 then row 1 rotates back to row 3 and rows 2 will move to row 1 and row 3 will move to row 2) Possible Rotation / Inversion numbers are 0,2, and 3
 6. The remaining competitors that failed to make approximately the top 16 qualifiers will be allowed to run in the LCQ race to make an attempt to race into the main

event. The top 2 competitors from the LCQ will progress to the main event. The 2 transfers from the LCQ will start behind approximately the top 16 qualifiers in the subsequent next 2 positions respective to their finish in the LCQ

7. There will also be 2 provisional positions awarded to enter the main event. The top 2 competitors in points if they have failed to qualify into the main event will be permitted to race on a provisional starting position. The 2 provisional starters will start behind the 2 LCQ transfer vehicles and position is determined by current championship point's standings for the last 2 positions.
 8. When utilizing the LCQ procedure for any class the vehicles and competitors that fail to make the main event positions (for example 20 starters) will not be permitted to race the main event and will be awarded finishing positions accordingly at the close of the main event for attempting to qualify. Starting at finishing position 21 points will be awarded accordingly as the competitors finished the LCQ.
 9. If the LCQ procedure is employed no other qualifying procedure rules apply to that class.
 10. Any competitor may only use 3 consecutive provisional starts at any one time.
- D. Cup-Configuration races-
1. When racing similar vehicles together with differences in the competition balance for equipment CHAMP OFF-ROAD may start these races in a staggered standing start style configuration.
 2. All staggered start races will be separated by distance or time determined by the Competition director and at CHAMP OFF-ROAD sole discretion. Separation for initial starts will determined before the start of the event.
 3. If there is a full course caution on the first lap there may be a full restart. There will only be one attempt at a full restart
 4. Restarts will also be done by standing re-start at the flag line with the first group stopped at the end of the start zone. Second or third groups will start behind the first group determined by the time gap from the leader of each respective group from the most prior green flag lap line crossing. All restarts will be called over the raceceiver by the Competition Director only and separate for each group based on the time gap needed to maintain separation of the groups. Any competitor in one group that is passed by the leader of another group is now part of that group and will remain in the physical position in line with the group the competitor is mixed into for any restarts.
 5. There may not be a competition caution at the midway point in any Cup-Configuration races and it will be at CHAMP OFF-ROAD sole discretion to use a competition caution or not.
 6. Each class will still qualify for starting position and normal inversion procedures will be used for each class of vehicle. Some similar vehicles may qualify in a single group or separate at CHAMP OFF-ROAD sole discretion.

5.5. Race Start

- A. Starting grid position will be established by CHAMP OFF-ROAD prior to each event.
- B. Race vehicles must be in the staging area thirty minutes prior to the beginning of the race.
- C. All vehicles must be ready to race when entering the starting grid.
- D. Late vehicles may start after the green flag, only with permission from a CHAMP OFF-ROAD official.
- E. The penalty for making contact with the official pace truck is disqualification. This is not appealable. Passing the pace truck without permission will also result in a penalty.



- F. Scoring and timing of the race does not begin until the official starter waves the green flag. Any vehicle that does not maintain its designated position to that point may be repositioned and/or penalized by CHAMP OFF-ROAD officials at their discretion. (see [section 6.1 for more detail on green flag / start procedures](#))

5.6. **Race Halt** –CHAMP OFF-ROAD officials may stop a race at any time the track is deemed unsuitable for racing. Under adverse conditions, a race may be called official after 50% of the laps have been completed, or if any race is halted due to exceeding the allowed time limit for that race of 30 minutes or at the race director’s discretion.

- A. When a race is halted prior to the completion of one lap, there shall be a complete restart in the original starting position.
- B. When a race is halted after the completion of one lap, vehicles will line up in the order in which they were running at the completion of the last full lap before the halt. If there is no restart, drivers will be scored and paid on the positions they would have held in a restart.
- C. When an event is halted due to rain or adverse circumstances prize money shall only be paid for the races completed. CHAMP OFF-ROAD may reschedule the event to a mutually agreeable date. In that case, the incomplete races would be finished first, and original entries would start in the position they were halted in previously.

5.7. **Race Start/Finish Line** – The official race start line will be indicated at each event during pre-race driver’s meetings. The start line may be different from the finish line.

5.8. Race Course Procedure

- A. A vehicle may be pulled from competition at any time if a CHAMP OFF-ROAD official feels it is a hazard to others.
- B. Vehicles must race under their own power and in forward gears only.
- C. If a vehicle gets off the designated racetrack, speed must be reduced significantly, and the vehicle must merge back into the line safely without gaining time or position.
- D. Yellow Flag - Caution Procedures
 1. In a caution where no penalty is imposed Any vehicles charged with the caution may be put to the back of the pack.
 2. In any caution where a penalty is imposed to a driver at fault for the caution, any other involved vehicles may be given their position in the field back or be placed at the back of the pack at the discretion of the race director.
- E. Any competitor that has gone one or more laps down must use additional courtesy to the vehicles still on the lead lap. Any competitor attempting to pass the leader(s) to get back on the lead lap must make the passes with very limited or no contact at all. Any contact by the vehicle attempting to pass the leader(s) may be deemed as aggressive driving and result in applicable penalties as deemed necessary by CHAMP OFF-ROAD officials. Contact that results in the retirement of any of the vehicles being passed by the lapped competitor may result in severe penalty which may include disqualification and or other penalties at the sole discretion of CHAMP OFF-ROAD officials.

- F. A race vehicle that has a tire that is starting to delaminate or come apart in anyway must reduce speed below 30 mph and enter the hot pit and change that tire within one lap, that race vehicle may only pass the flag stand one time in this condition. A race vehicle that continues to throw any debris or parts from their vehicle and or does not comply with the rules above may be disqualified from the race.
- G. Competition Rules Definitions:
1. Track Limits – the track limit or designated race track is determined by CHAMP OFF-ROAD as the only area that can be raced on, usually laid out between two or more of the following items, K-rail, fencing, banners, bright colored cones, dirt wall or dirt furrow, sometimes referred to as the racing surface.
 2. Competitive racing surface - defined as the area within the track limit that a race competitive speed can be maintained. One example would be, a turn may have a track limit of 80 feet wide but late in the race the competitive racing surface may only be about 40 feet wide, because the dirt beyond the cushion becomes too deep or too soft that a competitive speed cannot be maintained.
 3. Cushion – the inside edge of loose dirt that gets pushed and or built up, usually to the outside of a turn.
 4. Heavy contact – when one race vehicle contacts another race vehicle with enough momentum and or force, that the other race vehicle is significantly displaced from its current position, path, trajectory and or significantly breaks its momentum.
 5. Light contact - when one race vehicle contacts another race vehicle with very low momentum and or force, as not to significantly displace the other race vehicle from its current position, path, trajectory and or significantly breaks its momentum.
 6. Defensive move – a race vehicle intentionally moving left or right in order to block or reduce the momentum of another race vehicle.
 7. Incidental contact - contact that is believed to be unplanned or unintended, sometimes in conjunction with something else. One example would be but not limited to, two race vehicles racing side by side through a turn, the vehicle on the inside hooks a rut that puts it up on two wheels and instinctively turns outward in order to regain control, in the process of doing so it contacts the vehicle on the outside of the turn.
 8. Holding your line – a race vehicle maintaining its course, path or trajectory. (Following the arc or radius of a turn within the track limits).
 9. Not holding your line – a race vehicle not maintaining its course, path or trajectory.
 10. Aggressive Driving – being at the limit of light contact, multiple light contacts within the same race, the appearance of not being in control and or putting others at unnecessary risk.
- H. Competition Rules: A competitor may receive a penalty for any of the following listed below. ***If any of the following is believed to be incidental contact, there must be no call (no penalty). ***If two or more race vehicles are involved in an incident and all involved are equally at fault there will be no call, unless all involved are deemed to be overly aggressive or unsafe, then all involved will receive the same penalty.
1. Any contact on the approach to a jump that result in a race vehicle leaving the jump in an unsafe manner.
 2. Heavy contact.
 3. Light contact that is maintained: both parties must try to detach or break contact immediately.
 4. When one race vehicle forces another race vehicle outside of, or off the competitive racing surface.

5. If a race vehicle makes more than one consecutive defensive move: A race vehicle may make one defensive move, only if the lead vehicle has a clear track in the direction of the move. If the track is not clear, a race vehicle may move over but avoid contact and must leave space on the competitive racing surface for the other race vehicle to continue racing.
6. If a race vehicle makes heavy contact or fails to leave room on the competitive racing surface while making a defensive move.
7. If a black flag (penalty) is given in the last two laps of a race, that race vehicle will be scored in last position of the last lap that it completes. If the penalized contact or act results in another race vehicle losing positions or not finish the race, an additional penalty will also be extend to one or more of the following, a points loss, fine, and or next race starting position penalty.
8. Driving through another race vehicle: An example would be, if a race vehicle leading another race vehicle has changed its trajectory and or over rotated in front of another race vehicle, the oncoming vehicle must reduce speed and try to avoid contact, (on the brakes and off the gas). If contact is unavoidable (incidental) you may not attempt or continue to push that race vehicle, even if it may result in the loss of position.
9. Not reducing speed when a spin, crash or other unnatural or possible unsafe incident is happening in front of your race vehicle.
10. Not reducing speed or getting off the gas when not on the racing surface. "Off the line off the gas". If at any time a race vehicle is not on the racing surface or track limits and still on the gas without showing clear intent to slow down (i.e. throwing roost off tires)
11. If there is ANY contact made at any time other than under green flag (racing) conditions.
12. If more than one warning for the same offence is given during the same race to the same race vehicle.
13. If more than one wheel is over or outside of the track limit and an advantage or position is gained.
14. Not holding your line when the track is not clear to do so.
15. Aggressive Driving.

5.9. **Official Competition** – All races will run until the checkered flag is shown to the leader.

5.10. Hot Pit Procedures

- A. Hot pit speed limit is 30 MPH.
- B. Race vehicles may not be pushed onto the racetrack from the hot pit area. Vehicles may be started by hand pushing in the hot pit area but may not be pushed past the flagman at the track entrance.
- C. All equipment used to service the race vehicle must be removed from the vehicle before entering the racetrack and must be returned to the equipment side of the pit wall immediately following the pit stop.
- D. Lug nuts must be fully tightened before the race vehicle leaves the pit area. Vehicles will return to pit area for inspection if CHAMP OFF-ROAD officials detect a violation of this rule.
- E. All major repairs must be done behind the pit wall.
- F. Only one jack may be used for tire changes. The same jack must be used when changing tires on both sides of the vehicle during a pit stop. A second jack may only be used in the



- event that a vehicle falls off the first jack, in order to facilitate the use of the first jack.
- G. Air supply tanks and pressure regulators for all air equipment must remain on the equipment side of the pit wall.
 - H. There is no fueling in the hot pits.
 - I. During a pit stop, one crew member must stand at the front of the vehicle in the driver's direct view for the duration of the stop. The vehicle may not leave the pit until that crew member sees that all work is completed and signals that it is safe to proceed.
 - J. No more than five crew members may be over the hot pit wall during their division race.
 - K. Long pants and closed toe shoes must be worn in the hot pits and racetrack area at all times.
 - L. All pro truck team crew members are required to wear team uniform shirts in the hot pits.
 - M. Correct Crew member credentials or valid CHAMP OFF-ROAD driver license is required for access to the hot pits.

5.11. **Team Spotters-** All teams in all divisions are required to have one spotter per race vehicle, in the CHAMP OFF-ROAD designated area any time the race vehicle is on the racetrack.

- A. Spotter must check in with the CHAMP OFF-ROAD official in the designated spotter area before the start of the race and must remain in the area as long as his/her vehicle is on the track.
- B. Spotters must have 2 working radios consisting of 1 working "listen only" radio and headset with the ability to hear the competition director as well as 1 two-way radio to communicate directly with the driver in the race vehicle.
- C. Drivers may be penalized for inappropriate spotter behavior.
- D. Spotters must have vehicle numbers marked clearly on front and back of person so as to be easily visible to CHAMP OFF-ROAD officials. Numbers must be black on a white background with a minimum size of 2 inches by 3 inches.
- E. Spotters for rookie drivers must have yellow stripes on headset on both sides of race car number.

SECTION 6 – FLAG SPECIFIC RULES

6.1. **Green Flag (Start/Restart)** – All race vehicles must remain in appropriate positions until the race is started as outlined below signifying the start or restart of the race.

- A. **For all classes except JR SxS**
 - 1. Each racetrack will have a designated start box marked by start line and designated end of start area line (the start box). ON any start or re-start the pole sitter will start the race on his/her discretion upon entry of the start box and before leaving the start box area.
 - 2. No competitors are permitted to start the race until the pole sitter starts or penalties may be applied.
 - 3. An official will waive the green flag when the pole sitter starts the race. (see section 5.5 section F for more detail on green flag / start)
 - 4. It is the responsibility of the pole sitter to maintain a consistent pace to the start area and will not be permitted to "brake check" or slow speed as set by the pace truck or about 25 MPH before entering the start box. Failure to comply may result in a penalty to the pole sitter, including losing positions.
 - 5. If the pole sitter does not start the race before leaving the start box area the flag man will waive the green flag and all competitors are free to start at will

regardless of the pole sitter actions.

6. On standing starts, the Official Starter will indicate the start of the race by waving the green flag or by some other means.
7. In the event of a caution on a start or restart before a single lap is completed the following will apply:
 - a) In the event of a full caution before one lap is completed, we will have a full restart.
 - b) If a single vehicle caused the incident alone, he/she may be placed at the back of the pack for the restart.
 - c) The field will be re-gathered based on the starting position from that start attempt. If some vehicles are damaged and will not continue those positions will be vacated and left open in the field. If a full row is vacated the next row may move forward to remove the gap in the field.
 - d) Only one attempt will be made at a restart. If the restart attempt fails and we have a second caution before that lap is completed, we will go to single file restart at that time.
 - e) Any vehicle that enters the hot pit area in this process will go to the back of the pack for the restart. If multiple vehicles enter the hot pit or leave the track, they will be lined up at the back of the pack based on the order in which the vehicle leaves the hot pit and rejoins the field.
8. In the event of a complete restart, all vehicles that took the first green flag will be awarded the appropriate finishing position based on the position in the field. Starting grid position settles any multiple vehicle issues in the same location on the track.

B. For Classes JR SxS

1. Each racetrack will have a designated start box marked by start line and designated end of start area line (the start box). ON any start or re-start the flag man will start the race on his/her discretion upon entry of the pole sitter into the start box and before leaving the start box area.
2. No competitors are permitted to start the race until the green flag is waived or penalties may be applied.
3. It is the responsibility of the pole sitter to maintain a consistent pace to the start area and will not be permitted to "brake check" or slow speed as set by the pace truck or about 15 MPH before entering the start box. Failure to comply may result in a penalty to the pole sitter, including losing positions.
4. On standing starts, the Official Starter will indicate the start of the race by waving the green flag or by some other means.
5. In the event of a caution on a start or restart before a single lap is completed the following will apply:
 - f) In the event of a full caution before one lap is completed, we will have a full restart.
 - g) If a single vehicle caused the incident alone, he/she may ~~will~~ be placed at the back of the pack for the restart.
 - h) The field will be re-gathered based on the starting position from that start attempt. If some vehicles are damaged and will not continue those positions will be vacated and left open in the field. If a full row is vacated the next row may move forward to remove the gap in the field.
 - i) Only one attempt will be made at a restart. If the restart attempt fails and we have a second caution before that lap is completed, we will go to single

- file restart at that time.
- j) Any vehicle that enters the hot pit area in this process will go to the back of the pack for the restart. If multiple vehicles enter the hot pit or leave the track, they will be lined up at the back of the pack based on the order in which the vehicle leaves the hot pit and rejoins the field.
6. In the event of a complete restart, all vehicles that took the first green flag will be awarded the appropriate finishing position based on the position in the field. Starting grid position settles any multiple vehicle issues in the same location on the track.
- 6.2. **Blue Flag with Diagonal Yellow Stripe (Passing Flag)**– Race vehicles given this flag must prepare to yield to overtaking traffic.
- 6.3. **Yellow Flag (Caution)** – Race vehicle must immediately slow to 30 miles per hour or other speed indicated by CHAMP OFF-ROAD officials. No passing is allowed under a yellow flag. A call on the Raceceiver by the Race Director of Yellow is to be treated the same as seeing the yellow flag displayed.
- A. Stationary yellow flag indicates a full course caution situation. Lap counting will cease during a full course caution.
- B. Penalties may be imposed for vehicles not abiding the yellow flag. Violators will be notified by receipt of a black flag at the finish line. Continued participation in the race after the black flag for this offense may result in disqualification of the vehicle. This is not an appealable disqualification.
- C. Only CHAMP OFF-ROAD safety personnel will attend to race vehicles and drivers involved in caution incidents. CHAMP OFF-ROAD officials may request assistance from trained crew members as needed, but other than that crewmembers may not enter the racetrack to assist their vehicles.
- D. Vehicles will be placed at the back of the pack when a caution is called, and the driver is charged with the caution. Multiple vehicles may be charged with a caution.
- 6.4. **Red Flag (Race Stop)** – Race vehicle must stop in a safe matter immediately, regardless of your scored position on track.
- A. Failure to obey the red flag will result in disqualification. This is not an appealable disqualification.
- B. Repairs, refueling, or service of any nature is not allowed during a red flag. If a vehicle is in the hot pits being serviced, all work must stop immediately when the red flag is displayed, and nothing can be continued until the red flag is withdrawn and returns to a yellow flag or the race is restarted.
- C. Red and yellow flags together designate a complete restart before one lap has been completed. Damaged vehicles may go to the hot pit area for repairs and must go to the back of the pack for the restart. Timing on the restart is at the discretion of CHAMP OFF-ROAD officials.
- 6.5. **Black Flag (Penalty)** – Race vehicle must report to penalty area and remain until released by a CHAMP OFF-ROAD official. This flag will be displayed at the finish line only.
- A. The black flag may be displayed for rough driving, an unsafe vehicle, failure to acknowledge other flags, failure to adhere to CHAMP OFF-ROAD rules or directives, and

- other offenses at the discretion of CHAMP OFF-ROAD officials.
- B. After a black flag is displayed to the driver for three consecutive laps with no penalty served, scoring of the vehicle will be discontinued for the remainder of the race.
 - C. If a driver receives a black flag during the final two laps and does not serve the penalty, CHAMP OFF-ROAD officials may drop the finishing position of the vehicle, deduct championship points, or both.
 - D. Any black flag penalty may be a stop and go penalty or shall put the offending Drivers' vehicle to the back of the pack. CHAMP OFF-ROAD officials will place vehicle back on track after penalty is served.
 - E. Any competitor receiving a 2nd black flag penalty in the same race will not be allowed to continue.
- 6.6. **White Flag (One Lap to Go)** – Display of the white flag at the finish line means the leader has started his/her last lap.
- A. No race vehicle may receive any assistance after the white flag has been shown with the exception of those making regular pit stops.
 - B. In the event a caution is required on the white flag lap the field will be lined up based on the last completed green flag lap and the last lap will be run to complete the race. Any vehicle entering the hot pit will be placed at the back of the pack.
- 6.7. **Checkered Flag (End of Race)** – display of the checkered flag at the finish line means the race is completed. All vehicles must go to the designated finish area and remain there until released by a CHAMP OFF-ROAD official.
- A. When the checkered flag is displayed to the leader, the balance of the field receives the checkered flag in the same lap. Finishing position will be awarded according to most laps completed in the allocated amount of time, whether the vehicle is still running or not.
 - B. In the event of a caution on the last lap after the leader and or other competitors have crossed the line and taken the checkered flag any competitors that cross the line will be scored with the appropriate position as crossed before the caution came out. All other competitors that have not crossed the line before the caution comes out will be scored with position from the last completed green flag lap or based on the last restart if the prior lap was not run under green condition.
 - C. In the event of an exact tie at the finish line the tie will be broken by looking back to the driver with the higher position for the previous lap.

SECTION 7 – TIMING AND SCORING

- 7.1. **Official Scoring** – All decisions of the designated CHAMP OFF-ROAD official scorer for an event are final unless a recheck has been requested by a driver or a CHAMP OFF-ROAD official.
- 7.2. **Scoring Re-Check Procedures** – A participant must submit a request for a scoring re-check in person within twenty minutes after the declaration of finishing positions has been made by CHAMP OFF-ROAD officials. Results are not considered official until any requested re-checks have been concluded. Any recheck request must be accompanied by a \$100.00 deposit. If an error is found, the deposit will be refunded. If no error is found, the deposit is forfeited.



SECTION 8 – VIOLATIONS AND DISCIPLINARY ACTIONS

- 8.1. **General Procedure** – If it comes to the attention of CHAMP OFF-ROAD officials that a participant has violated a CHAMP OFF-ROAD rule or has acted in a manner that is detrimental to off road racing or to CHAMP OFF-ROAD, and the act warrants a penalty, the member will be notified by CHAMP OFF-ROAD officials of the violation, the circumstances involved, and the penalty imposed.
- 8.2. **Emergency Action** – CHAMP OFF-ROAD reserves the right to take temporary emergency action against a participant in the event that he/she acts in a manner that can be considered a threat to the orderly conduct of an event. Such action may include ejection from premises, suspension of license, or any other action designed to remove the threat created. Consumption of alcohol or drugs before or during an event, fighting, inappropriate driving, and failure to obey any flag or other directive of a CHAMP OFF-ROAD official are examples of conduct that would warrant emergency action.
- 8.3. **Payment of Fines** – Fines shall be paid to CHAMP OFF-ROAD headquarters promptly after receipt of penalty notice. Teams with outstanding fines will not be permitted to compete in future events. All unpaid fines can be collected by deduction from winnings. Any fines left unpaid at the end of the season will be grounds for refusal of a CHAMP OFF-ROAD license for the next year.
- 8.4. **General Scope of Penalties** – Penalties for violation of CHAMP OFF-ROAD rules are determined by the severity of the violations and the effect on fairness of competition, the orderly conduct of the event, and the interests of off-road racing and CHAMP OFF-ROAD. Penalties may include, but are not limited to: disqualification, probation, license suspension, fines, or loss of points.
- 8.5. **Unsportsmanlike Conduct** – Any participant found by CHAMP OFF-ROAD officials to be engaging in unsportsmanlike behavior or any inappropriate behavior that affects the orderly conduct of an event, the interests of off-road racing, or CHAMP OFF-ROAD will receive a penalty. This includes any aggressive action toward a CHAMP OFF-ROAD official by participant including arguing, yelling or raising your voice when talking to an official, or touching the official in any physical way. Drivers are solely responsible for the actions of all team members at all times and in the event that a team member shows Unsportsmanlike Conduct, CHAMP OFF-ROAD officials may penalize the driver for the actions of the team member in addition to any penalty to the team member for his / her actions.
- 8.6. **Repeat offenses**- Any participant found by CHAMP OFF-ROAD officials to be engaged in any repeat offense of any technical violation or any other action that causes the CHAMP OFF-ROAD officials to impose any penalty to the driver or team will see the penalty more than double on the second offense for the same action or violation. In the event that any participant is found repeating any offense for a third time the participant may be removed from the event and put on suspension solely at the discretion of the CHAMP OFF-ROAD Competition Director.
- 8.7. **Physical Altercations** – Any competitor or team member involved in a personal confrontation where one person touches another with intent of physical harm to the other will be placed on indefinite probation and the Series may impose additional disciplinary sanctions given the severity of the offense.



- 8.8. **Vehicular Acts of Aggression** - In the event that CHAMP OFF-ROAD officials deem that a Driver committed premeditated intentional acts of aggression with their vehicle toward another driver's vehicle at any time during the event will be placed on indefinite probation and will receive a disqualification from that event. Any driver that is involved in a subsequent offense of premeditated acts of aggression with their vehicle toward another driver's vehicle will be subject to review by the executive management of CHAMP OFF-ROAD and may carry further extreme penalty which can include suspension and or permanent suspension and expulsion from the series. Any driver using their vehicle and attempting to cause another driver bodily harm or cause substantial equipment damage will be disqualified and removed from the property immediately for the remainder of the event and will be subject to further penalties, fines, and CHAMP OFF-ROAD will exercise the right to allow the local authorities deal with the situation within all limits of the law.

SECTION 9 – PRIZE MONEY/EVENT PAYBACK

- 9.1. **Distribution of Prize Money and/or Event Payback** - all events shall be contested for a guaranteed finishing position purse as set forth in the payoff schedule.
- A. Prize money shall be distributed by CHAMP OFF-ROAD Headquarters.
 - B. In the event of a dispute, filed in accordance with section 9 of this rulebook, prize money shall be held until the dispute is decided.

SECTION 10 – POINTS AND POINTS FUND

10.1 Eligibility for Points and Points Fund

- a. A driver cannot receive points for more than one race vehicle in the race.
- b. Points are awarded to the driver who occupies the grid under his/her registered vehicle number. Any driver changes must be reported to CHAMP OFF-ROAD to insure proper scoring for the driver. If a different driver races the vehicle, a number change must be made and reported. All points follow the driver.
- c. To be eligible to receive points, the driver and race vehicle must occupy the starting grid by clearing pre-race tech, pre-race staging, and roll onto the racing surface under the vehicles own power in attempt to take the green flag to start the race.
- d. To participate in year end points fund awards, the driver must compete in 80% of all event weekends in that season. An event weekend is defined as 2 consecutive rounds of racing held at the same facility. The driver will receive credit for participation if his/her vehicle is damaged in the first round of the weekend and is unable to compete in the second event of the weekend.
- e. In the event that a driver is unable to compete due to an injury or other special circumstance, another CHAMP OFF-ROAD licensed driver may act as a substitute driver. This driver substitution can only be done with prior approval from CHAMP OFF-ROAD Competition Director for two race weekends in a season and must be approved by the CHAMP OFF-ROAD competition director in advance of the event.
- f. In the event of an extreme hardship (death of an immediate family member or equivalent) that a driver is unable to compete, another CHAMP OFF-ROAD licensed driver may act as a substitute driver. This driver substitution can only be done with prior approval from CHAMP OFF-ROAD competition director. CHAMP OFF-ROAD competition director will have sole discretion to approve such an



extreme hardship. The approval or disapproval shall be at the sole discretion of the CHAMP OFF-ROAD competition director and is non-appealable.

- g. In the case of a tie for any position in year end points, the tie will be broken by using the greatest number of first place finishes. If a tie still exists, seconds, thirds, etc. will be considered until the tie is broken. If a tie still exists, the driver establishing the first victory of the season will prevail.
 - h. Eligibility to participate in the points fund may be forfeited by any member violating CHAMP OFF-ROAD rules or regulations prior to the presentation of the awards.
 - i. The points championship is not official until after the last race.
2. **Driver Points** – Points will be awarded according to the following point scale:

Position	Points	Position	Points
1	25	14	9
2	22	15	8
3	20	16	7
4	19	17	6
5	18	18	5
6	17	19	4
7	16	20	3
8	15	21	2
9	14	22	1
10	13	23	0
11	12	24	0
12	11	25	0
13	10	26	0

3. **Driver Bonus Points** – Bonus points will be issued as follows:
- a. Two bonus points for the driver who is leading any race at the halfway point and one bonus point for the driver who is in second, unless the race is halted prior to reaching the half-way point.



CHAMP OFF-ROAD RACING SERIES SAFETY RULES

The aforementioned safety rules will apply to all registered classes:

SR-1 Equipment

- A. No passenger is allowed on the race vehicle any time the vehicle is in motion.
- B. Race vehicles will not be allowed on the racetrack without safety and emergency equipment on the premises.
- C. No race vehicle is permitted on the track without approval from a CHAMP OFF-ROAD official.
- D. No driver will compete in any event with his/her head or arm extended outside of the vehicle.
- E. 1 UTV and 1 pit bike will be allowed per entry. These pit vehicles must be registered with CHAMP OFF-ROAD headquarters, must be driven in a safe manner, and may not be driven by anyone under 16 at any time other than a driver registered and banded in a pro class.

SR-2 Driver's Wear

- A. One-piece driver suits are required. The suits must cover from the neck to the ankles and to the wrists. All suits must have the SFI label attached and meet SFI Spec 3-2A/5 or higher.
- B. Drivers must wear gloves and driving shoes that meet SFI Spec 3.3/5 or higher and have the SFI label attached. Gloves may not be modified or have any holes in them. If at any time any CHAMP OFF-ROAD official notices a driver missing a glove or having a glove with holes or fingers cut out the driver will be black flagged from the track immediately and it will be the sole discretion of the competition director if the driver will be allowed to re-join the race or if they will be parked for the duration.
- C. Drivers must wear full length socks of fire-retardant material SFI 3.3 labeled at all times.
- D. Drivers must use a full helmet skirt made of fire-retardant material, with attached SFI 3.3/5 label or approved fire-retardant head sock with attached SFI 3.3 label at all times.
- E. All driver apparel must be clean, in good condition, and free from rips or worn areas.
- F. The designated CHAMP OFF-ROAD patch will be attached to the suit on the upper front right breast area, no more than six inches from the top of driver's shoulder. No other racing sanctioning body patches or decals are to be worn on the suit. CHAMP OFF-ROAD patch must be sewn on to suit with thread.

SR-3 Helmets

- A. Full face helmets with a Lexan shield are required.
- B. Helmets must be certified to a minimum one or more of the following standards:
 - 1. Snell Memorial Foundation guidelines and have a minimum requirement of the current rating or one prior rating only. Certification information may be found at the following web site <http://www.smf.org/stds> - 2020 will be the last year that for the Snell 2010 rated helmets
 - 2. SFI Spec 31.1/2010 with a legible SFI sticker attached.
 - 3. FIA 8868 with a legible FIA sticker attached.

SR-4 Eye Protection

- A. It is required that drivers wear eye protection in the form of Lexan shields.

SR-5 Seats



- A. Only manufactured race seats are permitted. Custom manufactured seats must be approved by CHAMP OFF-ROAD.
- B. All seats, rib protectors, leg extensions, and head rests must be padded. Head rest padding must be certified to SFI Spec 45.2.
- C. Seat must be located within roll cage structure.

SR-6 Seat Belts and Shoulder Harnesses

- A. A quick release lap belt not less than three inches wide is required. A 2-inch belt may be used provided it is certified to SFI specs 16.1 or 16.5 and dated by the manufacturer. All belts must have the SFI label attached and meet SFI Spec 16.5 or higher. Both ends of the lap belt must be fastened to the roll cage. Bolt in style belts must be fastened with high quality graded bolts, not less than 3/8". Clip in style belts must be cotter pinned or safety wired. Cam or twist Lock type belts are not allowed.
- B. Shoulder harnesses are mandatory. Harnesses must be no less than three inches wide and must come from behind driver's seat. 2-inch harnesses may be used provided they are certified to SFI specs 16.1 or 16.5 and dated by the manufacturer. All belts must have the SFI label attached and meet SFI Spec 16.5 or higher. When crossing the roll cage, the harness must pass through a steel guide welded to the cage that will prevent the harness from sliding from side to side.
- C. A crotch belt is mandatory and must be securely mounted to the lower seat frame or roll cage at the bottom, and to the lap seat belt on the top.
- D. Sternum straps are not allowed.
- E. At any place the lap belt, harness, or crotch belt passes over any substance that could cause cutting of the belt, the belt must be rolled, padded, or have a grommet installed.
- F. All seat belts and shoulder harnesses must connect at the lap belt with a quick release buckle.
- G. Seat belts must be certified to SFI specs 16.1 or 16.5 and must have the SFI label attached and dated by the manufacturer. Belts must not be used beyond two years after stated date.
- H. Seat belts may be rejected by CHAMP OFF-ROAD officials if dirty, frayed, oily, greasy, or otherwise considered unsafe by officials.
- I. Shoulder harness should be mounted behind the driver. The mounting point is approximately 4" below top of shoulder. Lap belts should be kept at a minimum at least 2.5" forward of seat and backrest intersection. All belts must be mounted directly to a main structure member of the same size specification as the roll cage and with gussets. All adjustment buckles should be kept at a minimum distance of 1.5" from the seat to prevent accidental loosening or chafing.

SR-7 Head and Neck Restraints

- A. Head and neck restraints are mandatory in all classes any time the vehicle is on the track.
 - 1. R3, Hans, Hybrid or other restraint certified to SFI spec 38.1 with a legible sticker attached are allowed and must be manufactured within the last 5 years to be legal.
 - 2. The head and neck restraint, when connected, must be mounted, configured, maintained and used in accordance with the manufacturer's instructions.
 - 3. It is the responsibility of the driver to ensure that his/her restraint is correctly installed, maintained, and properly used.

SR-8 Gas Pedals

- A. All vehicles must have a gas pedal with a toe hook.
- B. Toe hook must enable the driver to pull back on the pedal with foot in the event of a stuck throttle. See diagram on FIG 10.
- C. Each vehicle must have a foot throttle incorporating two (2) positive action return springs attached directly to the carburetor/throttle body arm and must register a minimum pull of two (2) pounds each. A positive stop or over-ride prevention system must be used to keep linkage from passing over center and sticking in an open position.

SR-9 Roll Bars

- A. Material for roll cage construction must be 4130 chromoly tubing or ASTM 1018/1026 CDS/DOM. All welding must be of the highest quality with full penetration and no undercutting of the parent metal. All welds shall conform to the American Welding Society D1.1, Structural Welding Code, Chapter 10, Tubular Structures and Standards for the material used (see AWS. Org). It is strongly recommended that the welder inspect all welds using Magnaflux™, die- penetrate, or other effective methods. All tubes must be welded 360-degrees around the circumference of the tube. No oxy-acetylene brazing or welding allowed. Good external appearance of a weld does not necessarily guarantee its quality, poor looking welds are never a sign of good workmanship. None of the tubing may show any signs of crimping or wall failure. All bends must be mandrel type. The center radius of the bends may not be less than three (3) times the outside diameter of the roll cage tubing.
- B. Specific size and wall thickness of roll bars is addressed in race division rules and outlined in included diagrams.
- C. High density flame proof roll bar padding with an SFI rating of 45.1 is required on all bars that may come in contact with driver. Padding must be firmly attached so it cannot rotate or move.

SR-10 Windshield Area

- A. Trucks must have complete left half of windshield opening covered with a CHAMP OFF-ROAD approved rock guard. Open Wheel vehicles must have complete windshield opening covered with a CHAMP OFF-ROAD approved rock guard. Rock guard must have a minimum 1/8-inch rod and a maximum 1.5-inch square opening welded at each intersection.
- B. A 7 inch by 10-inch section may have vertical bars only. See diagram on FIG 9

SR-11 Side Window Nets

- A. Window nets must be certified to SFI spec 27.1 and have the manufacturer's SFI label attached. Ribbon style window nets only. The ribbon type should be made from exactly 1-inch nylon material with a maximum 1 ¼ inch square opening between the ribbons.
- B. The window net must fill the entire window opening including wind wing area of the race vehicle to allow no more than 1 inches access to the drivers.
- C. Rod must be made from a minimum of 1/2-inch solid steel and go 1 inch through upper rear mounting tab. 1/2- inch rod top and bottom.
- D. All window net mounts must be welded to the roll cage. The window net, when in closed position must fit tight and be secured with a safety belt type of latch. Push button latches



are not allowed.

- E. Window net latch must also utilize a secondary Velcro strap. Strap must be red and measure a minimum of 3 inches x 1 inch. Velcro strap must be sewn to net or bolted/riveted to cage and bolted to latch handle. See diagram on FIG 4
- F. The window net latch must be located at the front top of the window opening.
- G. No brackets protruding towards the driver.
- H. Spring type mounting of nets on the top or bottom is not permitted.

SR-12 Helmet Nets

- A. For seats NOT considered a full containment seat (seats that do not have adequate head containment on both sides of the seat):
 - 1. Pro 4, Pro 2 and Pro Lite vehicles must use a center and door side driver net. Only SFI 37.1 Polyester or Kevlar approved nets are allowed.
 - 2. Nets must have an approved quick release mechanism accessible to the driver.
 - 3. The nets should be as close to the helmet as possible, with as minimal angular divergence as possible.
 - 4. For seats with lateral head supports, nets must be in contact with the head supports and attached slightly inboard at the rear, so as to partially wrap around the support.
 - 5. The nets should be installed with some tension.
 - 6. The upper strap of the net must be at or above the center of gravity of the helmet for all drivers.
- B. For full containment seat (Seats that have adequate head containment sides built into the seat structure):
 - 1. Pro 4, Pro 2 and Pro Lite vehicles may not be required to use center or door side helmet nets if using a full containment seat system that provides the same or better protection to the driver's head movement as helmet nets would provide. Must be approved by the Tech Director

SR-13 Headlights and Parking Lights – Grill Assembly

- A. Headlight and parking light openings must be covered. Decals will be permitted.
- B. Single section grill pieces, which have been approved by the CHAMP OFF-ROAD Technical Director, may be used in place of factory production grills provided it fits the required template and maintains stock appearance of vehicle represented.

SR-14 Rear View Mirror

- A. Rear view mirrors will be permitted.

SR-15 Firewall

- A. Firewalls must be metal (aluminum- .040 inch minimum or steel-20-gauge minimum) and separate the engine and fuel source, fuel fill, fuel lines, fuel pumps, and fuel vents from the driver's compartment.
- B. Complete front and rear firewalls are required. Firewalls must extend to mid-rail bar.



- C. Engine and air cleaner must be completely covered with a metal cover. Cover must be a minimum thickness of .040 inches or use a CHAMP OFF-ROAD approved fire-resistant air cleaner side vent containment system to trap any fluid and route it out the side of the vehicle. Any competitor may consult with the CHAMP OFF-ROAD Technical Director for the approved systems.
- D. The air cleaner opening must face away from driver.
- E. All race vehicles that have an enclosed engine and/or transmission compartment must have all breathers and vents routed out the rear of the vehicle behind the rear axle.

SR-16 Fire Protection

- A. It is mandatory that all teams have 2 fully charged 10-pound dry chemical ABC fire extinguishers per entry in their pit area at all times.
- B. Bulk fuel storage is prohibited in pits.
- C. Metal drums, electric fuel pumps, and metal hand pumps are not allowed.
- D. Fuel jugs must be plastic, and DOT approved.
- E. Plastic fuel pumps are the only fuel pumps allowed in the pits.
- F. Every pit must have “no smoking” signs posted every 30 feet at the front of the pit closest to the public walkways.
- G. Any awning over 100 square feet must have a valid flame certificate.
- H. All race vehicles are required to have a remote, on board, 5-pound minimum fire suppression system.
- I. All trucks with automatic transmissions must have the fire suppression system piped to the engine and transmission compartments.
- J. All race trucks must have an access door on the right side of the driver’s compartment. The door must be a minimum of 8 inches by 8 inches, painted red, labeled with minimum 1.0-inch white letters FIRE DOOR and fold down toward the rear or the outside of the truck and allow unobstructed access to the engine and transmission. The fire door opening mechanism must only be a 2 inch by 2-inch butterfly wing quarter turn Dzus button and must be no more than 18 inches from outside of vehicle. No push button or other styles are allowed.
- K. All gas caps must be tethered to vehicle with a cable.

SR-17 Batteries

- A. No liquid lead acid batteries will be permitted.
- B. Positive post must be covered with insulated material.

SR-18 Driver Medical Attention

- A. If a competitor requires medical attention, by track or other medical teams, the medical technician must release competitor before he/she may return to competition. Failure to comply with advice of the medical technician will result in disqualification from competition for the remainder of the event.
- B. If a driver loses consciousness at any time during an event, the driver cannot compete for at least 7 days or must be cleared by doctor before returning to competition.

SR-19 Quality of Workmanship

- A. Race vehicle workmanship must meet with CHAMP OFF-ROAD officials’ approval.

SR-20 Fueling of Race Vehicle

- A. No fuel will be added to race vehicles in staging or on the starting line prior to a race or practice.

SR-22 Vehicle External Lighting and Display Accessories

- A. Vehicles may have up to 4 small lights per vehicle is authorized for use during a CHAMP OFF-ROAD event. Up to four small under chassis lights, but only if it is NOT a color that may look like fire, such as red, yellow or orange, and may have one above chassis light, such as a lighted whip, not to exceed 12" in length.
- B. Vehicles may also have one single display accessories such as a flagpole or lighted pole but cannot be more than 12 inches in length, must be flexible, and must have a blunted end, such as a ball securely attached to the end. Said pole must not extend above the roof line of the vehicle. All lights and or flag poles and mounts must be approved by CHAMP OFF-ROAD Tech Officials before entering the track.
- A. Any lights that may interfere with another driver's visibility, or that are not approved by CHAMP OFF-ROAD Tech Officials, must be removed from the race vehicle before passing through tech or entering onto the racetrack

CORNER GUSSETS

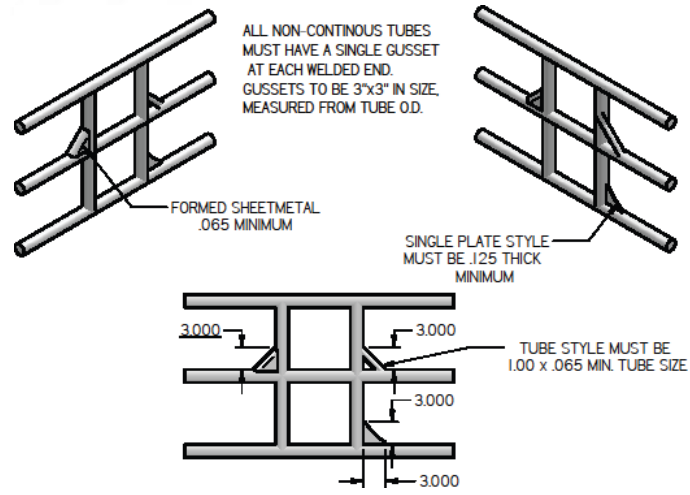


FIG 2

WINDOW NET

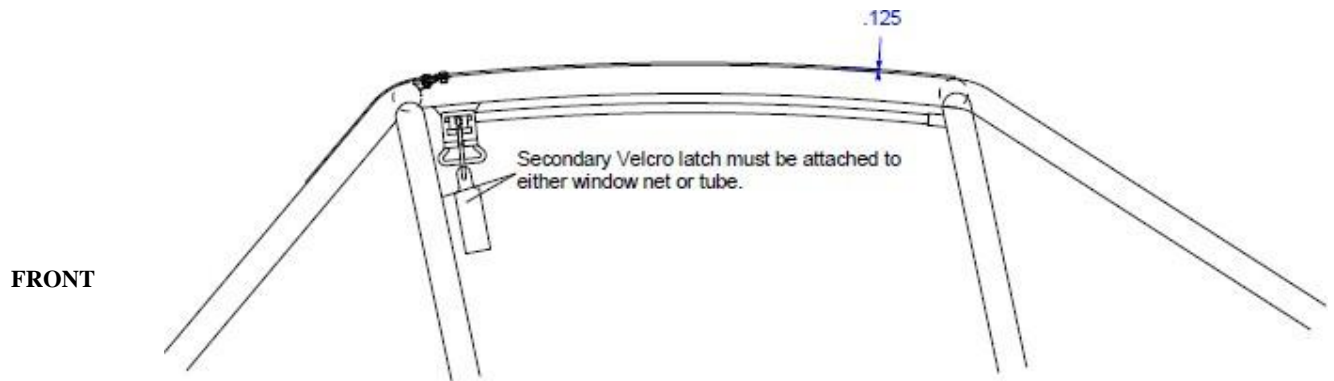
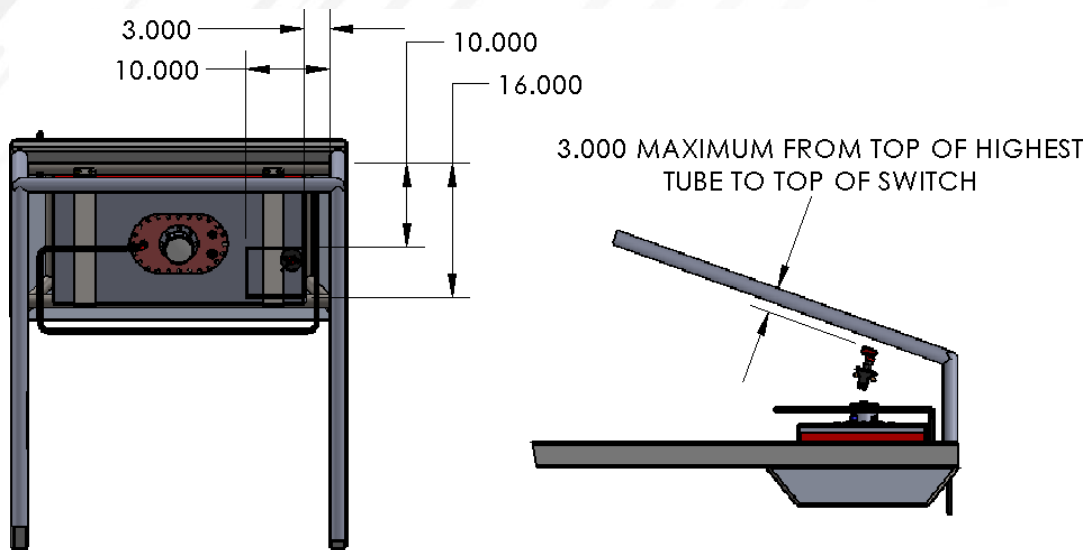


FIG 4



EMERGENCY SHUT OFF SWITCH MUST BE LOCATED AT REAR OF VEHICLE.
CENTERLINE OF SWITCH MUST BE WITHIN 3.0-10.0 INCHES IN SIDE OF FRAME
LOCATED ON DRIVERS SIDE. SWITCH MUST BE LOCATED WITHIN 10.0-16.0 INCHES
OF REAR OF FRAME.

FIG 5

FUEL CELL DIAGRAM

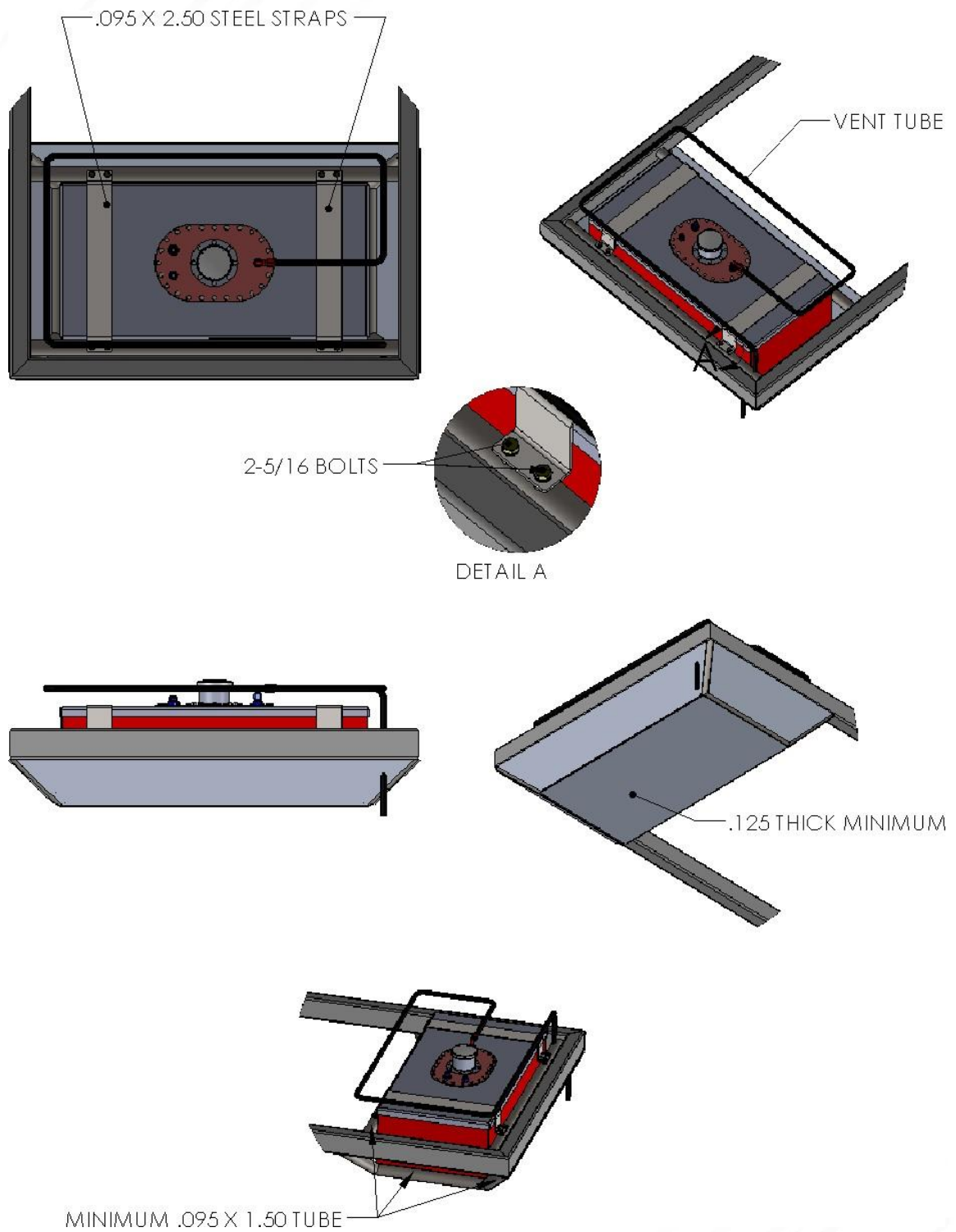


FIG 6

TRUCK & BUGGY SCREENS

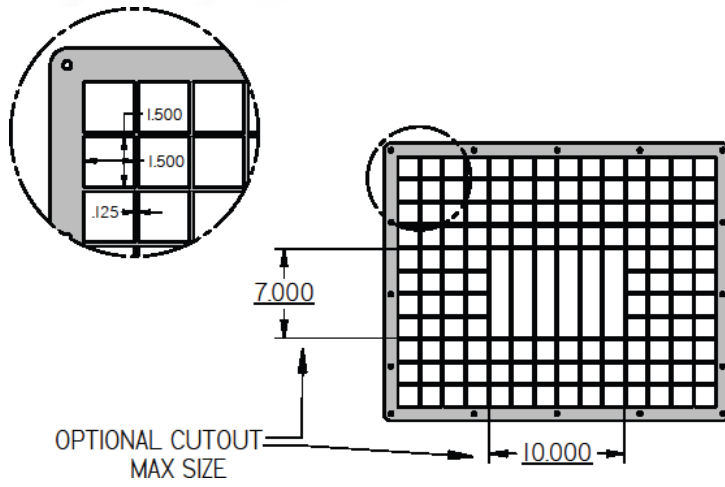


FIG 7

GAS PEDAL



FIG 8

PREFACE



"The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all CHAMP OFF-ROAD ("CHAMP OFF-ROAD") events, and, by participation in these events, all CHAMP OFF-ROAD members are deemed to have acknowledged, accepted, and complied with these rules. No express or implied warranty of safety shall result from publications of, or compliance with these rules and/or regulations. The rules are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to participants, spectators, or others."

CHAMP OFF-ROAD rules are the sole property of CHAMP OFF-ROAD. Use of these rules by any other organization or individual is forbidden unless prior written consent is given by the CHAMP OFF-ROAD.

CHAMP OFF-ROAD, its parent, affiliates, members, officers, directors, or staff, assumes no responsibility, legal or otherwise, for failure or malfunction of any products of manufacturers listed in this rulebook. CHAMP OFF-ROAD is NOT liable for actions or decisions made by individuals, promoters, or organizations, etc. using CHAMP OFF-ROAD rules.

Specifications and/or suggested standards contained in this rule book are intended for use as a guide with respect to safety and for no other purpose either expressed or implied. The use of the specifications and/or suggested standards contained herein by any association, organization, manufacturer or individual is entirely voluntary and **CHAMP OFF-ROAD** will NOT accept any responsibility for consequences resulting from the application of said specifications and/or suggested standards.



CHAMP OFF-ROAD RACING SERIES PRO-LITE TRUCK RULES ADDENDUM TO THE GENERAL RULES

The following rules apply to trucks in the Pro Lite division.

Pro-Lite: Vehicle manufactured as a 2-wheel drive compact pickup truck.

– All pro trucks must be a standard manufacturer production model available to the general public in the USA. Vehicle style must have a manufacturer production of at least 5,000.

– All makes and models must be approved by CHAMP OFF-ROAD.

PTR-1 MARKING AND IDENTIFICATION

- A. All vehicle numbering is subject to approval and is assigned by CHAMP OFF-ROAD.
- B. Single digit numbers can only be used in truck classes. Division ID must be indicated in lower right-hand corner of number area using 1 1/2-inch minimum numbers and letters.
- C. CHAMP OFF-ROAD officials may require a competitor to use a different number to avoid confusion or duplication at an event.
- D. In the event that a vehicle number is not visible from the timing and scoring area, the competitor will not be scored. It is the competitor's responsibility to make sure that the number is visible during all race conditions.
- E. Advertising on race vehicles must be in good taste.
- F. Foil or reflective numbers are not permitted.
- G. All CHAMP OFF-ROAD vehicles are required to have CHAMP OFF-ROAD stickers on each side of the front of the door area, 4 inches down from the window opening.
- H. CHAMP OFF-ROAD may require the use of specific sponsor decals.
- I. Team vehicles with the same paint and colors must have distinguishing markings of some kind.

PTR-2 NUMBERS

- A. Numbers are 1-99 for each truck class.
- B. All numbers must be block style only.
- C. Numbers must be side by side. No outlines, stacking or shadows allowed. Italic slant of 25 degrees or less is allowed.
- D. Fonts must be chosen from one the below approved styles only:
 1. Impact
 2. Helvetica Black
 3. Mechanical Bold
- E. Numbers will be located in the following positions:
 1. (1) number plate on each side, front edge of number plate to be 6 inches from back of cab. Bottom edge to be 4 inches above top of bed side. Number plate must be below roof line. (must also include division identification in this area)
 2. Roof of vehicle, as viewed from passenger side
 3. (1) number plate on the back of vehicle facing rear
 4. Driver's side upper left-hand corner of windshield area (must also include division identification in this area)
- F. *Pro-Lite:*
 1. The side number plate must be white with a minimum size of 15 by 18 inches. Numbers must be solid black with a minimum height of 13 inches.
 2. Roof numbers must be a minimum height of 22 inches.
 3. Rear facing numbers must be on a white number plate measuring 10 inches by 12 inches. Numbers must be solid black with a minimum height of 8 inches.

4. Windshield number and division must be solid black on a white surface with a minimum height of 4 inches.

PTR-3 CHASSIS/ROLL CAGE

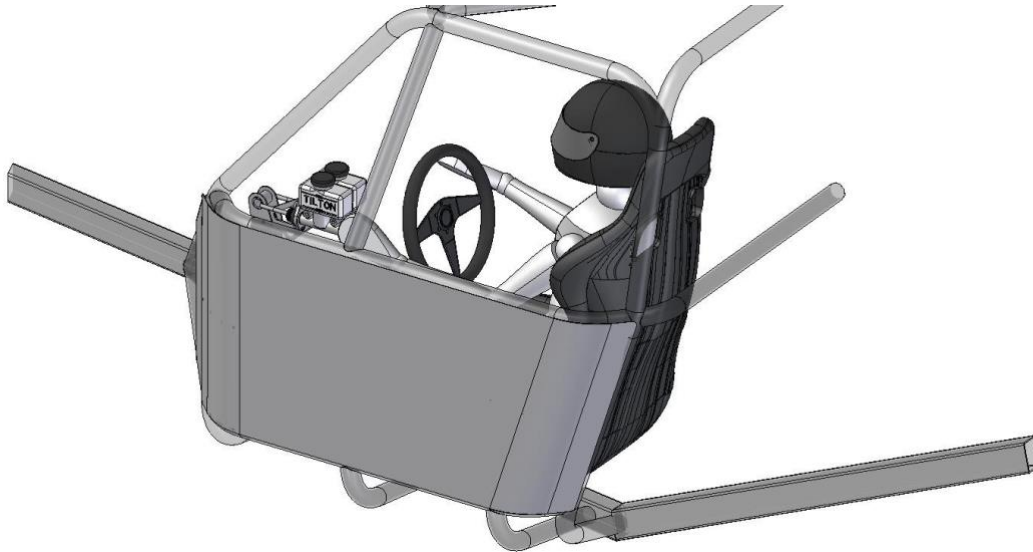
- A. All trucks must be left side steer only. Steering wheel, seat, and pedals must be in approximate stock location.
- B. All tubing, welds, gussets, and roll cage construction must be approved by CHAMP OFF-ROAD.
- C. Material for roll cage construction must be 4130 chromoly or ASTM 1018/1026 CDS/DOM round tubing (see SR-9).
- D. Minimum tubing diameter and thickness for vehicles weighing:
 1. Up to 3000 pounds – 1 ½ inch diameter by .120
 2. 3001 to 5000 pounds – 1 ¾ inch diameter by .120 (1 ½ inch diameter is allowed with pre-approval from tech director prior to entering race track)
 3. Over 5000 pounds – 2-inch diameter by .120
- E. All tubes must be welded 360-degrees around the circumference of the tube.
- F. Gussets are required on all intersections in driving compartments within 3 inches of intersection.
- G. All plate gussets must be of the same material and thickness as the roll cage, measuring 3 inches by 3 inches.
- H. Tube gussets and wrap gussets must be a minimum of 1.0 diameter x .065 thick.
- I. All trucks must have 3 horizontal door bars per side. Effective immediately all newly built trucks must incorporate the driver's side extended impact zone bars. See diagram. Existing race vehicles will be required to update to the new driver side extended impact door bars before the 2013 race season. The drivers seating location and head area in relation to the left side window opening and roof area tubing locations and construction will be under review on all trucks to maximize the driver's safety and head protection.
- J. All roll bars that may come in contact with driver must be covered with high density flame proof roll bar padding certified to SFI Spec 45.1 or better.



- K. There must be a minimum of 2 inches of clearance between the driver's helmet and the cage.
- L. Diagonals or similar bracing is mandatory for all truck roof openings as well as front and rear roll bar hoops.
- M. Driver's side door bars must be covered with a minimum of .125-inch steel plate bolted on, using a minimum of 3/8" bolts on 6" centers.
- N. Door plating must completely cover from bottom of main rail to top of door bar and extend a minimum of 4 inches in front of pedals to a minimum of 4 inches behind the seat.
- O. Under driver Floor Plate: .125" thick steel or .250" 6061-T6 aluminum plate bolted every six (6) inches with 3/8 bolts. Plate must cover entire floor opening from front fire wall to back firewall

side tube to side tube of driver's compartment. Plate must extend to centerline of all floor tubes. Mounting tabs must be made of .090 thick steel.

- P. Seat back plate: .125" thick steel or .250" 6061-T6 aluminum plate 12 inches wide must be centered on seat back. Plate must start at centerline of shoulder harness tube and extend to drivers compartment floor. Plate must be located inside the vehicle, between the seat and the rear firewall. Plate may be welded in (stitch welded one inch every six inches) or bolted in place. Vehicles using metal tube frame seats may attach plate to seat. Plate must be spaced away from seat 1.5 inches if attached to seat.



- Q. Chassis must be constructed of 3 inch by 2-inch rectangular tubing only, with a minimum wall thickness of $\frac{1}{8}$ inch and must be built in accordance to the CHAMP OFF-ROAD standardized prints.
- R. Removal of frame material is permitted only for steering rack clearance. Removal of this material must be approved by CHAMP OFF-ROAD.
- S. Pro Lite top roll cage width will be 46 $\frac{1}{2}$ inches from outside of bar to outside of bar.
- T. Elbow bar shall be a 61 $\frac{1}{2}$ inch minimum from outside of bar to outside of bar.

PTR-4 EXOTIC MATERIALS

- A. No titanium or any other exotic materials or fasteners may be used anywhere in the vehicle with the exception of the engine components.

PTR-5 MEASUREMENTS

- A. Trucks may be measured as they enter and or leave the racetrack and must comply with measurements at all times. Common sense will be used for any trucks coming off the track with heavy obvious damage at the discretion of the Technical Director.
- B. All measurements will be performed with CHAMP OFF-ROAD technical instruments or gauges.
- C. Wheelbase will be measured on one side from center of the front wheel to the center of the rear wheel on the same side. Maximum allowable tolerance cannot exceed $\frac{1}{2}$ inch plus or



minus on the other side.

- D. Front wheel travel is measured on a vertical plane from the center point on the end of the spindle. Rear wheel travel is measured on a vertical plane from the center of the rear axle.
- E. All wheel travel measurements will be from stop to stop with spring removed.
- F. Track width measurement will be taken at the widest outer surface of the tire. Gauge must pass freely all the way to the ground.
- G. CHAMP OFF-ROAD officials determine all measurements and center points.
- H. Maximum track width is 74 inches.
- I. Wheelbase is 106 inches.

PTR-6 RIDE HEIGHT

- A. Truck must race at a minimum 10-inch ride height. This will be measured at the lowest point from front firewall bulkhead to rear firewall bulkhead. This includes belly pan bolt heads and any other items that may be under the chassis or belly pan.
- B. Trucks may be measured for proper ride height before and after competition.

PTR-7 BODY

- A. All trucks must have complete bodies, cabs, hoods, doors, fenders, grills, and roofs in top quality condition, in standard location. All body lines must meet CHAMP OFF-ROAD approval.
- B. Complete bodies must be attached at start of competition, practice, or any on track activities. Bodies must be attached in such a fashion as not to create a pointed or sharp extrusion when panels are removed. A rounded loop body mounting bracket construction is mandatory.
- C. All body and fender shapes and configurations must be approved by CHAMP OFF-ROAD.
- D. All body components must be installed in their standard location, plus or minus 1 inch, as referenced by a production model truck.
- E. Additions to the body or the race vehicle, such as fins, scoops, wings, and other extruding additions will not be permitted.
- F. The addition of front air dams under grill is restricted to be no taller than 9" from the bottom of the grill. Air dam must also be a minimum of 12" from the ground at ride height.
- G. The interior of the race vehicle must be completely enclosed by metal with a minimum thickness of .040 from front to rear. This includes both front and rear fire walls.
- H. Vehicles must be equipped with a complete set of CHAMP OFF-ROAD approved bumpers.
- I. Roof line, rocker panels, and top of bed side must be parallel to horizontal frame members.
- J. Body hangers MUST be constructed from aluminum flat materials with a minimum thickness of .090". All hangers must have a minimum of 4 bolts attaching the aluminum hanger to the main chassis. Bolts must be evenly spaced. The inner attachment points of the body hanger must have a minimum span of 12 inches. Bolts must be a minimum of ¼" diameter. All parts must not have any sharp corners or dangerous edges. All hangers must be rounded. All parts must be approved by the Tech Director.
- K. Bed sides must be full length including the taillight wrap around.
- L. Bed sides must have a minimum of four ¼ inch minimum bolts or Dzus buttons evenly spaced at front of bedside and four ¼ inch minimum bolts or Dzus buttons evenly spaced at rear of bedside. Bolts or Dzus buttons must have 2-inch washers and be aligned in a vertical fashion. Forward bed side hangers must be independent of cab. See diagram on FIG 3.
- M. Door panels must retain all factory-molded contours and accent lines and be fastened with Dzus buttons or hex head bolts only. Cab and bed side mounting must be independent of each other.
- N. Driver's compartment of CHAMP OFF-ROAD must be a minimum of 1/8 inch for all classes. Floor must extend from 4 inches in front of pedals to 4 inches behind seat.



- O. Mud flaps are required and must extend from 6 inches above center line of rear axle to 3 inches from ground at ride height. See diagram on FIG 7
 - 1. Flaps must be 14 inches wide and made from hard plastic polymer or equivalent with a minimum thickness of ¼ inch.
 - 2. No mounting with zip ties or chains.
 - 3. Must be captured between two ½ inch by 1-inch metal plates and mounted to resist folding back.
 - 4. Each flap must be installed with a minimum of five ¼ inch bolts.
 - 5. Must be centered on tire.
- P. Roof must be properly attached to the roll cage of the truck and be fastened with Dzus buttons or 5/16-inch hex head bolts only. Bolts must be hex head only for use with a 6 point, ½ inch socket or wrench, with clear access for removal from the top of vehicle. All nuts must be fixed in place underneath to the roll cage mounting tabs either by welding, use of captive nut plates or clip-on threaded nuts.
- Q. Aluminum or steel sheeting (minimum thickness of ¼ inch aluminum or 1/8-inch steel) must completely cover the top left of the roll cage above driver's head from the front to the rear of the roll bar tube. Right hand side must be sheeted with minimum .060 thick aluminum securely fastened (i.e. bolts or Dzus fasteners)
 - 1. Sheeting must be firmly attached to the cage and extend ½ inch past the center line of tubes in all four directions.
 - 2. Sheeting must be installed with a minimum of 6 evenly spaced 5/16-inch bolts, not protruding toward the driver. Bolts must be hex head only for use with a 6 point, ½ inch socket or wrench, with clear access for removal from the top of vehicle when bodywork is removed. All nuts must be fixed in place underneath to the roll cage mounting tabs either by welding, use of captive nut plates or clip-on threaded nuts. No use of Riv-nuts or press in Captive nuts permitted unless they are welded in place. Bolts should be lubricated for easy removal. Use of Lock-tite should be avoided.
 - 3. Mounting tabs must be at least .095 thick.
- R. The hood must be locked down with 3 hood pins or 3 bolts with 2inch washers evenly spaced across the front of the hood. The rear of the hood should be fastened securely to retain body integrity with bolts, hood pins, etc. Must be approved by CHAMP OFF-ROAD official.
- S. Tires must retract into fender wells.

PTR-8 BUMPERS

- A. Race vehicles must have front and rear bumpers. CHAMP OFF-ROAD officials must approve all bumpers.
- B. Front bumper must be 1 inch in front of and cannot extend more than 12 inches beyond grill. Bumper can be no wider than the inner sidewall of the front tire when straight.
- C. Rear bumper must have a minimum of 6 inches between bumper and fuel cell and may not extend more than 1 inch beyond the outside front to rear tire line.
- D. Bumpers must be constructed of tubing with a minimum of 1.5-inch diameter by .095.
- E. Any bumper brackets must be a minimum of .095.
- F. Rear bumper must be 1 inch behind bed side as measured in a straight line between the rear of stock production length bedsides.
- G. Nerf bars may not extend more than 2 inches beyond the outside front to rear tire line.
- H. Nerf bars and bumpers must be rounded.
- I. All rookie drivers must have the rear bumper painted or taped yellow.
- J. Minimum front and rear bumper width is 32 inches.



PTR-9 SUSPENSION

- A. All four corners must be coil over suspension.
- B. No suspension or sway bar adjustment of any kind is allowed when vehicle is moving. This includes but is not limited to hydraulic, electric, mechanical, and manual adjustment.
- C. Front wheel travel limit is 12 inches maximum.
- D. Rear wheel travel limit is 14 inches maximum.
- E. Sway bars are allowed.
- F. Four bar rear suspension only.
- G. Rear axle housing may not rotate independently of pivot points
- H. On the front suspension, the A arm must be constructed symmetrical about the center line of vehicle.

PTR-10 STEERING COMPONENTS

- A. CHAMP OFF-ROAD officials must approve universal joints in steering shaft.
- B. Hydraulic power steering is permitted.
- C. Steering wheel quick release metal coupling is mandatory and must be approved by CHAMP OFF-ROAD officials.
- D. All race vehicles are required to have a steering wheel pad.

PTR-11 SHOCKS

- A. CHAMP OFF-ROAD officials must approve all shocks.
- B. All trucks must have at least one working shock on each wheel and a maximum of 2 shocks per corner.
- C. Shocks may have external bypass tubes and reservoir cans.
- D. External bypass is allowed on 1 shock per corner.
- E. Shocks cannot be adjusted while truck is in motion.
- F. Heating or cooling liquids or chemicals in shock is not permitted.
- G. Shocks cannot be linked together in any way. This includes but is not limited to hydraulic, electric, manual, or mechanical links.
- H. No linkage mounted shocks.
- I. Determination of air shock usage will be done in the following manner: Truck will be presented to CHAMP OFF-ROAD officials on level ground at existing ride height. Truck height will be measured from a given point on the chassis and all canisters will be purged of air, nitrogen, or other charged support. If truck droops more than 1 ½ inches, the truck will be illegal.
- J. Bump stops will be allowed on the front and rear.
 - 1. Bump stops will only be legal if they absorb a maximum of the last 3 inches of upward compression.
 - 2. Bump stops cannot be attached to any moving suspension parts and may only be attached to the chassis of the truck.
 - 3. 1 spring stack is allowed per corner with a maximum of 2 springs on 1 shock.

PTR-12 BRAKES & BRAKE COOLING

- A. Brakes must be operational on all four wheels at all times. All brake operation must be CHAMP OFF-ROAD approved.
- B. Only disc brakes with steel (magnetic) rotors using standard metal mounting hats are permitted.
- C. Electronic wheel speed sensors or brake actuators will not be permitted.
- D. Brake pressure sensors are allowed.

PTR-13 WEIGHT

- A. Driver will be included in race vehicle's minimum weight seated in the driving position with drivers back contacting back of seat.



- B. Vehicles can be courtesy weighed prior to competition.
- C. CHAMP OFF-ROAD officials must approve all weight material.
- D. Added weight must be in block form.
- E. Blocks must weigh no less than 5 pounds each and cannot be made of liquid of any type, pellets, or other granulated weight.
- F. Added weight must be securely bolted in place on the race vehicle on a primary chassis component / tube(s).
- G. Dislodged weight cannot be returned to the vehicle for weighing at the end of the race.
- H. All block ballast must be painted white and identified with vehicle number.
- I. Weight can be sealed at the discretion of CHAMP OFF-ROAD officials.
- J. No weight shifting devices of any kind are allowed. This includes but is not limited to hydraulic or electronic devices.
- K. All vehicles will weigh in before and/or after competition at the discretion of CHAMP OFF-ROAD officials. Failure to do so will result in disqualification.
- L. All vehicles must meet minimum weight and front percentage both pre and post-race.
- M. All weight lost on track will result in a \$5.00 per pound fine.
- N. Spec V-8 trucks and CHAMP OFF-ROAD OEM Platform Engine trucks must weigh a minimum of 3400 pounds.
- O. Minimum front axle weight is 45% of total truck weight.

PTR-14 ENGINE BLOCK

- A. Cubic inch of race vehicle motor must be declared at time of inspection.
- B. Engines are subject to inspection by CHAMP OFF-ROAD officials at any time.
- C. CHAMP OFF-ROAD officials' method of measuring the weight to displacement ratio is the only valid method of cubic inch P & G testing.
- D. At CHAMP OFF-ROAD officials' discretion, engines will be prepared for mechanical cubic inch certification and measurement.
- E. All engines must comply with corresponding CHAMP OFF-ROAD Engine Spec Sheet. Each brand Engine Spec sheets are published in the Pro Lite Engine Spec Sheet section of the most current rule book.
- F. CHAMP OFF-ROAD officials must approve all manufacturer engine blocks.
- G. V8 Spec Engine block must be of the same material as delivered by the manufacturer and must be for sale in the USA. CHAMP OFF-ROAD OEM Platform Engines have mandated block that cannot be modified in any way for any reason and are sealed and must remain sealed.
- H. The center line of the crankshaft cannot be less than 8 inches above the lowest part of the frame rail, as measured from the front of the engine.
- I. No rear engine trucks will be allowed. Engine must remain in the front of the truck
- J. Blocks may not be modified by addition of material unless approved by CHAMP OFF-ROAD officials.
- K. V8 Spec engines:
 - 1. Motor set back will be a maximum of 42 inches + or - 2 inches measured from the spindle centerline to the back of the block at the bell housing mounting surface.
 - 2. Engine and transmission oil pans must be positioned between frame rails as viewed from the top
- L. Blocks may not be modified by addition of material unless approved by CHAMP OFF-ROAD officials.

PTR-15 ENGINE HEADS

- A. V8 Spec engines:
 - a. Only CHAMP OFF-ROAD authorized engine builders or agents will be allowed to perform any internal maintenance or repairs and then re-certify engine with CHAMP OFF-ROAD serial numbered bolt head seals. A list of authorized engine builders is available from CHAMP OFF-ROAD technical officials upon request.



1. All V8 spec engines must have CHAMP OFF-ROAD serial numbered seals or CHAMP OFF-ROAD approved OEM engine supplier serial numbered seals applied only by CHAMP OFF-ROAD authorized engine builders or agents on the following parts:
 - a. Valve covers
 - b. Intake manifold
 - c. Front engine timing cover
- b. CHAMP OFF-ROAD approved engines:
 1. All V8 Spec engines must comply with corresponding CHAMP OFF-ROAD Engine Spec Sheet as published by CHAMP OFF-ROAD. Each brand Engine Spec sheets are published in the Pro Lite Engine Spec Sheets section of the most current rule book.
- c. If At any time CHAMP OFF-ROAD determines that any particular engine brand or make of engine has an advantage, we may equalize that engine either by a reduction in RPM or the use of a restrictor or by changing the fuel injection tune. These changes may be required during the racing season.

PTR-16 ENGINE OILING SYSTEM

- A. V8 Spec Engines may be wet or dry sump. Any type of oil pan is allowed on either setup.
- B. V8 Spec engine:
 1. Engine oil pans will not be part of the sealed engine program.
 2. Dry sump pump can have no more than 4 stages (3 scavenge, 1 pressure).
- C. LOPE engines must retain oiling system as issued by LOPE and may not be modified for any reason.
 1. Dry sump systems not permitted on LOPE engines
 2. All trucks will use an external pressurized oil reservoir system with electrically operated solenoid. (recommend use of Accusump by Canton Racing)
 3. Filter adapter will be used to allow external oil cooler and filter system and connection for external pressurized oil reservoir.

PTR-17 IGNITION SYSTEMS

- A. All ignition systems must be approved by CHAMP OFF-ROAD.
 1. V8 Spec Engine:
 - a. MSD Ignition with module 6AL-6420-6430-6440-6425 (or ALN) will be required with RPM limits as stated below. Other ignitions may be run upon approval only. Ignition boxes may be sealed by CHAMP OFF-ROAD during technical inspection.
 1. Mopar engines may use up to 6000 RPM limit maximum.
 2. Ford engines may use up to 6200 RPM limit maximum.
 3. Chevy 604 series engines may use up to 6200 RPM limit maximum.
 4. LOPE engine 6000 RPM limit maximum.
 - b. Ignition box must be out of reach of driver or covered with CHAMP OFF-ROAD approved fixed panel.
 2. LOPE Engine:
 - a. Must run mandated MoTec ECU and wire loom as supplied by LOPE. Wire loom may not be modified in any way.
 - b. CHAMP OFF-ROAD will control ECU firmware at all times.
 - c. **LOPE engine may use up to 6000 RPM limit maximum**



PTR-18 ELECTRICAL ACCESSORIES

- A. At the request of television, certain vehicles may compete with telemetry systems, as so installed by the series production television network requesting such information.
- B. All CHAMP OFF-ROAD **PRO LITE** MoTec Fuel Injected trucks:
 1. Vehicle digital dashes, data recording devices and/or any other form of measurement, sensors or recording of any kind or nature is permitted only for the following:
 - a. Engine Related items - engine RPM, water temperature, engine oil temperature, engine oil pressure, fuel pressure, voltage, lambda O2 (Oxygen Sensors), exhaust gas temperature, intake manifold vacuum/pressure (the same sensor may be used in intake or crank case), water pressure, power steering pump pressure, power steering oil temperature
 - b. Transmission Related items – transmission fluid / oil temp, Transmission main pump PSI. Sensors, Electronic gear indicators for manual transmissions may connect to main dash.
 - c. Shift spark interrupters may be wired to shifter and / or transmission shift drum when using manual transmission
 - d. Other Drive Train Related Items – Transfer case oil temperature, Transfer case oil pressure, gear oil temperature, brake pressure sensors.
 - e. other sensors are permitted, accelerometers, GPS, lap timing device or recording device of any kind is permitted (except those listed as restricted for traction control below in letter F. Any sensors listed in letter F will not be allowed.).
- C. Any configuration of data measurement or recording must be completely open and available for CHAMP OFF-ROAD inspection at any time during a CHAMP OFF-ROAD event weekend. All stored Data must be cleared before the start of competition; this will include any practice or qualifying data. If data is stored on a removable chip (i.e. RacePak style) the chip must be installed and sealed by CHAMP OFF-ROAD prior to entering the track. A “lack” of data or no data may result in a penalty including disqualification.
- D. The following Digital dash units are permitted
 1. Motec – any model
 2. RacePack – any model
 3. AIM – any model
 4. Life-any model
 5. All other Digital dashes subject to CHAMP OFF-ROAD approval.
- E. No traction control devices allowed.
- F. No wireless devices in or on the vehicle are permitted.
- G. No data transfer is allowed to or from vehicle when in motion.
- H. CHAMP OFF-ROAD OEM Platform Engine specific
 1. Only CHAMP OFF-ROAD mandated sensors may be used as issued.
 2. No modifications to any wire loom or sensors are permitted for any reason.

PTR-19 ENGINE & RACE VEHICLE ELECTRICAL SYSTEMS



- A. All ignition systems must be approved by CHAMP OFF-ROAD.
- B. No computerized systems are permitted unless CHAMP OFF-ROAD approved.
- C. Any make or brand of spark plug may be used.
- D. All vehicles must have a working alternator/generator system.
- E. All vehicles must have a self-starter in working condition and must be capable of starting on their own power.
- F. All electrical switches must be located on the dash panel.
- G. All vehicles must have a master on/off switch wired to the battery in a manner that will cut off all electrical power and the engine.
- H. Master switch must be labeled as such, have a red circle around it, be located on the left-hand side rear of, and must be accessible from the outside of the race vehicle. Switch centerline must be 8 inches inside frame, 10 inches forward of frame rear. Switch must turn counterclockwise for off. Red circle must be at least 1 inch wide.

PTR-20 ENGINE COOLING SYSTEMS

- A. Installation, location, and type of electrical cooling fan must be acceptable to CHAMP OFF-ROAD.
- B. No icing refrigerant chemicals may be used in or near the engine compartment or in any place on the truck.
- C. Electrical engine cooling fans are optional.
- D. Any Radiators of any size may be used.
- E. Radiator may be placed in front or rear of vehicle.
- F. CHAMP OFF-ROAD OEM Platform Engine specific
 - 1. Must maintain water pump as issued from CHAMP OFF-ROAD without modification as delivered from the manufacturer.

PTR-21 ENGINE EXHAUST SYSTEMS

- A. Exhaust mufflers are required on all exhaust systems.
- B. Muffler must meet a maximum decibel of.
 - 1. A penalty of 1 percent per DB over the maximum allowed level front weight bias will be added for first offense.
 - i. Consecutive events of non-compliance will result in weight penalty doubling with each event.
 - ii. Any competitor that remains out of compliance after 4 consecutive events will not be permitted to compete or may be disqualified



- iii. DB readings may not grow more than 2 DB from the first readings of any event leading into the last race of the weekend
- C. Exhaust pipes must be attached to headers or manifolds in a secure manner.
- D. Exhaust pipes must extend past driver compartment to the outer edge of the truck and to the rear of the driver.
- E. All exhaust must discharge downward or outward to either side of vehicle.
- F. Exhaust heat shields are permitted.
- G. Exhaust pipes that enter the cab of the truck must have a protective heat shield.
- H. V8 Spec engines:
 - 1. Headers must be made from 1 3/4 inch primary tubing with a simple formed canister style collector (not merged and may not have internal dividers or cone). 1 5/8-inch primary tubing may be used in the first 10 inches as measured from the exhaust flange. A O2 sensor bung or 3/4 pipe bung must be welded at the intersection of collector and tubes. Must be located for easy access for inspection of inside of collector
- I. LOPE engines
 - 1. OEM exhaust manifolds must be maintained as delivered from LOPE Engine kit. The following stock manifold part numbers are permitted:
 - i. 12616286
 - ii. 12616285
 - iii. 12611639
 - iv. 12611638

PTR-22 CARBURETOR

- A. No turbo, nitrous, or super chargers permitted.
- B. All carbureted vehicles must use a CHAMP OFF-ROAD approved float bowl vent catch tank system, roll over vent valve, or tube vent line exiting at rear of vehicle behind rear axle to limit fuel leakage or escape when the vehicle is upside down.
- C. V8 Spec engines:
 - 1. A single 650 Holley 80541-1 650 CFM is mandated.
 - 2. Adjustments to maintain performance levels or tailor the metering system are permitted.
 - 3. Adjustments which are not perceived as modifications are: - Idle speed, idle mixture, power valve, jets, air bleeds, metering blocks and float level.
 - 4. Replacement float bowl of original design with fuel sight glass window may be used.
 - 5. No other modifications are allowed.
 - 6. A single 1-inch spacer that must have 4 holes is allowed. Tapering of holes is permitted.
- D. LOPE Engines:
 - 1. Only mandated MoTec ECU and fuel injection system will be used.

PTR-23 CARBURETOR RESTRICTOR PLATES

- A. No devices between the carburetor and the intake manifold designed to increase or redirect airflow will be allowed.
- B. Trucks must use open plenum or straight bore design spacer with standard design gaskets only.
- C. Restrictor plates maybe added to a carburetor or throttle body at any time CHAMP OFF-ROAD deems it necessary

PTR-24 AIR AND INTAKE CLEANERS

- A. Intake air or filtered air cannot be blended with alcohols, ether, or other oxygenates, nor



blended with aniline or its derivatives, nitrous compounds, or any other nitrogen containing compounds.

PTR-25 FUEL INJECTION

Pro Lite -- LOPE LS3 Engine Platform only

ECU

1. Must use MoTeC/ CHAMP OFF-ROAD mandated ECU only. ECU must be registered with CHAMP OFF-ROAD Technical department before installed into vehicle. CHAMP OFF-ROAD may change the ECU programming at any time.
2. An RJ45/8P8C Ethernet port must be located within easy reach of outside of vehicle to allow connection for technical inspection of ECU.
3. Must use a CHAMP OFF-ROAD/MoTeC wiring loom. Loom may not be tampered with or repaired without permission of a CHAMP OFF-ROAD tech official.

Intake

1. Intake and throttle body must remain as issued from LOPE and may not be modified in any way.
2. Upper intake may be facing forward or reverse mounted to allow for front drive accessories and or air cleaner routing. Engines when ordered from CHAMP OFF-ROAD must specify orientation before sealing or may have to pay for a seal replacement.

Fuel Rails

1. Fuel Rails must remain stock as delivered by LOPE and may not be modified in any way.

PTR-26 FUEL CELL

- A. All fuel cells must be CHAMP OFF-ROAD approved.
- B. CHAMP OFF-ROAD will reject any previously approved fuel cell, which appears to be defective, damaged, or not in proper condition.
- C. No pressure systems will be allowed. Any concealed or not concealed pressure type containers, feed lines or actuating mechanisms will not be permitted, even if inoperable.
- D. Icing, Freon type chemicals, or refrigerants may not be used in or near the fuel system.
- E. Electric fuel pumps must have oil pressure shut-off. Loss of oil pressure will automatically shut off fuel pump. A momentary on bypass may be installed. The momentary on by pass may be like a push button, 2-pole starter button, which can be mounted in a position best suited to the driver. The oil pressure-sending unit is either AC Delco part number 25036938, Niehoff part number OP23481, Wells part number PS119 or PS122, Napa part number OP6624 or OP6616, Standard ignition Blue Streak part number PS126 or Niehoff Borg Warner part number OP23311. The sending unit receives power from the ground.
- F. Digital dash or electrical device such as Performance Engineering's Fuel Pump Safety Switch may replace mandated mechanical fuel pressure switch for operation of electric fuel pump, provided operation can be verified by the tech team to only allow power to fuel pump for a

- maximum of 4 seconds when engine is not running.
- G. No material other than standard foam as provided by the fuel cell manufacturer is permitted.
 - H. Rear mounted fuel cell must have a chassis or body cross member of substance between the fuel cell and driver and be protected from ground obstacles.
 - I. Fuel cells must be dated by manufacturer. Fuel cells will become obsolete five (5) years after date of manufacture and must be replaced.
 - J. All fuel cell fillers and vents must have check valves installed.
 - K. Fuel pressure regulator vent line must do one of the following:
 - 2. Connect to intake manifold vacuum.
 - 3. Connect to air cleaner so that any fuel enters engine.
 - 4. Connect to fuel cell.
 - 5. Have vent hose routed past the rear axle.
 - L. A splash shield must be in place to direct any spill away from the driver, motor, and motor exhaust. A body panel is considered sufficient splash shield.
 - M. Fuel cell cannot be vented into the driver's compartment of any truck.
 - N. The fuel cell must be located behind the cab. The fuel cell must have a 1/8 inch skid plate minimum covering the complete bottom, sides and rear of the cell. All mountings must be CHAMP OFF-ROAD approved. Fuel cell cannot be mounted to skid plate. Cell must be mounted to chassis. See diagram on FIG 1
 - O. Fuel cell must have a minimum of two 2 1/2 inch steel straps, evenly spaced on top of the cell with a minimum of two 5/16-inch bolts or one 3/8 inch bolt on each end of strap. Fuel cell must also have two 2 1/2 inch steel straps or 1 1/2 inch tubing underneath cell. Alternative mounting methods may be approved at the discretion of the CHAMP OFF-ROAD Technical Director. See diagram. See FIG - 1
 - P. All fuel cells must be housed in a metal can, .060 thick aluminum minimum. Slip over lid must be .090 thick aluminum minimum with 1.0-inch return.

FUEL VENT ROUTING

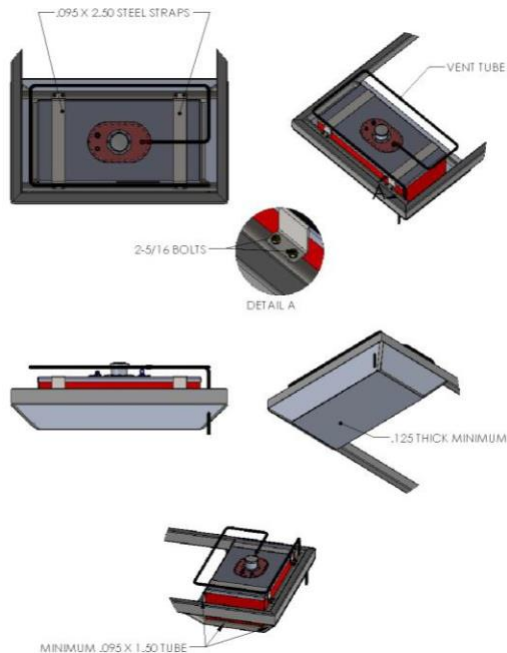


FIG - 1



**ALL FUEL CELL LINES AND VENTS MUST COME OUT OF THE TOP OF THE FUEL CELL
(PICTURED ABOVE).**

PTR-27 FUEL

- A. All cars shall use fuel, as defined in the following graph, unless a specific exemption is made in the provisions for a specific category/class.
- B. Permitted Fuel: Permitted fuel is herein defined as gasoline meeting specified dielectric constant standards and not contain any prohibited substance in excess of stated limits. Gasoline is a mixture of refined hydrocarbons. Gasoline is an electrical insulator and its relative effectiveness as an insulator is represented by its dielectric constant (D.C.). The

D.C. of gasoline will be measured by a CHAMP OFF-ROAD FTK01 Fuel Check Meter. The 0 (zero) calibration of the CHAMP OFF-ROAD Fuel Check Meter is set against reagent or laboratory grade cyclohexane. Gasoline may be tested and certified at CHAMP OFF-ROAD events by the determination of the dielectric constant using the CHAMP OFF-ROAD Fuel Check meter and through the application of various chemical analyses. If a competitor's fuel is not compliant with the fuel standards below, CHAMP OFF-ROAD shall take appropriate action. Penalties for use of non-compliant fuel can include fine, and/or reduction of points, and/or suspension.

- C. Cooling: The cooling of fuel is not permitted during competition.

Fuel Samples: CHAMP OFF-ROAD has the right to sample a Competitor's fuel at any time during the Event. Samples will be impounded for observation and or testing by CHAMP OFF-ROAD and/or any outside laboratories at CHAMP OFF-ROAD discretion.

If the services of an outside laboratory were used and the fuel was found to be non-compliant by the laboratory, the racer will be assessed the cost of the fuel transportation to the laboratory and laboratory fees.

- D. Restricted Substances: The fuel must not be blended with other alcohols, ethers, or oxygenates, and it must not be blended with aniline or its derivatives, nitroparaffins or other nitrogen containing compounds. Nitrous oxide is forbidden.

Fuel Standards		
Classes	Type	DC Max
All Classes Except Karts	Gasoline without added oil	3
Karts	VP MS98L	1.5
The user of any substance in the following table in excess of the stated limit is prohibited either in fuel or otherwise introduced into the engine		
Chemical Compounds Prohibited or Restricted in CHAMP OFF-ROAD Race Fuels		
Compounds	Examples	Maximum Weight or Percentage by Weight Allowed
Total Aldehydes	Acetaldehyde, Acrolein, Formaldehyde	1.00%
Benzene		5.60%
3,3-dimethyl-1 butene		0.05%
Total ethers	1,4 Dioxane, ETBE, Furan, MTBE, Tetrahydrofuran	0.00%
Total Dienes (Diolefins)	1,4 Butadiene, Isoprene	1.00%
Ethanol		0.00%
Total Epoxides	Ethylene oxide, Propylene oxide	0.00%
Total Nitrogen Compounds	Nitromethane, Nitroethane, Nitropropane, and all aromatic nitrogen compounds such as Nitrobenzene, Ammonia, Amines, and their salts, Aniline, Hydrazine, Pyridine, Pyrrole, Benzidine	0.00%

- E. Specified Fuel: CHAMP OFF-ROAD reserves the right to have all cars use the same blend of fuel in a given event or series class. When this right is exercised, it will be stated in the CHAMP OFF-ROAD rule book and/or in other CHAMP OFF-ROAD bulletins. In all such cases, fuel used for practice, qualifying and the race itself must be the specified fuel blend as produced by the manufacturer of the fuel. At an event where a specified fuel has been named, CHAMP OFF-ROAD will use a sample of the actual fuel provided at the event by the specified fuel supplier to determine whether the fuel used by a competitor conforms to the specifications of the specified fuel blend. The addition of chemicals additives or fuels to the specified fuel is strictly forbidden.
- F. If CHAMP OFF-ROAD officials suspect maskers in fuel, chemical testing will be conducted at possible expense to the competitor.
- G. Penalties for use of hazardous chemicals will be severe including fine, and/or reduction of points, and/or suspension.
- H. Pro Lite trucks are restricted to Non-Oxygenated gasoline. Gasoline cannot be blended, mixed, or modified in any way.



PTR-28 OIL COOLERS

- A. All oil coolers and their installation must be approved by CHAMP OFF-ROAD.
- B. Engine and transmission oil to air or oil to water heat exchangers are permitted.
- C. Cooling fans are permitted. No coolers are allowed in the driver's compartment.

PTR-30 TRANSMISSION

- A. Transmissions must be standard production, catalogued, and available through regular dealer channels.
- B. All forward and reverse gears must be in working order.
- C. Components must be installed in stock order: engine to transmission to differential via a drive shaft. Engine must be located in front of truck.
- D. All transmissions must be approved by CHAMP OFF-ROAD officials.
- E. Motor crankshaft must be connected to transmission input shaft via a conventional clutch assembly or vane type torque converter.
- F. Automatic transmissions must operate through a conventional torque converter.
- G. Manual shifting of all transmissions is mandatory, unless other method is needed to accommodate handicap condition of driver. CHAMP OFF-ROAD officials must approve all non-manual shifting procedures.
- H. Use of any Turbo 400 based automatic transmission must use SFI 4.1 approved case and SFI 30.1 approved bell housing. Will allow stock case with shatter-shield but must be pre-approved from CHAMP OFF-ROAD tech official prior to entering race track.
- I. V8 spec engines and CHAMP OFF-ROAD OEM Production Engines:
 - 1. GM turbo 400 transmission with standard gearing (2:48, 1:48, 1:0) will be the only transmission allowed.
 - 2. Aftermarket Billet short extension housing is allowed.
 - 3. Use of aftermarket SFI 4.1 transmission case and bell housing SFI 30.1 Mandatory.
 - 4. Transmission must operate through a conventional torque converter.
 - 5. Manual shifting of transmission is mandatory unless other method need be employed for handicap condition of the driver.
 - 6. Remote accessory drives are not allowed.
 - 7. Under drives are not permitted.
 - 8. Torque converter must be steel with a minimum of 8-inch diameter. Two piece take apart torque converter is allowed. Two-piece convertor may have aluminum front cover, must retain steel rear shell (pump). Two- piece convertor must weigh minimum of 24.5 pounds full of oil.
 - 9. All transmission hubs, drums, planetaries, shafts and carriers must be of magnetic metal-based materials. All parts must retain stock dimensions, no lightening or removal of material. Billet replacement parts are not permitted with the exception of the direct drum, forward drum, and valve body.
 - 10. 300M input shaft and intermediate shaft is allowed
 - 11. Direct drum housing, Forward Hub, and Forward drum housing may be billet and must be made from ferrous metal-based material. No other billet parts are allowed.
 - 12. Transmission tail housings may be billet but must maintain stock configuration / style of tail housing.

PTR-31 DRIVE PARTS

- A. Engine to transmission adapter plate can be a maximum of 1 ½ inch thick.
- B. A combination of multiple adapter plates can be used if it does not exceed 1 ½ inch thickness.



PTR-32 PROTECTIVE SHIELDS

- A. Location of all shields must be approved by CHAMP OFF-ROAD.
- B. Transmission must be covered completely by a protective shield placed to protect the driver from exploding parts from beginning of transmission case/bell housing to 4 inches before a bolt on tail housing. All shields must be approved by CHAMP OFF-ROAD.
- C. Shields must be constructed of a metal covering with a thickness of ¼ inch aluminum or 1/8-inch steel or be SFI approved.
- D. If you have an SFI 4.1 approved transmission case and SFI 30.1 approved bell housing no shield will be required.

PTR-33 DIP STICKS

- A. All dipsticks must be secured in dipstick tube with a positive locking or secured method.

PTR-34 DRIVE SHAFT

- A. One 360-degree solid steel bracket, no less than 2 inches wide and ¼ inch thick or 1-inch tubing with a minimum thickness of .095 inches must be placed around each drive shaft. Must be located within 4 to 6 inches aft of the centerline of front u joint.
- B. Drive shaft must be painted white and have vehicle number on it.

PTR-35 REAR AXLE/DIFFERENTIAL

- A. Quick change rear ends are not allowed.
- B. Only steel axles are permitted.
- C. Independent rear suspension is not allowed.
- D. Must be in stock location as approved by CHAMP OFF-ROAD officials.
- E. Rear differential must be spool type only and approved by CHAMP OFF-ROAD officials.
- F. Rear differential must have a minimum of 1 ½ inch inspection bung or plate placed in such a manner that CHAMP OFF-ROAD officials can see and identify the spool. If inspection area does not exist, crew chief will remove differential for CHAMP OFF-ROAD technical inspection.
- G. Must use conventional Ford style 9-inch third member assembly.

PTR-36 TIRES

- A. Tires must be DOT only.
 - 1. DOT tire classes are restricted to tires that are intended for highway use. All tires must be designed, built, and sold for use on passenger car or pickup truck ONLY.
 - 2. Tires must be available to the general public through standard dealers or normal internet retail stores. All tires must be listed in dealer communication as available prior to use and must be listed on company web site in the same size and model of tires. Internet only or one store only tires are NOT acceptable. Tires must be able to be purchased by the general public and or CHAMP OFF-ROAD officials before being allowed to be used in any race.
 - 3. Tires need to be part of a multiple line of tire sizes within a currently sold design. A minimum of 2 sizes in addition to what is allowed in the class must be offered. A tire used in the race should be identical in construction: rubber compound, durometer,



construction, sidewall with identical tread design as other sizes not used in the race (Example – if the tire used is a 32” tire, other tires from the manufacturer in sizes like 31” and 33” will be the same as the tires raced upon).

4. The tire must not exceed \$275.00 in cost.
- B. The only allowed tire sizes are 265-75-16”, as indicated on the tire, or 31x10.5-15” as indicated on the tire.
- C. Tire circumference may not exceed 101”.
- D. Tires will be measured without load of vehicle, from the widest and highest point, inflated to 13 psi, and mounted one race ready wheel.
- E. Durometer testing will be done and shall not be below 58 points. Tires may be Durometer tested with race ready conditions prior to any competition on the track.
- F. No inner liner allowed.
- G. Each Tire Manufacturer must submit for approval from CHAMP OFF-ROAD a list of the tires they wish to use in competition no less than 3 weeks prior to any event they wish to compete with said tire. This notice should be sent by mail and copy by email to the Technical director and is not considered received if no confirmation of receipt is sent by the Technical director of CHAMP OFF-ROAD. The notice must include tire line name, size, load range, part number, and manufacturer’s suggested retail sales price. It is the responsibility of the Tire manufacturer to submit the tire use request list before expecting to use any tire make or model or size at any CHAMP OFF-ROAD event. Once any tire make / model / size has been submitted and approved for use the manufacturer may consider that approved for the rest of the race season and is not required to submit again unless a change is made in construction or compound of the tire in question. Any change to construction, compound, or tread design will be considered a “new” tire and must be re-submitted and follow all tire guidelines for the class.
- H. CHAMP OFF-ROAD at its sole discretion may purchase tire(s) from a retail outlet of its choosing at any given time to be brought to the track to be used in the inspection process. Any cost associated with CHAMP OFF-ROAD obtaining the required tire(s) for comparison to the tire(s) brought to the track will be billed back to the participating manufacturer at the same cost incurred by CHAMP OFF-ROAD in the process including any and all testing procedures and lab costs. CHAMP OFF-ROAD officials may at their sole discretion dis-assemble or cut the tire(s) apart for testing purposes as part of the testing process. At the end of the inspection process time the purchased tire(s) will be returned to the Manufacturer by CHAMP OFF-ROAD tech officials.

PTR-37 WHEELS

- A. All wheels must be in good repair and free from cracks or defects that could cause wheel failure.
- B. Lug nut must be open ended, and of proper size.
- C. Studs must extend a minimum of 2 full threads past the end of the lugnut.
- D. Wheel studs may be no closer than ½ inch from the outer most face of the bead lock ring opening. Stud ends must be rounded.
- E. All bead locks must have recessed bolts only that do not protrude past the face of the ring.
- F. Foam mud plugs are the only wheel cover allowed. Snap on, clip-on, or bolt on covers will not be permitted.
- G. Maximum wheel diameter will be 16"

PTR-38 RADIOS

- A. Radios must be of two-way voice communication type only. Each race team is responsible for meeting FCC requirements.
- B. Radio communication between drivers is not permitted.
- C. All radio frequencies must be approved and reported to CHAMP OFF-ROAD prior to their use.
- D. All race vehicle radio communication systems must be approved by CHAMP OFF-ROAD.
- E. See Section 5 of CHAMP OFF-ROAD General Rules for spotter requirements.



- F. Spotters are required for all race teams.
- G. Any 2-way radios used at a CHAMP OFF-ROAD event may not exceed 6 watts output.
- H. Each competitor race vehicle must use at all times while on the track an override race receiver to listen to race control that overrides any communication from the spotter when race control is transmitting to the vehicles. The receiver device must be approved by CHAMP OFF-ROAD and meet CHAMP OFF-ROAD standards at all times. Competitors will not be allowed on the track at any time without the race receiver installed and functional.

PTR-39 TRANSPONDERS/TIMING

- A. Remote score timing devices will not be permitted by teams, owners, or anyone associated with an entry, unless approved by CHAMP OFF-ROAD.
- B. All teams are required to purchase remote timing transponders. Transponders can only be purchased through CHAMP OFF-ROAD and numbers must be recorded with CHAMP OFF-ROAD officials.
- C. Drivers are responsible for the charging and installation of all transponders. Any entry without a properly charged, properly installed, functioning transponder may not be scored and may be subject to further penalty.
- D. Transponders must be placed from front face of the front bumper to transponder center line 115 inches back on the driver's side of the truck.



CHAMP OFF-ROAD PRO LITE OEM PRODUCTION ENGINE SPEC SHEET

1. All CHAMP OFF-ROAD OEM Production Engine packages must come from CHAMP OFF-ROAD and be sealed by CHAMP OFF-ROAD.
2. Any team is only permitted to have 2 engines checked out to a team per truck being raced at any given time. One in the truck and one spare.
3. Engines will be sold to teams through CHAMP OFF-ROAD only on a check in and check out basis. Teams will pay for an engine and before any team can receive an additional engine the team must return an engine for the exchange. Pre- payment registration will be required and done through CHAMP OFF-ROAD registration staff. Engines may be ordered by contacting the Tech Director Bill Savage at 760-594-1037 or email at Bill@isocracing.com
4. No engines may be taken apart or rebuilt for any reason by any team or any builder. CHAMP OFF-ROAD may repair engine and re-seal at its sole discretion.
5. Teams will be limited to purchasing a maximum of 3 engines per race season unless permitted by CHAMP OFF-ROAD due to special circumstances and proven hard part failures. This will be done at the sole discretion of CHAMP OFF-ROAD. Multiple car teams may have additional restrictions to these purchase rules to limit added expenses.
6. No warranty is issued on any engine by CHAMP OFF-ROAD for any reason.
7. Approved Engine package will be ONLY the following:
 - a. GM LS3 sealed engine kit with electronics package from MoTeC acquired from CHAMP OFF-ROAD tech. No other engines permitted for any reason.
8. Teams are not permitted to change any external components on the engine package. This includes but is not limited to upper and lower intake, throttle bodies, fuel injectors, fuel rails, diameter of pullies on crank or accessories, coils, valve covers, timing chain covers, oil pan, engine main wire loom, stock exhaust manifolds. No component may be changed unless specifically allowed herein.
9. Any mechanical stock style water pump may be used. No electric water pumps. Pump must be driven by main engine dress belt system.
10. Any of the following stock GM Exhaust manifolds are permitted with the following part numbers. **12616286, 12616285, 12611639, 12611638**
11. The following harmonic balancer parts are allowed and can be used as needed to accommodate any accessory drive configuration needed to work with Power Steering pump, alternator, and water pump drive. Hub: ATI pn 916430M, Damper body: ATI pn 917071, ATI pn 917073, ATI pn 917030, ATI pn 917070 Bolt pack: ATI pn 950200 Crank bolt: ARP ATI pn 951503
12. Only use of mandated MoTeC CHAMP OFF-ROAD approved ECU and wire loom is permitted and the firmware in ECU will be locked down. ECU - MoTeC M130 with software developed specifically for CHAMP OFF-ROAD Pro Lite. Wiring The following harnesses will be delivered with each system: Chassis – 3800-EC008 Engine – 3800-EE007 Purchase/Delivery Systems must be purchased from: MoTeC Systems East 169-5 Gasoline Alley Mooresville, NC 28117 704-799-3800. All harnesses are built to order and take up to 6-8 weeks to complete. Support MoTeC will have support personnel present at each event to provide technical support. CHAMP OFF-ROADSupport@motec.com has been created for technical support questions.
13. System may be connected to existing digital dash units for normal monitoring and functions as most of the current trucks have so long as the digital dash complies with the data collection rules
14. CHAMP OFF-ROAD will have access to data port on ECU at any time to pull data out of the vehicle.
15. CHAMP OFF-ROAD will have the ability to exchange ECU with team at any time deemed necessary.

16. Fly by wire throttle pedal must be maintained from the stock configuration and parts provided with engine kit.
17. Teams must retain factory exhaust manifolds but may use any exhaust so long as it meets the rest of the rules for the class
18. Teams may use any alternator
19. Teams may use any power steering pump
20. Teams may use any air cleaner configuration and filter and upper intake section may be installed forward facing or reverse facing to assist in front drive accessory mounting
21. No add on electronic components or tuners permitted
22. Use of external pressurized oil reservoir will be mandatory.
23. Engines will have oil filter adapter installed to allow for external oil cooler and filter installation.



CHAMPIONSHIP OFF ROAD PRO LITE FORD ENGINE SPEC SHEET

ENGINE: FORD M-6007-D347SR7, FORD M-6007-D347SR

BLOCK: M-6010-BOSS302

INTAKE MANIFOLD: M-9424-0302 EDELBROCK VICTOR JR (NO PORTING OR POLISHING)

CYLINDER HEADS: M-6049-Z304DA7, NO PORTING OR POLISHING, NO REMOVAL OF ALUMINUM OTHER THAN ON DECK SURFACE

VALVE JOB: 3 ANGLE ONLY, NO GRINDING/BLENDING OR BOWL MODIFICATION

VALVES: NP2955 INTAKE 7MM OR EQUIVALENT

VALVE SPRINGS: COMP #26918 OR PAC #1218 OR EQUIVALENT

CAM SHAFT: M-6250-F303 HYD ROLLER

DURATION @ .050": 226*- INT/EX

LOBE LIFT: .320" INT/EX

INT. C/L: 109*

LIFTERS: M-6500-R-302H HYD ROLLER, COMP #877-16

ROCKER ARMS: M-6564-F351C 1.65 CROWER, COMP & CRANE ALUMINUM

CRANKSHAFT: M-6303-C340, STROKE 3.400 MAX, MINIMUM 49 LBS +/- .5LB, NO LIGHTENING OR KNIFE- EDGING.

CONNECTING RODS: 2-1CR5400-927 SCAT

PISTONS: SBF090030F06 MAHLE, JE, CP OR RACETEC OR EQUIVALENT.

MIN. WEIGHT W/O PIN- 395 GRAMS

RINGS: .043", .043", 3MM MINIMUM

BORE SIZE MAX: 4.0625"

HARMONIC BALANCER: ANY MANUFACTURE ANY TYPE

COMP RATIO MAX: 10.75 TO 1

DRY SUMP: 4 STAGE SYSTEM MAX



CHAMPIONSHIP OFF ROAD PRO LITE DODGE ENGINE SPEC SHEET

ENGINE: #ASA75360 MOPAR

BLOCK: 5.9 MAGNUM 360M 1993-2003

INTAKE MANIFOLD: #360-14-3M-4150 INDY, AS-IS, NO ALTERATIONS. NO PORTING OR POLISHING ALLOWED

CYLINDER HEADS: P5153847/61775 MOPAR/EDELBROCK, NO PORTING OR POLISHING, NO REMOVAL OF ALUMINUM OTHER THAN ON DECK SURFACE

VALVE JOB: 3 ANGLE ONLY, NO GRINDING/BLENDING OR BOWL MODIFICATION

VALVES: SOLID STEEL 11/32" DIA. STEM, 2.02" INTAKE/ 1.60" EXHAUST, EDELBROCK # 39-1210/39-1213

VALVE SPRINGS: EDELBROCK #5767 OR EQUIVALENT

CAM SHAFT: COMP CAMS #: CRS 3128-3129 HR 106

DURATION 230-234 @ .050"

LOBE LIFT- INTAKE .304" EXHAUST .311"

INT. C/L: 106*

LIFTERS: HYD ROLLER, BORE .903" ENGINE PRO #M-2167, MOPAR #P4876054

ROCKER ARMS: ALUMINUM 1.5 RATIO W/ 7/16" STUDS ALLOWED

CRANK: SCAT # 4-360-3580-6123, EAGLE # 436035806123, MAX STROKE 3.580", MIN 55 – MAX 59 LBS. +/- .5 LB., NO LIGHTENING OR KNIFE-EDGING.

CONN RODS: SCAT CR6123-2124 OR EQUIVALENT

PISTONS: MAHLE SBM670030FO5, JE SRP 142069, OR EQUIVALENT

MIN. WEIGHT W/O PIN- 469g

RINGS: .043", .043", 3MM MINIMUM

BORE SIZE: 4.0625" MAX

HARMONIC BALANCER: ANY MANUFACTURE ANY TYPE.

MAX COMPRESSION: 10.75 TO 1

DRY SUMP: 4 STAGE SYSTEM MAX



CHAMPIONSHIP OFF ROAD PRO LITE GM 604 ENGINE SPEC SHEET

ENGINE: GM PERFORMANCE PARTS 19318604 or 88958604

BLOCK: GM 10105123 (CASTING #10243880)

INTAKE MANIFOLD: GM 12496822 (NO PORTING OR POLISHING)

CYLINDER HEADS: GM 12464298 (CASTING # 12367712), or GM 19300955, NO PORTING OR POLISHING, NO REMOVAL OF ALUMINUM OTHER THAN ON DECK SURFACE

VALVE JOB: 3 ANGLE ONLY, NO GRINDING/BLENDING OR BOWL MODIFICATION

VALVES: GM # 12555331 - 2.0" INTAKE, GM # 12551313 1.55" EXHAUST

VALVE SPRINGS: GM #12551483 OR ISKY #6105 OR EQUIVALENT

CAM SHAFT: GM #10185071 IN OEM SPEC OR ISKY # 211272/282 WITH SPEC BELOW

DURATION @ .050": 225*- INT/234*-EX

LOBE LIFT: .337" INT/.353" EX

INT. C/L: 112*

LIFTERS: GM # 17120735 HYD ROLLER

ROCKER ARMS: GM #19210724 OR EQUIVALENT, MAX RATIO 1.5:1 WHEN USED WITH ISKY CAM PART NUMBER, MAX ROCKER RATIO 1.6:1 WHEN USING GM# 10185071 CAMSHAFT. ROCKER ARM STUDS MAY UPGRADE TO 7/16".

CRANKSHAFT: GM # 12556307 OR SCAT/EAGLE # 435034805700, STROKE 3.48 MAX, MINIMUM 50 LBS +/- .5 LB., NO LIGHTENING OR KNIFE-EDGING.

CONNECTING RODS: SCAT# 3-ICR5700 OR GM # 10108688 OR EQUIVALENT

PISTONS: GM #10159436 OR JE # 324866 OR EQUIVALENT.

RINGS: .043", .043", 3MM MINIMUM

BORE SIZE MAX: 4.0375

HARMONIC BALANCER: ANY MANUFACTURE ANY TYPE

COMP RATIO MAX: 10.75 TO 1

DRY SUMP: 4 STAGE SYSTEM MAX

CORNER GUSSETS

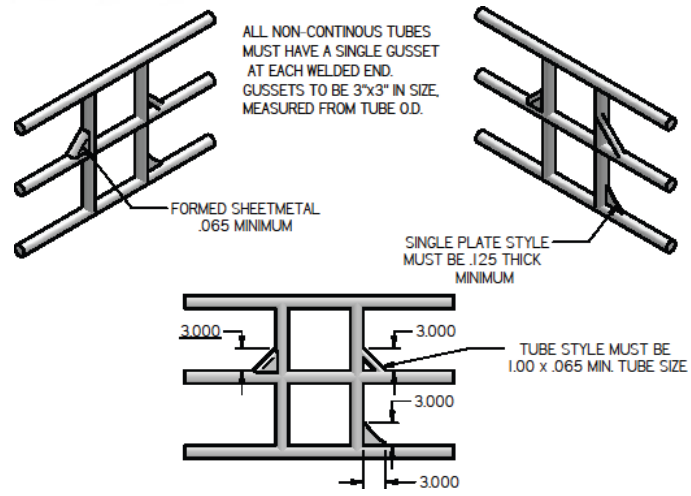


FIG 2

TRUCK BEDSIDE PANEL

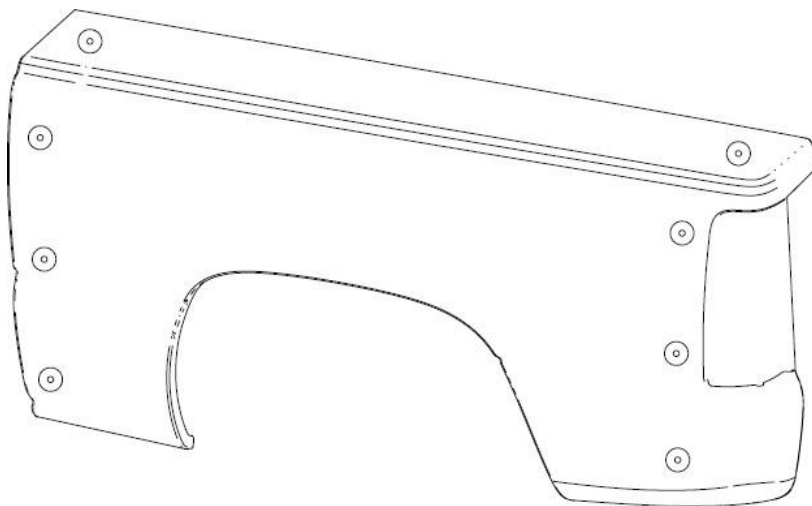


FIG 3

WINDOW NET

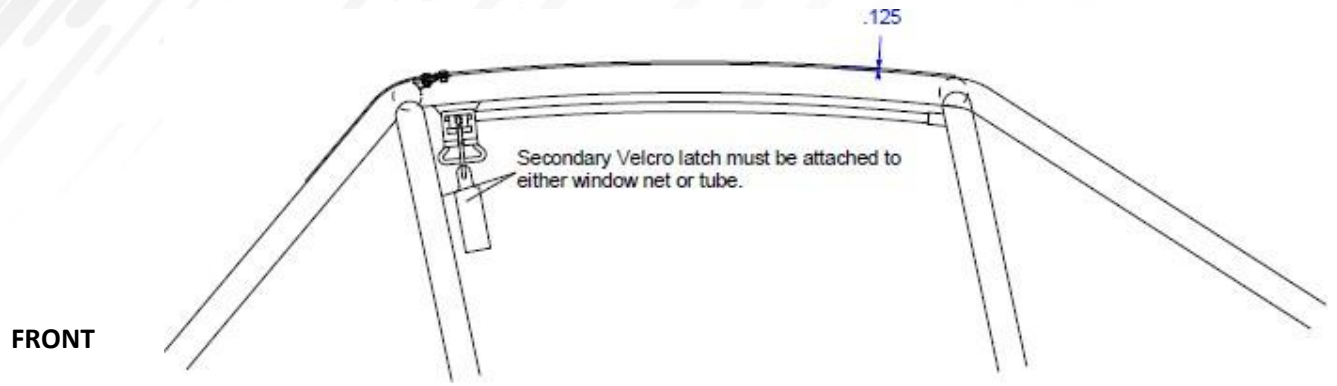
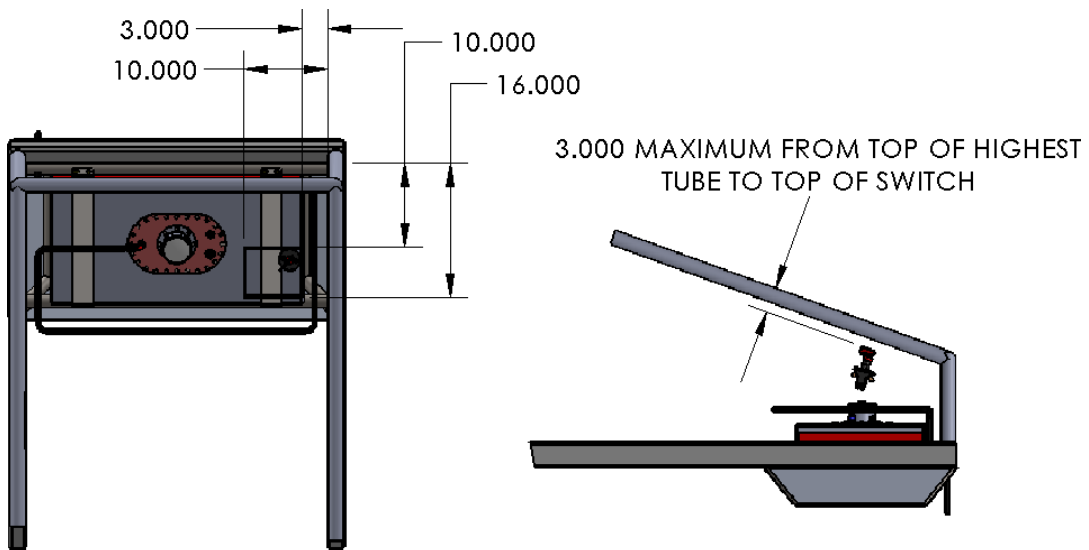


FIG 4



EMERGENCY SHUT OFF SWITCH MUST BE LOCATED AT REAR OF VEHICLE. CENTERLINE OF SWITCH MUST BE WITHIN 3.0-10.0 INCHES IN SIDE OF FRAME LOCATED ON DRIVERS SIDE. SWITCH MUST BE LOCATED WITHIN 10.0-16.0 INCHES OF REAR OF FRAME.

FIG 5

FUEL CELL DIAGRAM

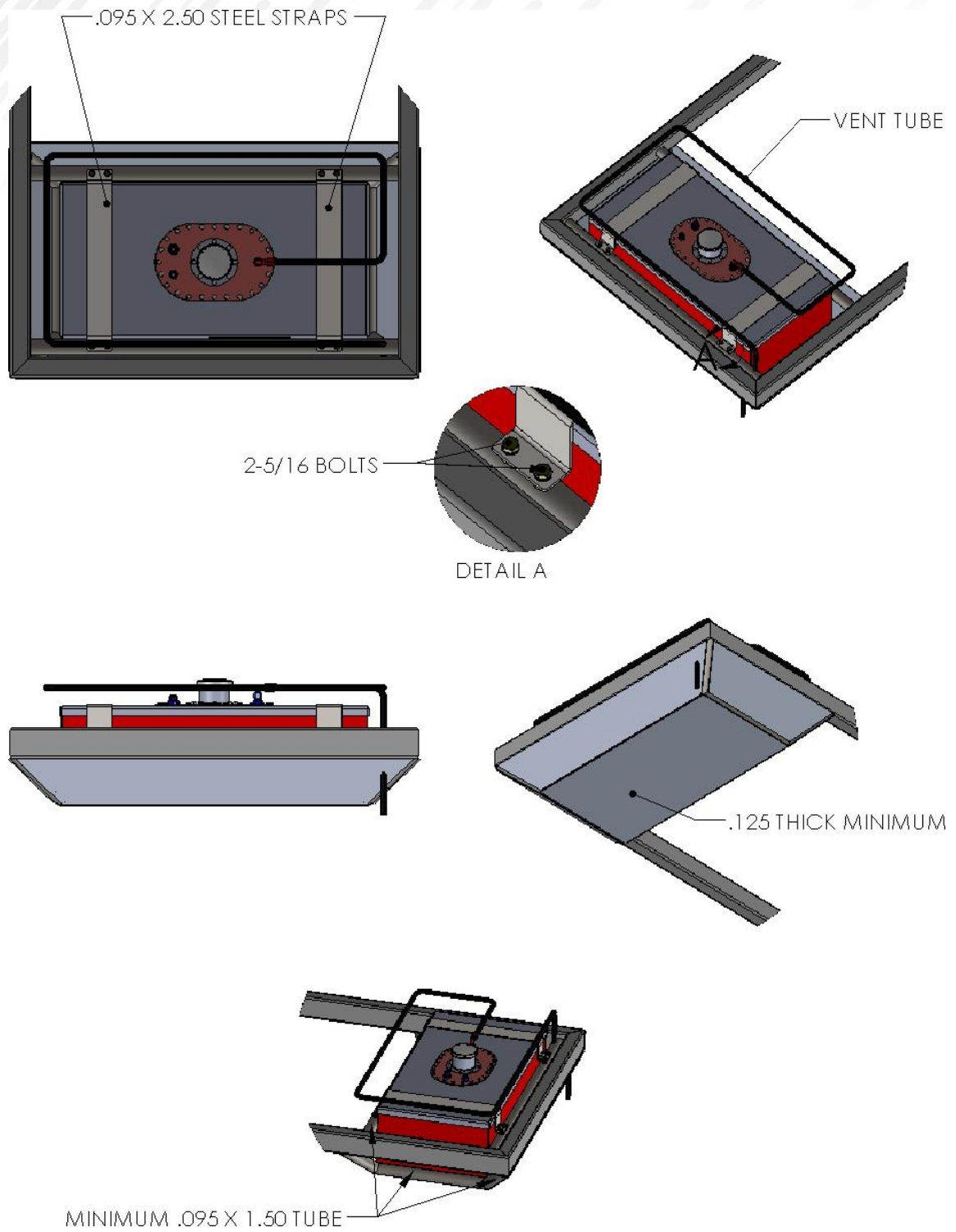


FIG 6

TRUCK MUD FLAPS

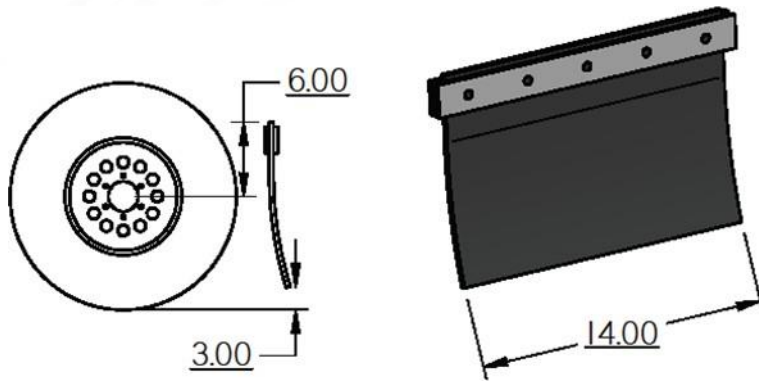


FIG 7

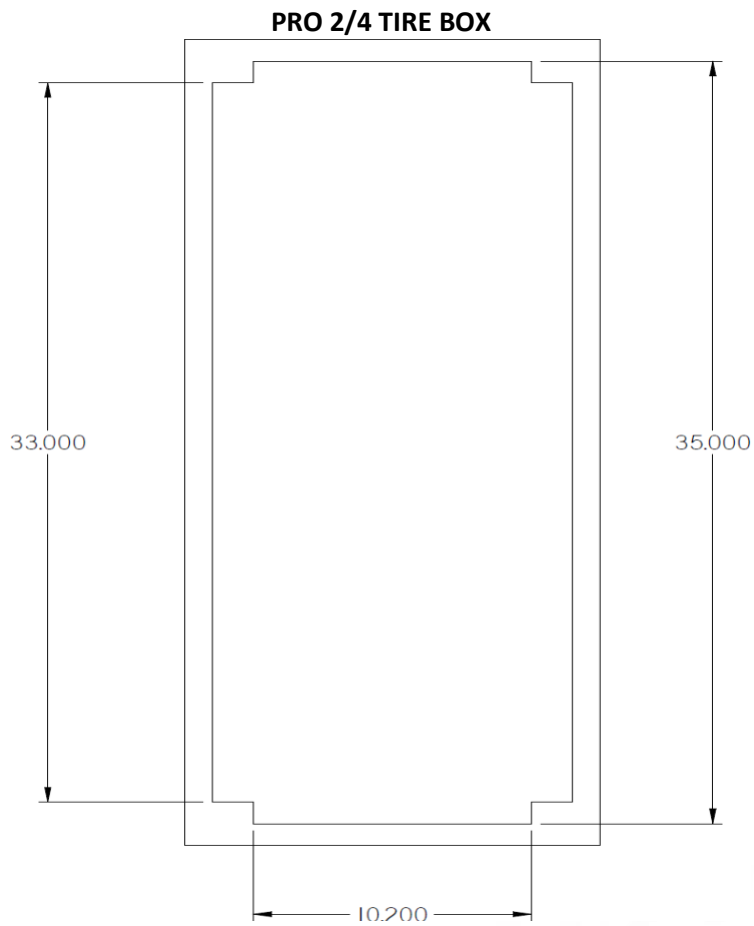


FIG 8

FIG 9

ROLL CAGE CONSTRUCTION

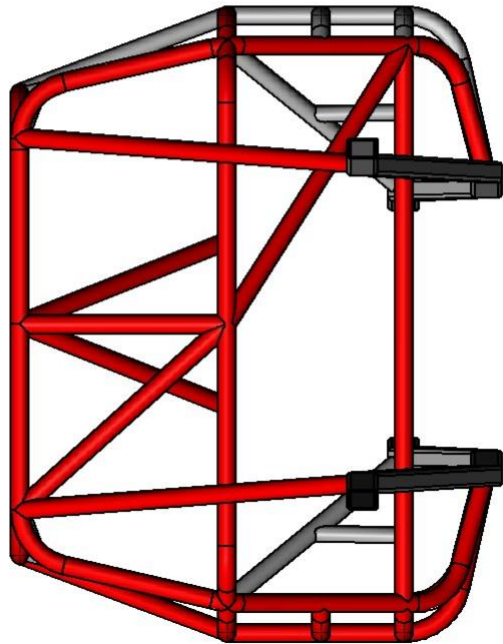
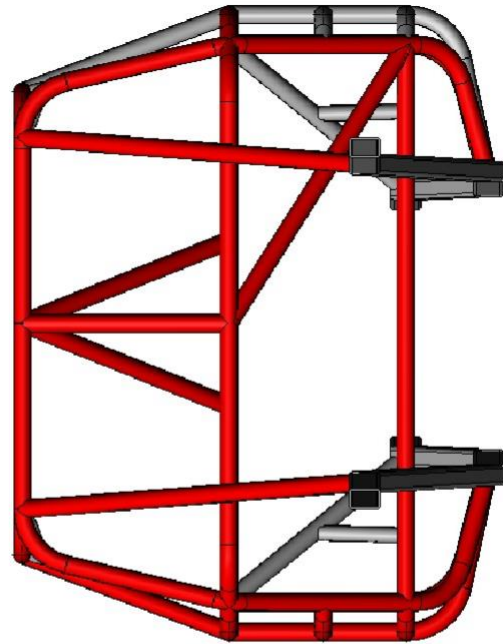
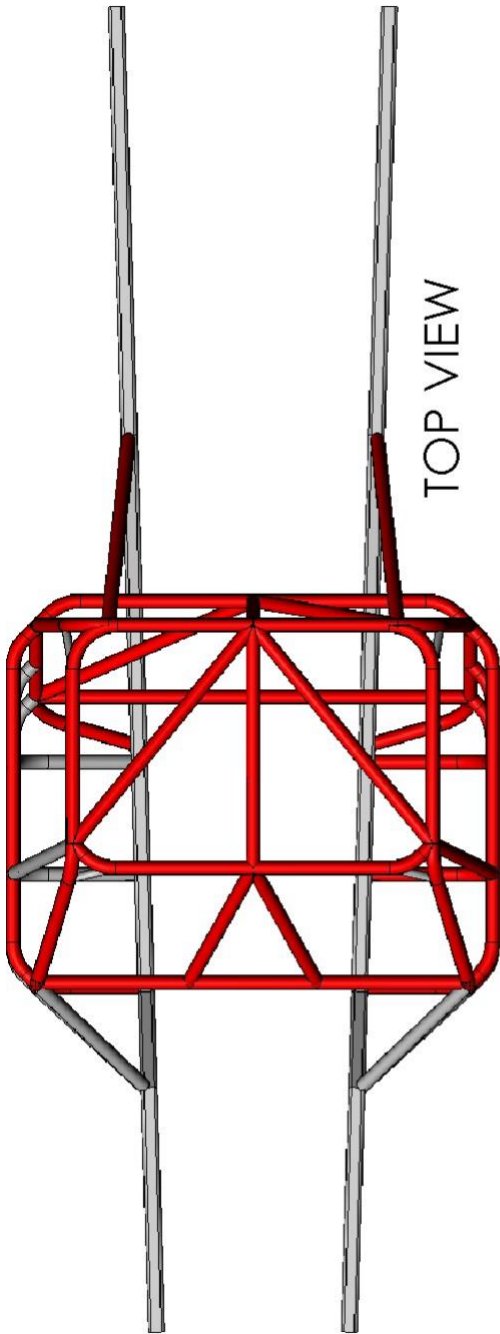


FIG 11

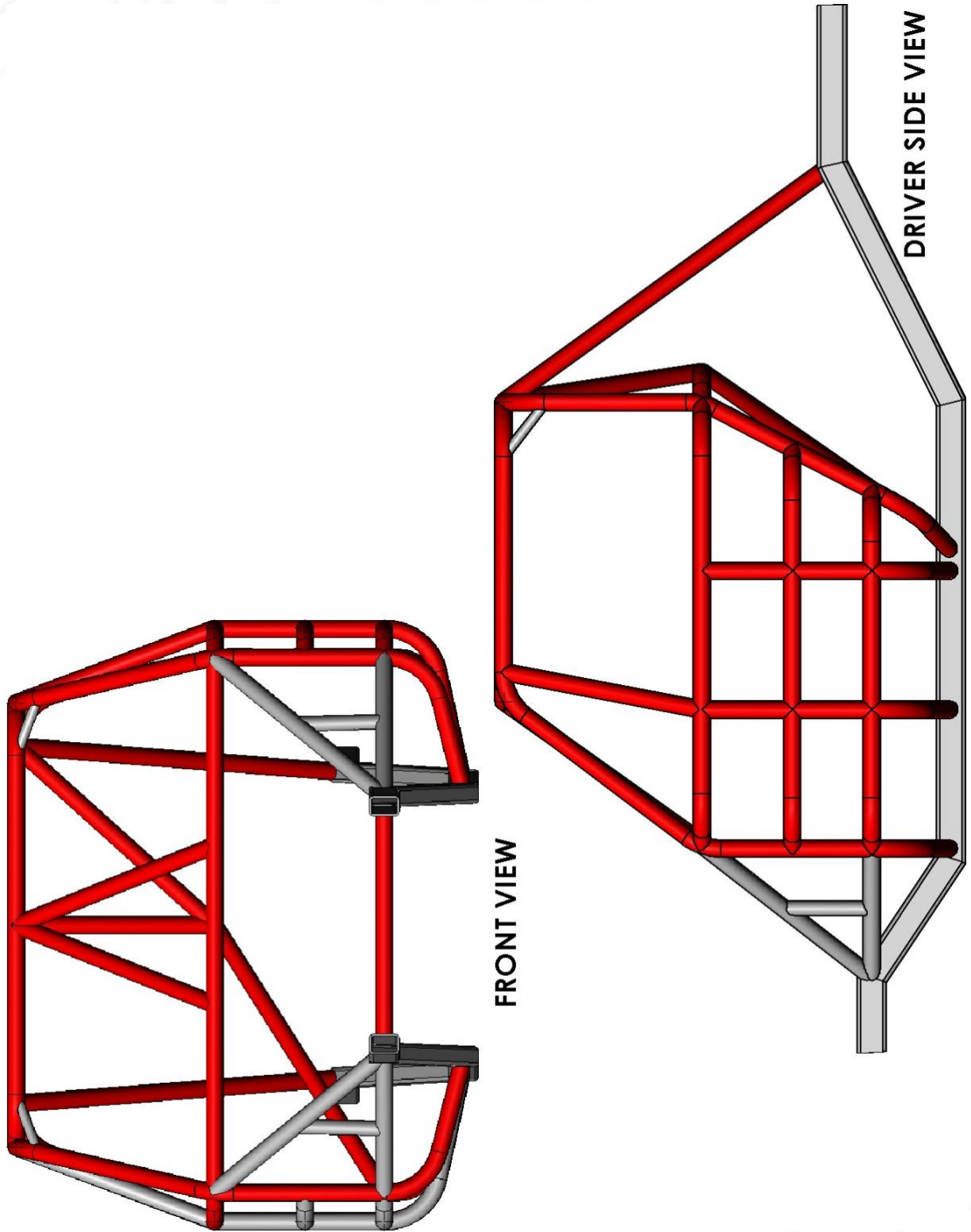
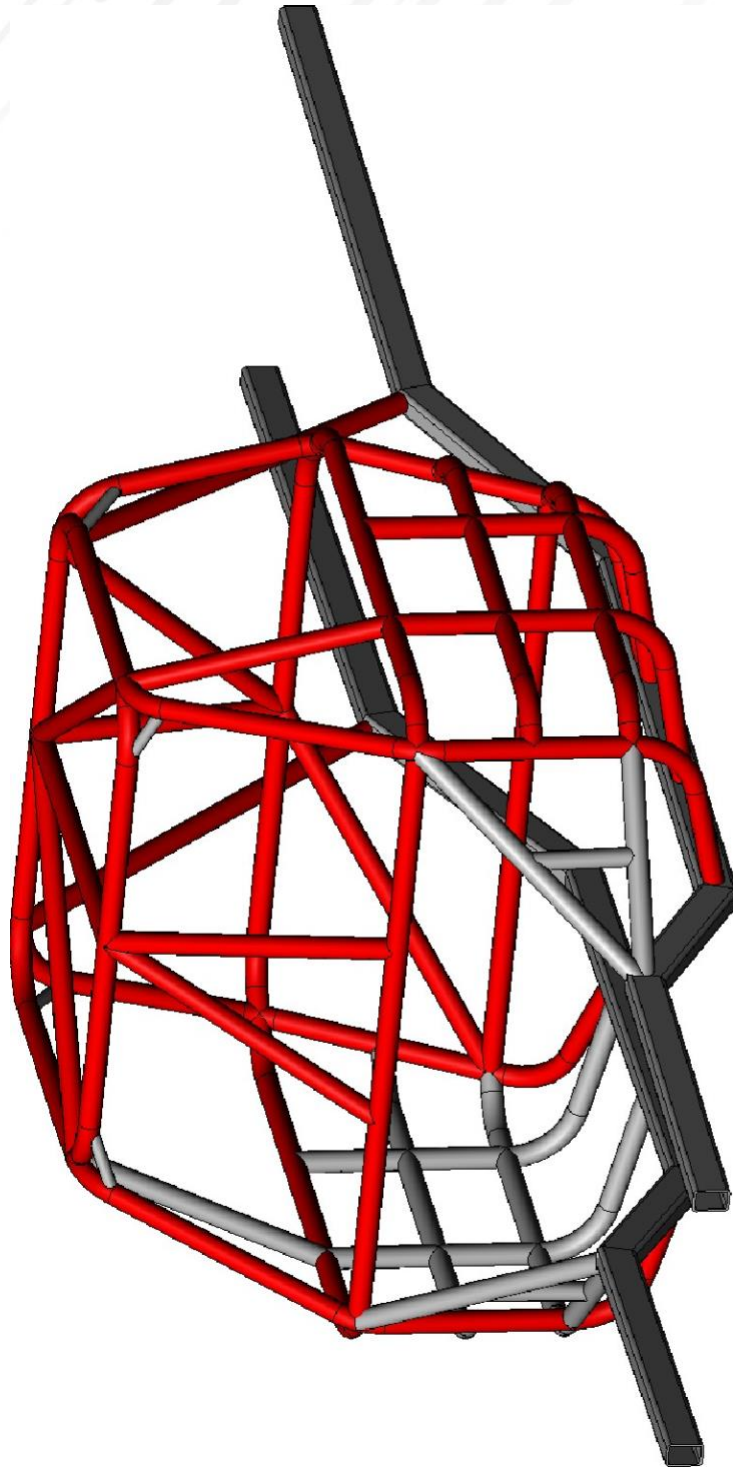


FIG 12



ROLL CAGE CONSTRUCTION:
ALL TUBES IN RED MUST BE LEGAL SIZE AS DEFINED MY VEHICLE WEIGHT

ALL DIMENSIONS SYMETRICAL TO CHASSIS C/L

FIG 17
PRO LITE

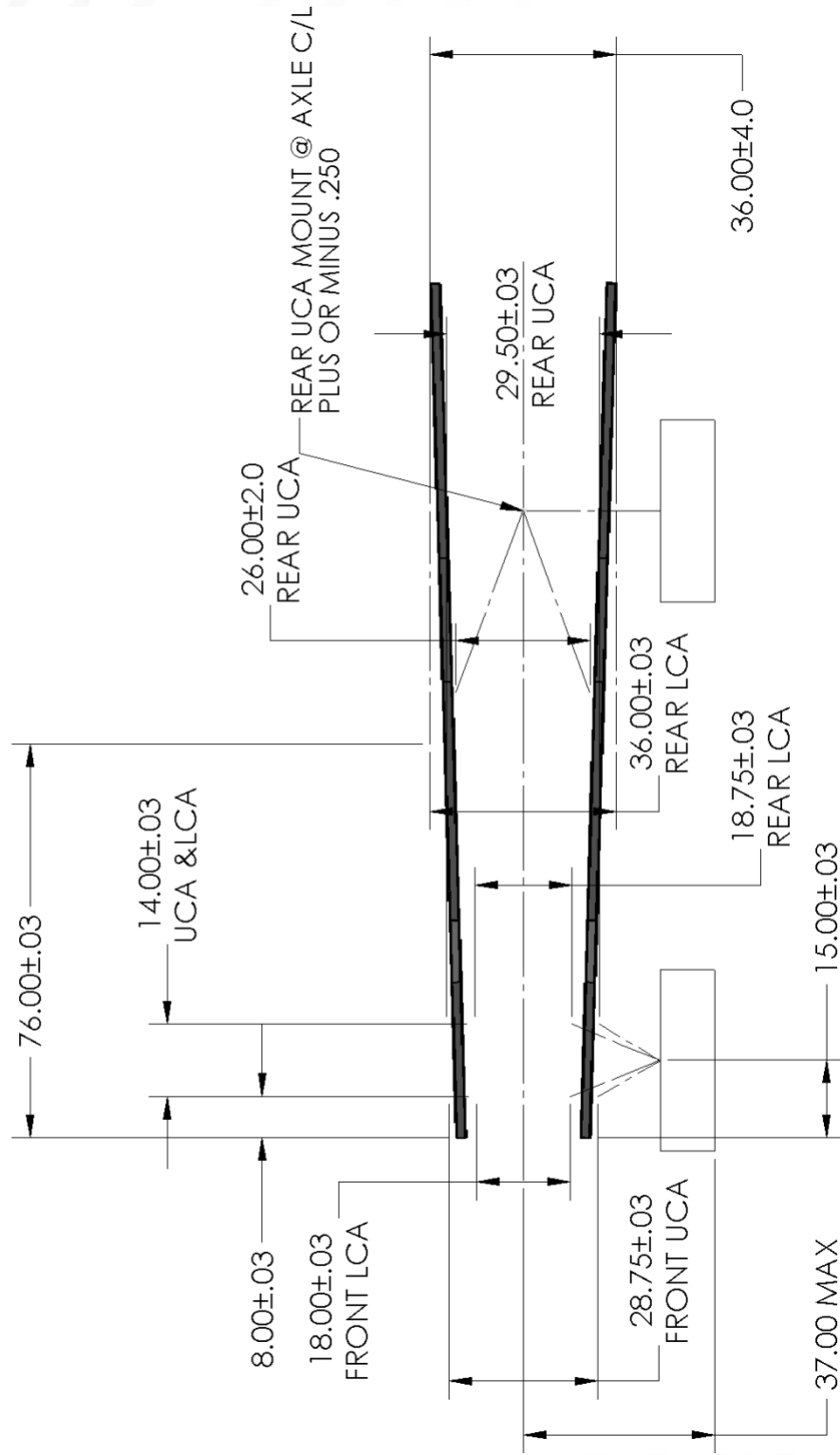


FIG 19
PRO LITE

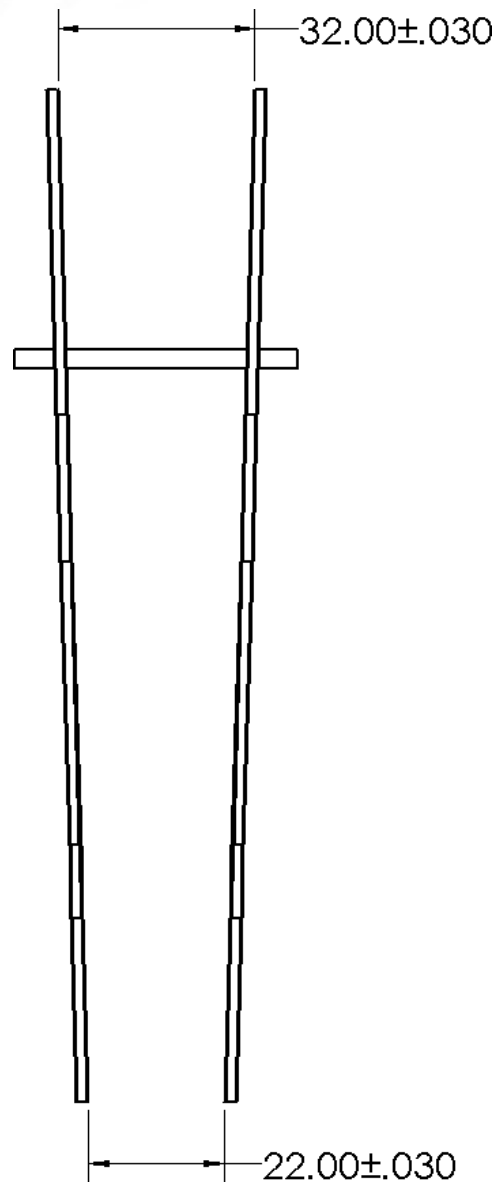


FIG 20

PRO LITE

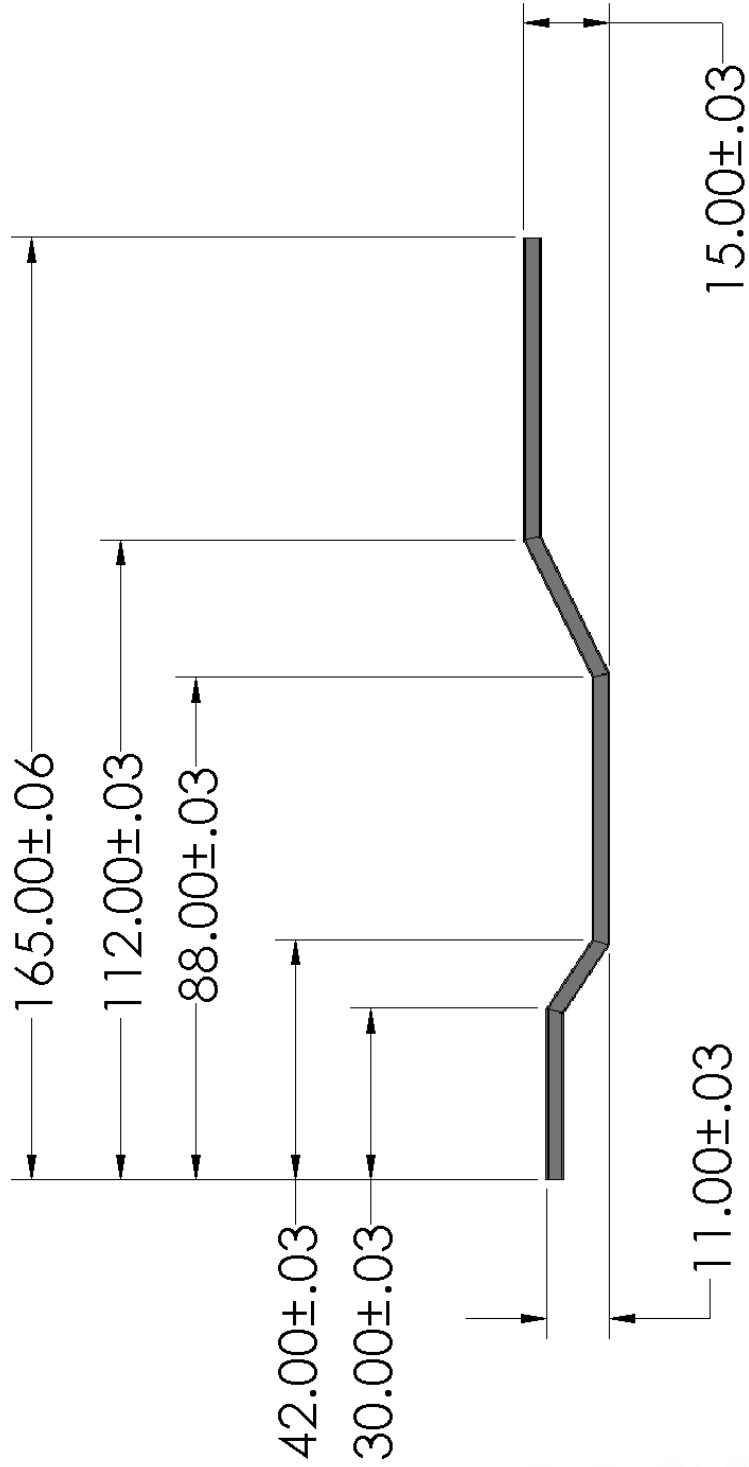
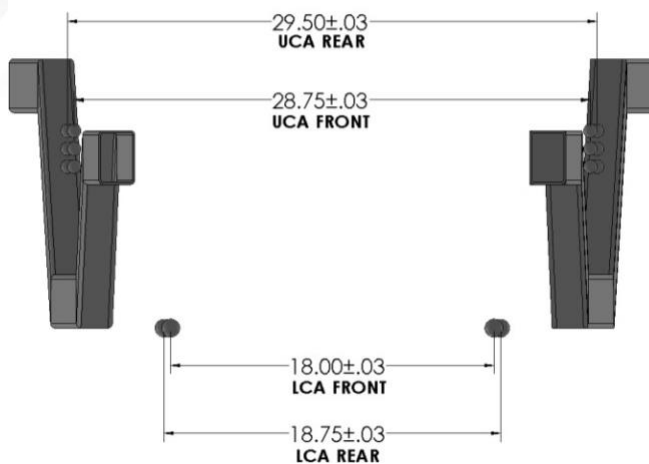


FIG 21

**FRAME MATERIAL= 2"X3" X.120 WALL RECT. TUBE ONLY
FRAME TO MAINTAIN 2"X3"X.120 PROFILE FOR ENTIRE LENGTH**

PRO LITE
FRONT CONTROL ARMS





CHAMP OFF-ROAD **PRO 2** TRUCK RULES ADDENDUM TO THE GENERAL RULES

PREFACE

"The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all CHAMP OFF-ROAD ("CHAMP OFF-ROAD") events, and, by participation in these events, all CHAMP OFF-ROAD members are deemed to have acknowledged, accepted, and complied with these rules. No express or implied warranty of safety shall result from publications of, or compliance with these rules and/or regulations. The rules are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to participants, spectators, or others."

CHAMP OFF-ROAD rules are the sole property of CHAMP OFF-ROAD. Use of these rules by any other organization or individual is forbidden unless prior written consent is given by the CHAMP OFF-ROAD.

CHAMP OFF-ROAD, its parent, affiliates, members, officers, directors, or staff, assumes no responsibility, legal or otherwise, for failure or malfunction of any products of manufacturers listed in this rulebook. CHAMP OFF-ROAD is NOT liable for actions or decisions made by individuals, promoters, or organizations, etc. using CHAMP OFF-ROAD rules.

Specifications and/or suggested standards contained in this rule book are intended for use as a guide with respect to safety and for no other purpose either expressed or implied. The use of the specifications and/or suggested standards contained herein by any association, organization, manufacturer or individual is entirely voluntary and **CHAMP OFF-ROAD** will NOT accept any responsibility for consequences resulting from the application of said specifications and/or suggested standards.

CHAMP OFF-ROAD **PRO2** TRUCK RULES ADDENDUM TO THE GENERAL RULES

The following rules apply to trucks in the Pro 2 divisions.

PRO22: Truck built or manufactured as a full size 2-wheel drive type utility vehicle using the spec 410 engine or restricted open engine.

– All pro trucks must be a standard manufacturer production model available to the general public in the USA. Vehicle style must have a manufacturer production of at least 5,000.



- All makes and models must be approved by CHAMP OFF-ROAD.

PTR-1 MARKING AND IDENTIFICATION

- A. All vehicle numbering is subject to approval and is assigned by CHAMP OFF-ROAD.
- B. Single digit numbers can only be used in truck classes. Division ID must be indicated in lower right-hand corner of number area using 1 1/2-inch minimum numbers and letters.
- C. CHAMP OFF-ROAD officials may require a competitor to use a different number to avoid confusion or duplication at an event.
- D. In the event that a vehicle number is not visible from the timing and scoring area, the competitor will not be scored. It is the competitor's responsibility to make sure that the number is visible during all race conditions.
- E. Advertising on race vehicles must be in good taste.
- F. Foil or reflective numbers are not permitted.
- G. All CHAMP OFF-ROAD vehicles are required to have CHAMP OFF-ROAD stickers on each side of the front of the door area, 4 inches down from the window opening.
- H. CHAMP OFF-ROAD may require the use of specific sponsor decals.
- I. Team vehicles with the same paint and colors must have distinguishing markings of some kind. PTR-2 NUMBERS

- A. Numbers are 1-99 for each truck class.
- B. All numbers must be block style only.
- C. Numbers must be side by side. No outlines, stacking or shadows allowed. Italic slant of 25 degrees or less is allowed.
- D. Fonts must be chosen from one the below approved styles only:
 - 1. Impact
 - 2. Helvetica Black
 - 3. Mechanical Bold
- E. Numbers will be located in the following positions:
 - 1. (1) number plate on each side, front edge of number plate to be 6 inches from back of cab. Bottom edge to be 4 inches above top of bed side. Number plate must be below roof line. (must also include division identification in this area)
 - 2. Roof of vehicle, as viewed from passenger side
 - 3. (1) number plate on the back of vehicle facing rear
 - 4. Driver's side upper left-hand corner of windshield area (must also include division identification in this area)

F. Pro 2:

- 1. The side number plate must be white with a minimum size of 17 by 20 inches. Numbers must be solid black with a minimum height of 15 inches.
- 2. Roof numbers must be a minimum height of 24 inches.
- 3. Rear facing numbers must be on a white number plate measuring 10 inches by 12 inches. Numbers must be solid black with a minimum height of 8 inches.
- 4. Windshield number and division must be solid black on a white surface with a minimum height of 4 inches.

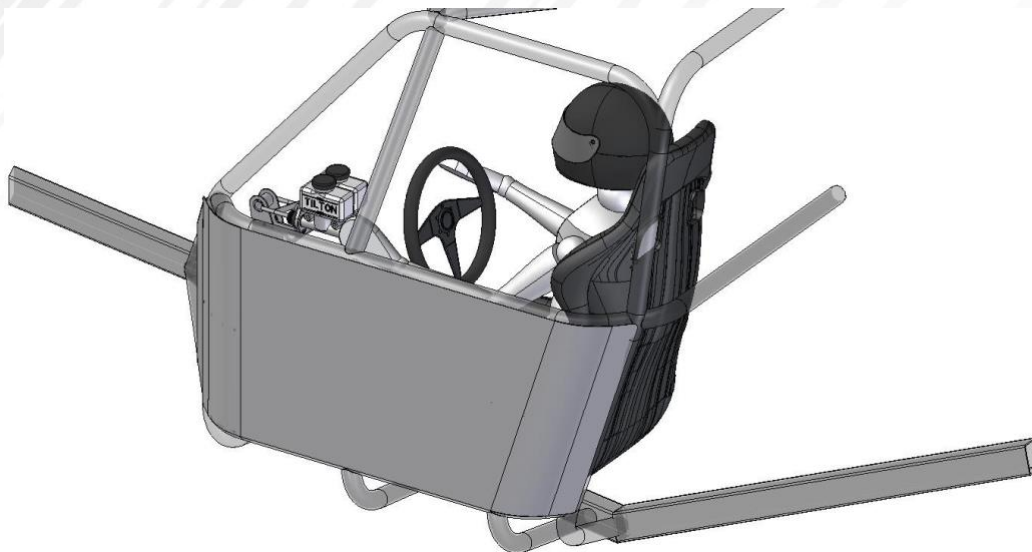
PTR-3 CHASSIS/ROLL CAGE

- A. All trucks must be left side steer only. Steering wheel, seat, and pedals must be in approximate stock location.
- B. All tubing, welds, gussets, and roll cage construction must be approved by CHAMP OFF-ROAD.
- C. Material for roll cage construction must be 4130 chromoly or ASTM 1018/1026 CDS/DOM round tubing (see SR-9).

- D. Minimum tubing diameter and thickness for vehicles weighing:
 1. -Up to 3000 pounds – 1 ½ inch diameter by .120
 2. -3001 to 5000 pounds – **1 ¾ inch** diameter by .120
 3. -Over 5000 pounds – 2-inch diameter by .120
 4. **No trucks weighing below 3000 pounds may run 1 ½ inch tubing diameter.**
- E. All tubes must be welded 360-degrees around the circumference of the tube.
- F. Gussets are required on all intersections in driving compartments within 3 inches of intersection.
- G. All plate gussets must be of the same material and thickness as the roll cage, measuring 3 inches by 3 inches.
- H. Tube gussets and wrap gussets must be a minimum of 1.0 diameter x .065 thick.
- I. All trucks must have 3 horizontal door bars per side. Effective immediately all newly built trucks must incorporate the driver's side extended impact zone bars. See diagram. Existing race vehicles will be required to update to the new driver side extended impact door bars before the 2013 race season. The drivers seating location and head area in relation to the left side window opening and roof area tubing locations and construction will be under review on all trucks to maximize the driver's safety and head protection.
- J. All roll bars that may come in contact with driver must be covered with high density flame proof roll bar padding certified to SFI Spec 45.1 or better.



- K. There must be a minimum of 2 inches of clearance between the driver's helmet and the cage.
- L. Diagonals or similar bracing is mandatory for all truck roof openings as well as front and rear roll bar hoops.
- M. Driver's side door bars must be covered with a minimum of .125-inch steel plate bolted on, using a minimum of 3/8" bolts on 6" centers.
- N. Door plating must completely cover from bottom of main rail to top of door bar and extend a minimum of 4 inches in front of pedals to a minimum of 4 inches behind the seat.
- O. Under driver Floor Plate: .125" thick steel or .250" 6061-T6 aluminum plate bolted every six (6) inches with 3/8 bolts. Plate must cover entire floor opening from front fire wall to back firewall side tube to side tube of driver's compartment. Plate must extend to centerline of all floor tubes. Mounting tabs must be made of .090 thick steel.
- P. Seat back plate: .125" thick steel or .250" 6061-T6 aluminum plate 12 inches wide must be centered on seat back. Plate must start at centerline of shoulder harness tube and extend to drivers compartment floor. Plate must be located inside the vehicle, between the seat and the rear firewall. Plate maybe me welded in (stitch welded one inch every six inches) or bolted in place. Vehicles using metal tube frame seats may attach plate to seat. Plate must be spaced away from seat 1.5 inches if attached to seat.



- Q. Chassis must be constructed of 3 inch by 2-inch rectangular tubing only, with a minimum wall thickness of $\frac{1}{8}$ inch and must be built in accordance to the CHAMP OFF-ROAD standardized prints.
- R. Removal of frame material is permitted only for steering rack clearance. Removal of this material must be approved by CHAMP OFF-ROAD.
- S. Top roll cage minimum width shall be 43 inches from outside of bar to outside of bar.
- T. Elbow bar shall be a 60-inch minimum from outside of bar to outside of bar.

PTR-4 EXOTIC MATERIALS

- A. No titanium or any other exotic materials or fasteners may be used anywhere in the vehicle with the exception of the engine components.

PTR-5 MEASUREMENTS

- A. Trucks may be measured as they enter and or leave the race track and must comply with measurements at all times. Common sense will be used for any trucks coming off the track with heavy obvious damage at the discretion of the Technical Director.
- B. All measurements will be performed with CHAMP OFF-ROAD technical instruments or gauges.
- C. Wheelbase will be measured on one side from center of the front wheel to the center of the rear wheel on the same side. Maximum allowable tolerance cannot exceed $\frac{1}{2}$ inch plus or minus on the other side.
- D. Front wheel travel is measured on a vertical plane from the center point on the end of the spindle. Rear wheel travel is measured on a vertical plane from the center of the rear axle.
- E. All wheel travel measurements will be from stop to stop with spring removed.
- F. Track width measurement will be taken at the widest outer surface of the tire. Gauge must pass freely all the way to the ground.
- G. CHAMP OFF-ROAD officials determine all measurements and center points.
- H. Maximum track width is 93 inches.
- I. Wheelbase is 117 inches.



PTR-6 RIDE HEIGHT

- A. Truck must race at a minimum 10-inch ride height. This will be measured at the lowest point from front firewall bulkhead to rear firewall bulkhead. This includes belly pan bolt heads and any other items that may be under the chassis or belly pan.
- B. Trucks may be measured for proper ride height before and after competition.

PTR-7 BODY

- A. All trucks must have complete bodies, cabs, hoods, doors, fenders, grills, and roofs in top quality condition, in standard location. All body lines must meet CHAMP OFF-ROAD approval.
- B. Complete bodies must be attached at start of competition, practice, or any on track activities. Bodies must be attached in such a fashion as not to create a pointed or sharp extrusion when panels are removed. A rounded loop body mounting bracket construction is mandatory.
- C. All body and fender shapes and configurations must be approved by CHAMP OFF-ROAD.
- D. All body components must be installed in their standard location, plus or minus 1 inch, as referenced by a production model truck.
- E. Additions to the body or the race vehicle, such as fins, scoops, wings, and other extruding additions will not be permitted.
- F. The addition of front air dams under grill is restricted to be no taller than 9" from the bottom of the grill. Air dam must also be a minimum of 12" from the ground at ride height.
- G. The interior of the race vehicle must be completely enclosed by metal with a minimum thickness of .040 from front to rear. This includes both front and rear fire walls.
- H. Vehicles must be equipped with a complete set of CHAMP OFF-ROAD approved bumpers.
- I. Roof line, rocker panels, and top of bed side must be parallel to horizontal frame members.
- J. Body hangers MUST be constructed from aluminum flat materials with a minimum thickness of .090". All hangers must have a minimum of 4 bolts attaching the aluminum hanger to the main chassis. Bolts must be evenly spaced. The inner attachment points of the body hanger must have a minimum span of 12 inches. Bolts must be a minimum of ¼" diameter. All parts must not have any sharp corners or dangerous edges. All hangers must be rounded. All parts must be approved by the Tech Director.
- K. Bed sides must be full length including the tail light wrap around.
- L. Bed sides must have a minimum of four ¼ inch minimum bolts or Dzus buttons evenly spaced at front of bedside and four ¼ inch minimum bolts or Dzus buttons evenly spaced at rear of bedside. Bolts or Dzus buttons must have 2 inch washers and be aligned in a vertical fashion. Forward bed side hangers must be independent of cab. See diagram on FIG 3.
- M. Door panels must retain all factory-molded contours and accent lines and be fastened with Dzus buttons or hex head bolts only. Cab and bed side mounting must be independent of each other.
- N. Driver's compartment of CHAMP OFF-ROAD must be a minimum of 1/8 inch for all classes. Floor must extend from 4 inches in front of pedals to 4 inches behind seat.
- O. Mud flaps are required and must extend from 6 inches above center line of rear axle to 3 inches from ground at ride height. See diagram on FIG 7
 - 1. Flaps must be 14 inches wide and made from hard plastic polymer or equivalent with a minimum thickness of ¼ inch.
 - 2. No mounting with zip ties or chains.
 - 3. Must be captured between two ½ inch by 1-inch metal plates and mounted to resist folding back.
 - 4. Each flap must be installed with a minimum of five ¼ inch bolts.
 - 5. Must be centered on tire.
- P. Roof must be properly attached to the roll cage of the truck and be fastened with Dzus buttons



or 5/16-inch hex head bolts only. Bolts must be hex head only for use with a 6 point, ½ inch socket or wrench, with clear access for removal from the top of vehicle. All nuts must be fixed in place underneath to the roll cage mounting tabs either by welding, use of captive nut plates or clip-on threaded nuts.

- Q. Aluminum or steel sheeting (minimum thickness of ¼ inch aluminum or 1/8-inch steel) must completely cover the top left of the roll cage above driver's head from the front to the rear of the roll bar tube. Right hand side must be sheeted with minimum .060 thick aluminum securely fastened (i.e. bolts or Dzus fasteners)
1. Sheeting must be firmly attached to the cage and extend ½ inch past the center line of tubes in all four directions.
 2. Sheeting must be installed with a minimum of 6 evenly spaced 5/16-inch bolts, not protruding toward the driver. Bolts must be hex head only for use with a 6 point, ½ inch socket or wrench, with clear access for removal from the top of vehicle when bodywork is removed. All nuts must be fixed in place underneath to the roll cage mounting tabs either by welding, use of captive nut plates or clip-on threaded nuts. No use of Riv-nuts or press in Captive nuts permitted unless they are welded in place. Bolts should be lubricated for easy removal. Use of Lock-tite should be avoided.
 3. Mounting tabs must be at least .095 thick.
- R. The hood must be locked down with 4 hood pins or 4 bolts with 2-inch washers evenly spaced across the front of the hood. The rear of the hood should be fastened securely to retain body integrity with bolts, hood pins, etc. Must be approved by CHAMP OFF-ROAD official.
- S. The maximum body width is 80 inches as measured between the A-pillars.
- T. Fenders may be flared to the outside of the tire.

PTR-8 BUMPERS

- A. Race vehicles must have front and rear bumpers. CHAMP OFF-ROAD officials must approve all bumpers.
- B. Front bumper must be 1 inch in front of and cannot extend more than 12 inches beyond grill. Bumper can be no wider than the inner sidewall of the front tire when straight.
- C. Rear bumper must have a minimum of 6 inches between bumper and fuel cell and may not extend more than 1 inch beyond the outside front to rear tire line.
- D. Bumpers must be constructed of tubing with a minimum of 1.5-inch diameter by .095.
- E. Any bumper brackets must be a minimum of .095.
- F. Rear bumper must be 1 inch behind bed side as measured in a straight line between the rear of stock production length bedsides.
- G. Nerf bars may not extend more than 2 inches beyond the outside front to rear tire line.
- H. Nerf bars and bumpers must be rounded.
- I. All rookie drivers must have the rear bumper painted or taped yellow.
- J. Minimum front and rear bumper width is 36 inches.

PTR-9 SUSPENSION

- A. All four corners must be coil over suspension.
- B. No suspension or sway bar adjustment of any kind is allowed when vehicle is moving. This includes but is not limited to hydraulic, electric, mechanical, and manual adjustment.
- C. Front wheel travel limit is 18 inches maximum.
- D. Rear wheel travel limit is 20 inches maximum.
- E. Four bar rear suspension only.
- F. Rear axle housing may not rotate independently of pivot points



PTR-10 STEERING COMPONENTS

- A. CHAMP OFF-ROAD officials must approve universal joints in steering shaft.
- B. Hydraulic power steering is permitted.
- C. Steering wheel quick release metal coupling is mandatory and must be approved by CHAMP OFF-ROAD officials.
- D. All race vehicles are required to have a steering wheel pad.

PTR-11 SHOCKS

- A. CHAMP OFF-ROAD officials must approve all shocks.
- B. All trucks must have at least one working shock on each wheel and a maximum of 2 shocks per corner.
- C. Shocks may have external bypass tubes and reservoir cans.
- D. External bypass is allowed on 1 shock per corner.
- E. Shocks cannot be adjusted while truck is in motion.
- F. Heating or cooling liquids or chemicals in shock is not permitted.
- G. Shocks cannot be linked together in any way. This includes but is not limited to hydraulic, electric, manual, or mechanical links.
- H. No linkage mounted shocks.
- I. Determination of air shock usage will be done in the following manner: Truck will be presented to CHAMP OFF-ROAD officials on level ground at existing ride height. Truck height will be measured from a given point on the chassis and all canisters will be purged of air, nitrogen, or other charged support. If truck droops more than 1 ½ inches, the truck will be illegal.
- J. Bump stops will be allowed on the front and rear.
- K. Bump stops will only be legal if they absorb a maximum of the last 6 inches of upward compression.
- L. 1 spring stack is allowed per corner with a maximum of 3springs on 1 shock.

PTR-12 BRAKES & BRAKE COOLING

- A. Brakes must be operational on all four wheels at all times. All brake operation must be CHAMP OFF-ROAD approved.
- B. Only disc brakes with steel (magnetic) rotors using standard metal mounting hats are permitted.
- C. Electronic wheel speed sensors or brake actuators will not be permitted.
- D. Brake pressure sensors are allowed.

PTR-13 WEIGHT

- A. Driver will be included in race vehicle's minimum weight seated in the driving position with drivers back contacting back of seat.
- B. Vehicles can be courtesy weighed prior to competition.
- C. CHAMP OFF-ROAD officials must approve all weight material.
- D. Added weight must be in block form.
- E. Blocks must weigh no less than 5 pounds each and cannot be made of liquid of any type, pellets, or other granulated weight.
- F. Added weight must be securely bolted in place on the race vehicle on a primary chassis component / tube(s).
- G. Dislodged weight cannot be returned to the vehicle for weighing at the end of the race.
- H. All block ballast must be painted white and identified with vehicle number.
- I. Weight can be sealed at the discretion of CHAMP OFF-ROAD officials.
- J. No weight shifting devices of any kind are allowed. This includes but is not limited to hydraulic or electronic devices.
- K. All vehicles will weigh in before and/or after competition at the discretion of CHAMP OFF-ROAD officials. Failure to do so will result in disqualification.
- L. All vehicles must meet minimum weight and front percentage both pre and post-race.
- M. All weight lost on track will result in a \$5.00 per pound fine.



N. Pro 2:

1. Trucks must weigh a minimum of ~~4000~~ 4100 pounds.
2. Minimum front axle weight is 45% of total truck weight.
3. Truck weight is set according to the following formula:
 - a. 2 valves per cylinder must weigh ~~9.75~~ 10.25 pounds per cubic inch.
 - b. 3 or more valves per cylinder must weigh 10.75 pounds per cubic inch.

PTR-14 ENGINE BLOCK

- A. Cubic inch of race vehicle motor must be declared at time of inspection.
- B. Engines are subject to inspection by CHAMP OFF-ROAD officials at any time.
- C. CHAMP OFF-ROAD officials' method of measuring the weight to displacement ratio is the only valid method of cubic inch P & G testing.
- D. At CHAMP OFF-ROAD officials' discretion, engines will be prepared for mechanical cubic inch certification and measurement.

E. Pro 2: OPEN

1. Engine block must be of OEM design and made from steel or aluminum.
2. Block must be available to the general public.
3. No more than 8 cylinders are allowed.
4. The maximum engine setback is 42 inches from the front spindle center line to rear of bell housing mount flange on rear of the block.
5. The center line of the crank shaft cannot be less than 8 ½ inches above the lowest part of the frame rail as measured from the front of the engine.
6. All open engines must run intake restrictor.
 7. **Engine builder must seal head to block, and present to tech a statement declaring bore and stroke. CHAMP OFF-ROAD Tech Director will provide the format for statement declaration sheets to be used**

F. Pro 2: 410

1. Engine block must have a 410 cubic inch maximum
2. Engine block must be of OEM design and made from cast iron.
3. Block must be available to the general public at a price competitive with other manufacturers.
4. Maximum of 8 cylinders and 2 valves per cylinder
5. Only ferrous rods are permitted.
6. The maximum engine setback is 42 inches from the front spindle center line to rear of bell housing mount flange on rear of the block.
7. The center line of the crank shaft cannot be less than 8 inches above the lowest part of the frame rail as measured from the front of the engine.
 8. **Engine builder must seal head to block, and present to tech a statement declaring bore and stroke. CHAMP OFF-ROAD Tech Director will provide the format for statement declaration sheets to be used**

PTR-15 ENGINE HEADS

A. Pro 2: 410

1. Only CHAMP OFF-ROAD approved spec Brodix heads are allowed. No removing,



- relocating, grinding, polishing or defacing of any letter or number cast into the cylinder head ports is allowed.
2. Only the following part numbers are approved for use.
 - a. Chevrolet – SPCH WISSOTA
 - b. Ford – SPFO WISSOTA
 - c. Mopar – SPMO WISSOTA
 3. Valve guides must remain in original angle and spacing as manufactured. Valve guide may not be tapered, thinned or shortened in any way.
 4. Valves may not be of any exotic materials such as titanium for example.
 5. No welding or adding material is allowed.
 6. Combustion chamber may be ground for clearance and polished.
 7. Intake bowl may be blended and polished from the valve seats to the edge of the letter “C” in the word “SPEC” on the roof and floor of the intake port. The side of the intake may be blended and polished from the valve seat to the same point as the roof and floor. No grinding or polishing along the side walls where the spec logo is cast.
 8. Exhaust seats may be blended into the exhaust bowl and port may be polished as long as the word “SPEC” in the roof of the exhaust port is not touched and the exhaust port exit at the header flange remains in the original as cast location, size and shape.
 9. Cylinder heads may be machined for push rod clearance.
 10. No grinding or polishing of any kind, other than stated above, is allowed.

PTR-16 ENGINE OILING SYSTEM

- A. Any oiling system may be used

PTR-17 IGNITION SYSTEMS

- A. All ignition systems must be approved by CHAMP OFF-ROAD.
- B. **Pro 2 (410)**
1. MSD “6-series” (6AL,6420,6425, 6430 {ALN}) ignition boxes are required with a Max 7500 RPM chip.
 2. Dual boxes with an A & B switch are permitted.
 3. The MSD ignition module cannot be located within the reach of the driver.
 4. Wiring for the MSD box must be separate from other vehicle wiring and have no extra connectors or termination.
 5. May utilize CHAMP OFF-ROAD Motec fuel injection as complete system as alternative to standard ignition and carburetor with a Max 7500 RPM.

PTR-18 ELECTRICAL ACCESSORIES

- A. At the request of television, certain vehicles may compete with telemetry systems, as so installed by the series production television network requesting such information.
- B. All carbureted trucks:
1. Vehicle digital dashes, data recording devices and/or any other form of measurement, sensors or recording of any kind or nature is permitted only for the following:
 - a. Engine Related items - engine RPM, water temperature, engine oil temperature, engine oil pressure, fuel pressure, voltage, lambda O2 (Oxygen Sensors), exhaust gas temperature, intake manifold vacuum/pressure (the same sensor may be used in intake or crank case), water pressure, power steering pump



- pressure, power steering oil temperature
 - b. Transmission Related items – transmission fluid / oil temp, Transmission main pump PSI. Sensors may not be directly connected to the transmission and must use a minimum of 12-inch soft line type hose to eliminate any direct connection to the transmission of any wiring. Electronic gear indicators for manual transmissions only in Pro 4 may be connected to the digital dash.
 - c. Shift spark interrupters may be wired to shifter and / or transmission shift drum when using manual transmission
 - d. Other Drive Train Related Items – Transfer case oil temperature, Transfer case oil pressure, gear oil temperature, brake pressure sensors. Sensors may not be directly connected to the transfer case or gear case and must use a minimum of 12-inch soft line type hose to eliminate any direct connection to the transfer case or gear case of any wiring.
 - e. No other sensors, measurement, GPS, track mapping, lap timing device or recording device of any kind is permitted at any time during the entire CHAMP OFF-ROAD event weekend.
- c. All CHAMP OFF-ROAD **PRO 2, PRO 2(M)** MoTec Fuel Injected trucks:
- 1. Vehicle digital dashes, data recording devices and/or any other form of measurement, sensors or recording of any kind or nature is permitted only for the following:
 - a. Engine Related items - engine RPM, water temperature, engine oil temperature, engine oil pressure, fuel pressure, voltage, lambda O2 (Oxygen Sensors), exhaust gas temperature, intake manifold vacuum/pressure (the same sensor may be used in intake or crank case), water pressure, power steering pump pressure, power steering oil temperature
 - b. Transmission Related items – transmission fluid / oil temp, Transmission main pump PSI. Sensors, Electronic gear indicators for manual transmissions may connect to main dash.
 - c. Shift spark interrupters may be wired to shifter and / or transmission shift drum when using manual transmission
 - d. Other Drive Train Related Items – Transfer case oil temperature, Transfer case oil pressure, gear oil temperature, brake pressure sensors.
 - e. other sensors are permitted, accelerometers, GPS, lap timing device or recording device of any kind is permitted (except those listed as restricted for traction control below in letter F. Any sensors listed in letter F will not be allowed.).
 - D. Any configuration of data measurement or recording must be completely open and available for CHAMP OFF-ROAD inspection at any time during a CHAMP OFF-ROAD event weekend. All stored Data must be cleared before the start of competition; this will include any practice or qualifying data. If data is stored on a removable chip (i.e. RacePak style) the chip must be installed and sealed by CHAMP OFF-ROAD prior to entering the track. A “lack” of data or no data may result in a penalty including disqualification.
 - E. The following Digital dash units are permitted
 - 1. Motec – any model
 - 2. RacePack – any model
 - 3. AIM – any model
 - 4. Life-any model
 - 5. All other Digital dashes subject to CHAMP OFF-ROAD approval.
 - F. No traction control devices allowed.
 - G. No wireless devices in or on the vehicle are permitted.
 - H. No data transfer is allowed to or from vehicle when in motion.
 - I. CHAMP OFF-ROAD OEM Platform Engine specific



1. Only CHAMP OFF-ROAD mandated sensors may be used as issued.
2. No modifications to any wire loom or sensors is permitted for any reason.

PTR-19 ENGINE & RACE VEHICLE ELECTRICAL SYSTEMS

- A. All ignition systems must be approved by CHAMP OFF-ROAD.
- B. No computerized systems are permitted unless CHAMP OFF-ROAD approved.
- C. Any make or brand of spark plug may be used.
- D. All vehicles must have a working alternator/generator system.
- E. All vehicles must have a self-starter in working condition and must be capable of starting on their own power.
- F. All electrical switches must be located on the dash panel.
- G. All vehicles must have a master on/off switch wired to the battery in a manner that will cut off all electrical power and the engine.
- H. Master switch must be labeled as such, have a red circle around it, be located on the left-hand side rear of, and must be accessible from the outside of the race vehicle. Switch centerline must be 8 inches inside frame, 10 inches forward of frame rear. Switch must turn counter clockwise for off. Red circle must be at least 1 inch wide.

PTR-20 ENGINE COOLING SYSTEMS

- A. Installation, location, and type of electrical cooling fan must be acceptable to CHAMP OFF-ROAD.
- B. No icing refrigerant chemicals may be used in or near the engine compartment or in any place on the truck.
- C. Electrical engine cooling fans are optional.

PTR-21 ENGINE EXHAUST SYSTEMS

- A. Exhaust mufflers are required on all exhaust systems.
- B. Muffler must meet a maximum decibel of.
 1. Front weight bias will be added for first offense.
 - i. Consecutive events of non-compliance will result in weight penalty doubling with each event.
 - ii. Any competitor that remains out of compliance after 4 consecutive events will not be permitted to compete or may be disqualified
 - iii. DB readings may not grow more than 2 DB from the first readings of any event leading into the last race of the weekend
- C. Exhaust pipes must be attached to headers or manifolds in a secure manner.
- D. Exhaust pipes must extend past driver compartment to the outer edge of the truck and to the rear of the driver.
- E. All exhaust must discharge downward or outward to either side of vehicle.
- F. Exhaust heat shields are permitted.
- G. Exhaust pipes that enter the cab of the truck must have a protective heat shield.



1. A penalty of 1 percent per DB over the maximum allowed level f

PTR-22 CARBURETOR

- A. No turbo, nitrous, or super chargers permitted.
- B. All carbureted vehicles must use a CHAMP OFF-ROAD approved float bowl vent catch tank system, roll over vent valve, or tube vent line exiting at rear of vehicle behind rear axle to limit fuel leakage or escape when the vehicle is upside down.
- C. **Pro 2: OPEN**
 1. 1 four-barrel carburetor permitted with CHAMP OFF-ROAD approved and tagged restrictor plate with a **maximum venturi size of 1.15"** mounted under the carburetor.
 2. Or CHAMP OFF-ROAD regulated Fuel Injection system may be used as listed in PTR-25 and with CHAMP OFF-ROAD approved and tagged restrictor plate with a **maximum venturi size of 1.15"** mounted under throttle body.
- D. **Pro 2(M):**
 1. 1 four-barrel Holly 4150 HP carburetor permitted.
 2. Intake manifold must be available through regular retail sources and available to the general public
 3. Or CHAMP OFF-ROAD regulated Fuel Injection system may be used as listed in PTR-25

PTR-23 CARBURETOR RESTRICTOR PLATES

- A. No devices between the carburetor and the intake manifold designed to increase or redirect airflow will be allowed.
- B. Trucks must use open plenum or straight bore design spacer with standard design gaskets only.
- C. Restrictor plates may be added to a carburetor or throttle body and venturi size may be adjusted at any time CHAMP OFF-ROAD deems it necessary.
 - a. Restrictor plate must be one (1) inch thick and accept "Allstar Performance" restrictor inserts without modification.
 - i. 1.15" restrictor insert Part number ALL26066 - <https://allstarperformance.com/base-plate-inserts-1-250-4pk-for-1in-spacer-all26066/> and may not be modified in any way
 - b. All **Pro 2** open engine trucks will utilize CHAMP OFF-ROAD approved and tagged restrictor plate with a **maximum venturi size of 1.15"** mounted under the carburetor or under the throttle body. All restrictor plates must be inspected, sealed, and approved by the Technical Director at all times before the vehicle is on the track for any session during a race weekend including, practice, qualifying, and racing.
- D. All Pro 2 and Pro 2(M) engines must have at least two studs that attaches the throttle body or carburetor to the intake drilled to accept a tag / seal after inspected and installed. Diameter of hole must be a minimum of .093" + but not smaller.

PTR-24 AIR AND INTAKE CLEANERS

- . Intake air or filtered air cannot be blended with alcohols, ether, or other oxygenates, nor blended with aniline or its derivatives, nitrous compounds, or any other nitrogen containing compounds.

PTR-25 FUEL INJECTION

ECU

1. Must use MTeC/CHAMP OFFROAD M130 ECU only. ECU must be registered with CHAMP OFFROAD Technical department before installed into vehicle. CHAMP OFFROAD may change the ECU programming at any time.
2. An RJ45/8P8C Ethernet port must be located within easy reach of outside of vehicle to allow connection for technical inspection of ECU.
3. Must use a CHAMP OFFROAD/MoTeC wiring loom. Loom may not be tampered with or repaired without permission of a CHAMP OFFROAD tech official. If any equivalent sensor is used and requires a pig tail adapter it must be inspected and approved by CHAMP OFFROAD Tech Director prior to use.
4. Only the following sensors or their equivalent will be allowed to connect to ECU.

Engine Management:

Sensor Type	Manufacturer	Part Number
Lambda	MoTeC	M 0258 001
Position – Crankshaft (Mag)	MoTeC	M 6-APX-003 DTM
Position – Camshaft (Hall Effect)	MoTeC	M MHALL 437-DTM – OR - M DHALL 437 - DTM
Position – Throttle	MoTeC	M 518-2846-100K
Pressure – Barometric	MoTeC	M 16-6835
Pressure – Engine Coolant	MoTeC	M APT-G2-DTM-150G
Pressure – Engine Oil	MoTeC	M APT-G2-DTM-150G
Pressure – Fuel	MoTeC	M APT-G2-DTM-150G
Pressure – Manifold	MoTeC	M 16-9886
Temperature – Engine	MoTeC	M 25-2197D
Temperature – Engine Oil	MoTeC	M 25-2197D
Temperature – Fuel	MoTeC	M 25-2197D
Temperature – Inlet Air	MoTeC	0 280 039 – OR – M 25-7225

ECU Outputs:

- Lambda Sensor 1 Heater
- Lambda Sensor 2 Heater
- Engine radiator fan-1 Engine
- radiator fan-2 Engine oil
- cooler fan -1
- Fuel Pump (A-B switch on dash)
- Tach output

***** CHAMP OFF-ROAD at any time may add or remove sensors and/or outputs.**

INJECTORS

- a. **Injectors are restricted to M ID 1050.**
- b. Only one (1) injector per cylinder is allowed. Injectors must be located in the intake manifold.
- c. Injectors must be perpendicular to throttle body mounting face (plus or minus five (5) degrees).



- d. Injectors must be located on top of the manifold within five (5) inches from edge of manifold that mounts to the head.
- e. Injectors must be mounted in a straight line, parallel to intake port centerlines.

FUEL RAILS

- a. Fuel rails must be constructed of stainless steel or aluminum.
- b. The fuel rail layout may be a one-piece, continuous U-shaped fuel rail or two individual fuel rails. Fuel rail bore must be cylindrical or "D" in shape and internal diameter and shape must be maintained for its entire length.
- c. Each fuel rail must be securely mounted to the intake manifold using a minimum of one positive fastener per end.
- d. Only "fuel in" and "fuel out" lines, injectors, fuel temperature sensor, and fuel pressure sensor maybe attached to fuel rail. No pressure damping devise of any type allowed.

INTAKE MANIFOLD

- a. Must use production cast aluminum intake manifold and be approved by CHAMP OFF-ROAD prior to installation.
- b. No sheet metal, fabricated, plastic intake manifolds are allowed.

THROTTLE BODY

- a. Throttle bodies are limited to the following;
 - 1. Braswell 1590, with a maximum venturi bore of 1.595 inches.

THROTTLE BODY MUST REMAIN AS DELIVERED BY THE MANUFACTURER.

- b. Throttle body must have four (4) venturi's. The throttle body venturi is defined as the constricted throat in the main body air passage.
- c. The throttle body venturi's constricted throat must have a maximum diameter of 1.595 (+0.000) inches.
- d. A riser no taller than two (2) inches may be used between throttle body and intake manifold.
- e. Restrictor plates maybe added to a carburetor or throttle body at any time CHAMP OFF-ROAD deems it necessary

Throttle Body Plates (Butterfly Plate assembly)

- a. Must have four (4) round butterflies.
- b. Maximum butterfly bore diameter 1.790 (plus .000) inches.
- c. Butterfly linkage may be progressive or 1:1.

Ignition Coils

Must use one (1) coil per cylinder. Coils must be M Delco 180

Contact and Order Information:



Nick Baggett Applications

Engineer -----

MoTeC Systems East 169-

5 Gasoline Alley

Mooreville, NC 28117

T: 704-799-3800

F: 704-799-3874

C: 630-391-3868

PTR-26 FUEL CELL

- A. All fuel cells must be CHAMP OFF-ROAD approved.
- B. CHAMP OFF-ROAD will reject any previously approved fuel cell, which appears to be defective, damaged, or not in proper condition.
- C. No pressure systems will be allowed. Any concealed or not concealed pressure type containers, feed lines or actuating mechanisms will not be permitted, even if inoperable.
- D. Icing, Freon type chemicals, or refrigerants may not be used in or near the fuel system.
- E. Electric fuel pumps must have oil pressure shut-off. Loss of oil pressure will automatically shut off fuel pump. A momentary on bypass may be installed. The momentary on by pass may be like a push button, 2-pole starter button, which can be mounted in a position best suited to the driver. The oil pressure-sending unit is either AC Delco part number 25036938, Niehoff part number OP23481, Wells part number PS119 or PS122, Napa part number OP6624 or OP6616, Standard ignition Blue Streak part number PS126 or Niehoff Borg Warner part number OP23311. The sending unit receives power from the ground.
- F. Digital dash or electrical device such as Performance Engineering's Fuel Pump Safety Switch may replace mandated mechanical fuel pressure switch for operation of electric fuel pump, provided operation can be verified by the tech team to only allow power to fuel pump for a maximum of 4 seconds when engine is not running.
- G. No material other than standard foam as provided by the fuel cell manufacturer is permitted.
- H. Rear mounted fuel cell must have a chassis or body cross member of substance between the fuel cell and driver and be protected from ground obstacles.
- I. Fuel cells must be dated by manufacturer. Fuel cells will become obsolete five (5) years after date of manufacture and must be replaced.
- J. All fuel cell fillers and vents must have check valves installed.
- K. Fuel pressure regulator vent line must do one of the following:
 - 3. Connect to intake manifold vacuum.
 - 4. Connect to air cleaner so that any fuel enters engine.
 - 5. Connect to fuel cell.
 - 6. Have vent hose routed past the rear axle.
- L. A splash shield must be in place to direct any spill away from the driver, motor, and motor exhaust. A body panel is considered sufficient splash shield.
- M. Fuel cell cannot be vented into the driver's compartment of any truck.
- N. The fuel cell must be located behind the cab. The fuel cell must have a 1/8 inch skid plate minimum covering the complete bottom, sides and rear of the cell. All mountings must be CHAMP OFF-ROAD approved. Fuel cell cannot be mounted to skid plate. Cell must be mounted to chassis. See diagram on FIG 1
- O. Fuel cell must have a minimum of two 2 1/2 inch steel straps, evenly spaced on top of the cell with a minimum of two 5/16 inch bolts or one 3/8 inch bolt on each end of strap. Fuel cell must also have two 2 1/2 inch steel straps or 1 1/2 inch tubing underneath cell. Alternative

mounting methods may be approved at the discretion of the CHAMP OFF-ROAD Technical Director. See diagram. See FIG - 1

- P. All fuel cells must be housed in a metal can, .060 thick aluminum minimum. Slip over lid must be .090 thick aluminum minimum with 1.0 inch return.

FUEL VENT ROUTING

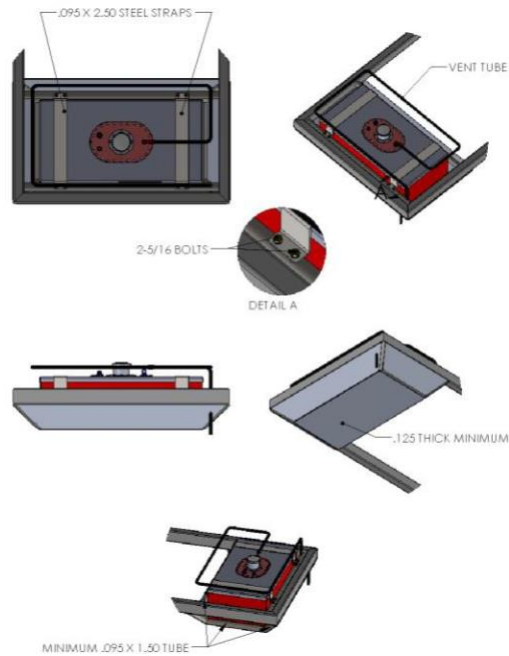


FIG - 1

ALL FUEL CELL LINES AND VENTS MUST COME OUT OF THE TOP OF THE FUEL CELL (PICTURED ABOVE).

PTR-27 FUEL

- A. All cars shall use fuel, as defined in the following graph, unless a specific exemption is made in the provisions for a specific category/class.
- B. Permitted Fuel: Permitted fuel is herein defined as gasoline meeting specified dielectric constant standards and not contain any prohibited substance in excess of stated limits. Gasoline is a mixture of refined hydrocarbons. Gasoline is an electrical insulator and its relative effectiveness as an insulator is represented by its dielectric constant (D.C.). The D.C. of gasoline will be measured by an CHAMP OFF-ROAD FTK01 Fuel Check Meter. The 0 (zero) calibration of the CHAMP OFF-ROAD Fuel Check Meter is set against reagent or laboratory grade cyclohexane. Gasoline may be tested and certified at CHAMP OFF-ROAD events by the determination of the dielectric constant using the CHAMP OFF-ROAD Fuel Check meter and through the application of various chemical analyses. If a competitor's fuel is not compliant with the fuel standards below, CHAMP OFF-ROAD shall take appropriate action. Penalties for use of non-compliant fuel can include fine, and/or



reduction of points, and/or suspension.

C. Cooling: The cooling of fuel is not permitted during competition.

Fuel Samples: CHAMP OFF-ROAD has the right to sample a Competitor’s fuel at any time during the Event. Samples will be impounded for observation and or testing by CHAMP OFF-ROAD and/or any outside laboratories at CHAMP OFF-ROAD discretion.

If the services of an outside laboratory were used and the fuel was found to be non-compliant by the laboratory, the racer will be assessed the cost of the fuel transportation to the laboratory and laboratory fees.

D. Restricted Substances: The fuel must not be blended with other alcohols, ethers, or oxygenates, and it must not be blended with aniline or its derivatives, nitroparaffins or other nitrogen containing compounds. Nitrous oxide is forbidden.

Fuel Standards		
Classes	Type	DC Max
All Classes Except Karts	Gasoline without added oil	3
Karts	VP MS98L	1.5
The user of any substance in the following table in excess of the stated limit is prohibited either in fuel or otherwise introduced into the engine		
Chemical Compounds Prohibited or Restricted in CHAMP OFF-ROAD Race Fuels		
Compounds	Examples	Maximum Weight or Percentage by Weight Allowed
Total Aldehydes	Acetaldehyde, Acrolein, Formaldehyde	1.00%
Benzene		5.60%
3,3-dienthyl-1 butene		0.05%
Total ethers	1,4 Dioxane, ETBE, Furan, MTBE, Tetrahydrofuran	0.00%
Total Dienes (Diolenes)	1,4 Butadiene, Isoprene	1.00%
Ethanol		0.00%
Total Epoxides	Ethylene oxide, Propylene oxide	0.00%
Total Nitrogen Compounds	Nitromethane, Nitroethane, Nitropropane, and all aromatic nitrogen compounds such as Nitrobenzene, Ammonia, Amines, and their salts, Aniline, Hydrazine, Pyridine, Pyrrole, Benzidine	0.00%

E. Specified Fuel: CHAMP OFF-ROAD reserves the right to have all cars use the same blend of fuel in a given event or series class. When this right is exercised, it will be stated in the CHAMP OFF-ROAD rule book and/or in other CHAMP OFF-ROAD bulletins. In all such cases, fuel used for practice, qualifying and the race itself must be the specified fuel blend as produced by the manufacturer of the fuel. At an event where a specified fuel has been named, CHAMP OFF-ROAD will use a sample of the actual fuel provided at the event by the specified fuel supplier to determine whether the fuel used by a competitor conforms to the specifications of the specified fuel blend. The addition of chemicals additives or fuels to the specified fuel is strictly



forbidden.

- F. If CHAMP OFF-ROAD officials suspects maskers in fuel, chemical testing will be conducted at possible expense to the competitor.
- G. Penalties for use of hazardous chemicals will be severe including fine, and/or reduction of points, and/or suspension.
- H. Pro Lite trucks are restricted to Non-Oxygenated gasoline. Gasoline cannot be blended, mixed, or modified in any way.

PTR-28 OIL COOLERS

- A. All oil coolers and their installation must be approved by CHAMP OFF-ROAD.
- B. Engine and transmission oil to air or oil to water heat exchangers are permitted.
- C. Cooling fans are permitted. No coolers are allowed in the driver's compartment.

PTR-29 CLUTCH

- A. Maximum of 3 disk clutches may be used.

PTR-30 TRANSMISSION

- A. Transmissions must be standard production, catalogued, and available through regular dealer channels.
- B. All forward and reverse gears must be in working order.
- C. Components must be installed in stock order: engine to transmission to differential via a drive shaft. Engine must be located in front of truck.
- D. All transmissions must be approved by CHAMP OFF-ROAD officials.
- E. Motor crankshaft must be connected to transmission input shaft via a conventional clutch assembly or vane type torque converter.
- F. Automatic transmissions must operate through a conventional torque converter.
- G. Manual shifting of all transmissions is mandatory, unless other method is needed to accommodate handicap condition of driver. CHAMP OFF-ROAD officials must approve all non-manual shifting procedures.
- H. Use of any Turbo 400 based automatic transmission must use SFI 4.1 approved case and SFI 30.1 approved bell housing. Will allow stock case with shatter-shield but must be pre-approved from CHAMP OFF-ROAD tech official prior to entering race track.
- I. No paddle shifters, solenoids, wires to transmission, bell housing, shifter, or linkage. No interfaces between ECU and transmission will be allowed
- J. Temperature gauge will be mechanical on transmission.
- K. No electrical gauges allowed on transmission.
- L. Under drive is permitted and is not considered part of the transmission. Must only use single speed non-shiftable.
- M. Pro 2 must use a production based automatic transmission with three (3) forward gears. Transmission must have been production-built unit with a minimum production of 5000 units. Transmission must be planetary gear type. No manual transmissions allowed of any kind

PTR-31 DRIVE PARTS

- A. Engine to transmission adapter plate can be a maximum of 1 ½ inch thick.
- B. A combination of multiple adapter plates can be used if it does not exceed 1 ½ inch thickness.

PTR-32 PROTECTIVE SHIELDS

- A. Location of all shields must be approved by CHAMP OFF-ROAD.



- B. Transmission must be covered completely by a protective shield placed to protect the driver from exploding parts from beginning of transmission case/bell housing to 4 inches before a bolt on tail housing. All shields must be approved by CHAMP OFF-ROAD.
- C. Shields must be constructed of a metal covering with a thickness of ¼ inch aluminum or 1/8 inch steel or be SFI approved.
- D. If you have an SFI 4.1 approved transmission case and SFI 30.1 approved bell housing no shield will be required.

PTR-33 DIP STICKS

- A. All dipsticks must be secured in dipstick tube with a positive locking or secured method.

PTR-34 DRIVE SHAFT

- A. One 360-degree solid steel bracket, no less than 2 inches wide and ¼ inch thick or 1 inch tubing with a minimum thickness of .095 inches must be placed around each drive shaft. Must be located within 4 to 6 inches aft of the centerline of front u-joint.
- B. Drive shaft must be painted white and have vehicle number on it.

PTR-35 REAR AXLE/DIFFERENTIAL

- A. Quick change rear ends are not allowed.
- B. Only steel axles are permitted.
- C. Independent rear suspension is not allowed.
- D. Must be in stock location as approved by CHAMP OFF-ROAD officials.
- E. Rear differential must be spool type only and approved by CHAMP OFF-ROAD officials.
- F. Rear differential must have a minimum of 1 ½ inch inspection bung or plate placed in such a manner that CHAMP OFF-ROAD officials can see and identify the spool. If inspection area does not exist, crew chief will remove differential for CHAMP OFF-ROAD technical inspection.

PTR-36 TIRES

- 1. Tires must be DOT only.
 - a. DOT tire classes are restricted to tires that are intended for highway use. All tires must be designed, built, and sold for use on passenger car or pickup truck ONLY.
 - b. Tires must be available to the general public through standard dealers or normal internet retail stores. All tires must be listed in dealer communication as available prior to use and must be listed on company web site in the same size and model of tires. Internet only or one store only tires are NOT



acceptable. Tires must be able to be purchased by the general public and or CHAMP OFF-ROAD officials before being allowed to be used in any race.

- c. Tires need to be part of a multiple line of tire sizes within a currently sold design. A minimum of 2 sizes in addition to what is allowed in the class must be offered. A tire used in the race should be identical in construction: rubber compound, durometer, construction, sidewall with identical tread design as other sizes not used in the race (Example – if the tire used is a 35” tire, other tires from the manufacturer in sizes like 31” and 33” will be the same as the tires raced upon).
 - d. The tire must not exceed \$400.00 in cost.
 - e. No studded tires or any hard-inserted items into the tread area of the tire will be permitted for any reason.
2. Maximum tread width is 10.200
 3. Maximum tire diameter is 35”
 4. Tire circumference may not exceed 110.5”.
 5. All tires will be measured on a 17” diameter x 9” maximum width race ready wheel with tire pressure at 13 psi.
 6. Tires will be measured without load of vehicle, from the widest and highest point, inflated to 13 psi, and mounted one race ready wheel.
 7. Durometer testing will be done and shall not be below 58 points. Tires may be Durometer tested with race ready conditions prior to any competition on the track.
 8. Tire soaking is not permitted.
 9. **Inner Liners allowed.**
 10. Minimum air pressure on the starting line is 13 psi.
 11. Equipment used to adjust air pressure during the race is not allowed.
 12. Tires will be measured using calipers as well as a box provided by the CHAMP OFF-ROAD technical staff. See diagram on FIG 8 All tires, to include the spare, must fit through the box at all times when race vehicles are competing on the track to include pre/post qualifying and pre/post-race. This applies to new, used or second-hand tires.
 13. Each Tire Manufacturer who wishes to compete in the CHAMP OFF-ROAD series must submit application of “intent to participate” to the Series Director or Competition Director prior to any competitor using that brand of tire. CHAMP OFF-ROAD will have the sole right to approve or deny any application from any Tire Manufacturer. Upon approval of any new to the CHAMP OFF-ROAD Pro 2 class Tire Manufacturer, must complete a Tire Vendor Agreement with CHAMP OFF-ROAD in order to compete in CHAMP OFF-ROAD each year.
 14. Each Tire Manufacturer must submit for approval from CHAMP OFF-ROAD a list of the tires they wish to use in competition no less than 3 weeks prior to any event they wish to compete with said tire. This notice should be sent by mail and copy by email to the Technical director and is not considered received if no confirmation of receipt is sent by the Technical director of CHAMP OFF-ROAD. The notice must include tire line name, size, load range, part number, and manufacturer’s suggested retail sales price. It is the responsibility of the Tire manufacturer to submit the tire use request list before expecting to use any tire make or model or size at



- any CHAMP OFF-ROAD event. Once any tire make / model / size has been submitted and approved for use the manufacturer may consider that approved for the rest of the race season and is not required to submit again unless a change is made in construction or compound of the tire in question. Any change to construction, compound, or tread design will be considered a "new" tire and must be re-submitted and follow all tire guidelines for the class.
15. CHAMP OFF-ROAD at its sole discretion may purchase tire(s) from a retail outlet of its choosing at any given time to be brought to the track to be used in the inspection process. Any cost associated with CHAMP OFF-ROAD obtaining the required tire(s) for comparison to the tire(s) brought to the track will be billed back to the participating manufacturer at the same cost incurred by CHAMP OFF-ROAD in the process including any and all testing procedures and lab costs. CHAMP OFF-ROAD officials may at their sole discretion disassemble or cut the tire(s) apart for testing purposes as part of the testing process. At the end of the inspection process time the purchased tire(s) will be returned to the Manufacturer by CHAMP OFF-ROAD tech officials.
 16. All Pro 2 teams will be restricted as to how many tires may be used at a race event. All tires will be logged and marked at the tech trailer prior to any practice sessions and prior to any truck getting on the track.
 - a. Each truck will be allocated 10 tires per 2 race weekend.
 - b. Each truck will be allocated 8 tires per 1 race weekend.
 - c. All tires will be marked at tech with the appropriate race markings Tech will only mark tires within the first two hours that Tech is opened each day. You may have all allotted tires marked at the beginning of the first practice day or one set at the beginning of each day of practice or qualifying.
 - d. CHAMP OFF-ROAD officials may grant the use of additional tires for that race event if there are safety concerns. If permission is granted, that competitor must start at the rear of the field in all remaining races at that event. If a team is found falsifying information and or circumventing this rule in any way, they will be disqualified.
 - e. When a team is found using tires other than the allocated and marked tires without prior CHAMP OFF-ROAD approval, they will be disqualified from competition and will not be permitted to qualify for the next two races and must start at the rear of the field.

PTR-37 WHEELS

- A. All wheels must be in good repair and free from cracks or defects that could cause wheel failure.
- B. Lug nut must be open ended, and of proper size.
- C. Studs must extend a minimum of 2 full threads past the end of the lugnut.
- D. Wheel studs may be no closer than ½ inch from the outer most face of the bead lock ring opening. Stud ends must be rounded.
- E. All bead locks must have recessed bolts only that do not protrude past the face of the ring.
- F. Foam mud plugs are the only wheel cover allowed. Snap on, clip-on, or bolt on covers will not be permitted.
- G. No race wheel may exceed a 9" width.
- H. Minimum backspacing for all wheels will be 3.75".

PTR-38 RADIOS

- A. Radios must be of two-way voice communication type only. Each race team is responsible for meeting FCC requirements.
- B. Radio communication between drivers is not permitted.
- C. All radio frequencies must be approved and reported to CHAMP OFF-ROAD prior to their use.
- D. All race vehicle radio communication systems must be approved by CHAMP OFF-ROAD.
- E. See Section 5 of CHAMP OFF-ROAD General Rules for spotter requirements.
- F. Spotters are required for all race teams.
- G. Any 2-way radios used at a CHAMP OFF-ROAD event may not exceed 6 watts output.
- H. Each competitor race vehicle must use at all times while on the track an override race receiver to listen to race control that overrides any communication from the spotter when race control is transmitting to the vehicles. The receiver device must be approved by CHAMP OFF-ROAD and meet CHAMP OFF-ROAD standards at all times. Competitors will not be allowed on the track at any time without the race receiver installed and functional.

PTR-39 TRANSPONDERS/TIMING

- A. Remote score timing devices will not be permitted by teams, owners, or anyone associated with an entry, unless approved by CHAMP OFF-ROAD.
- B. All teams are required to purchase remote timing transponders. Transponders can only be purchased through CHAMP OFF-ROAD and numbers must be recorded with CHAMP OFF-ROAD officials.
- C. Drivers are responsible for the charging and installation of all transponders. Any entry without a properly charged, properly installed, functioning transponder may not be scored and may be subject to further penalty.
- D. Transponders must be placed from front face of the front bumper to transponder center line 115 inches back on the driver's side of the truck.

CORNER GUSSETS

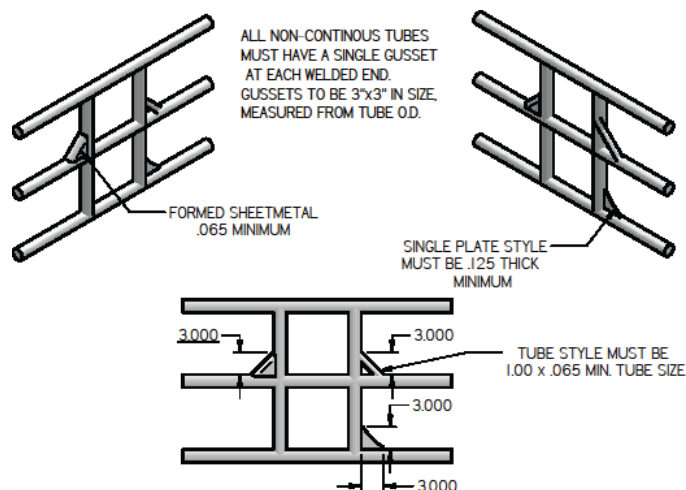


FIG 2

TRUCK BEDSIDE PANEL

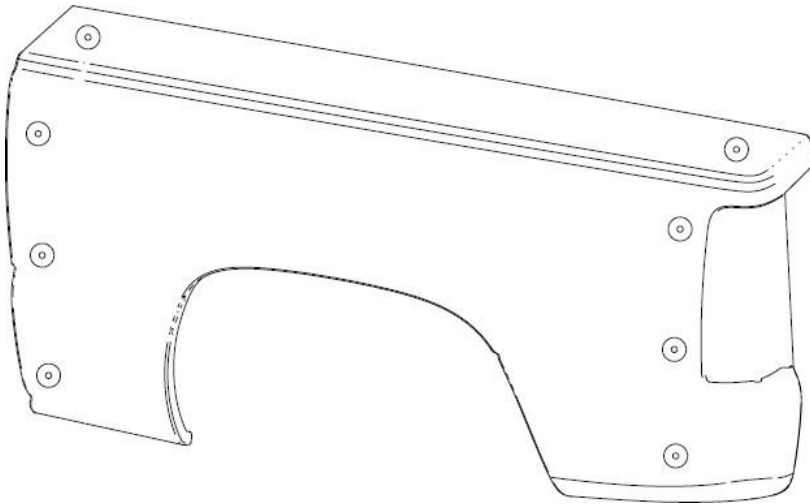


FIG 3

WINDOW NET

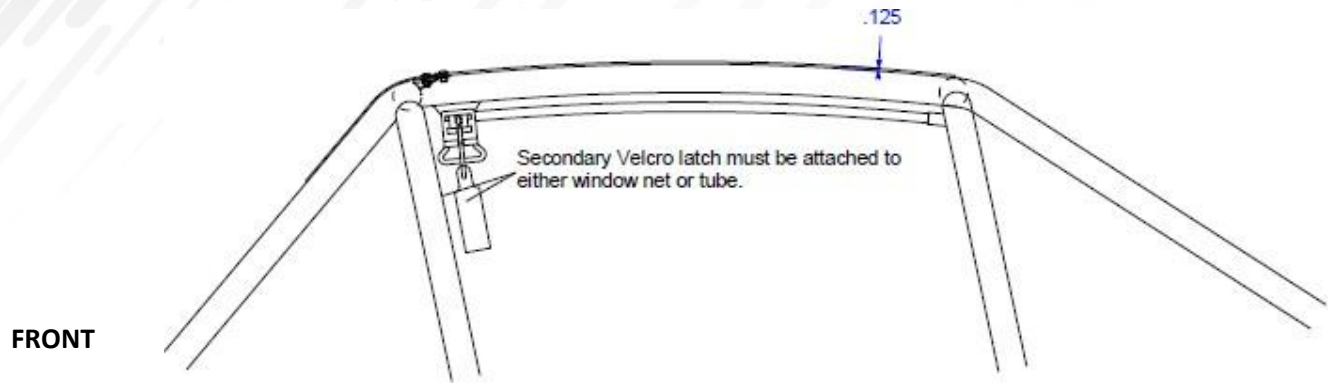
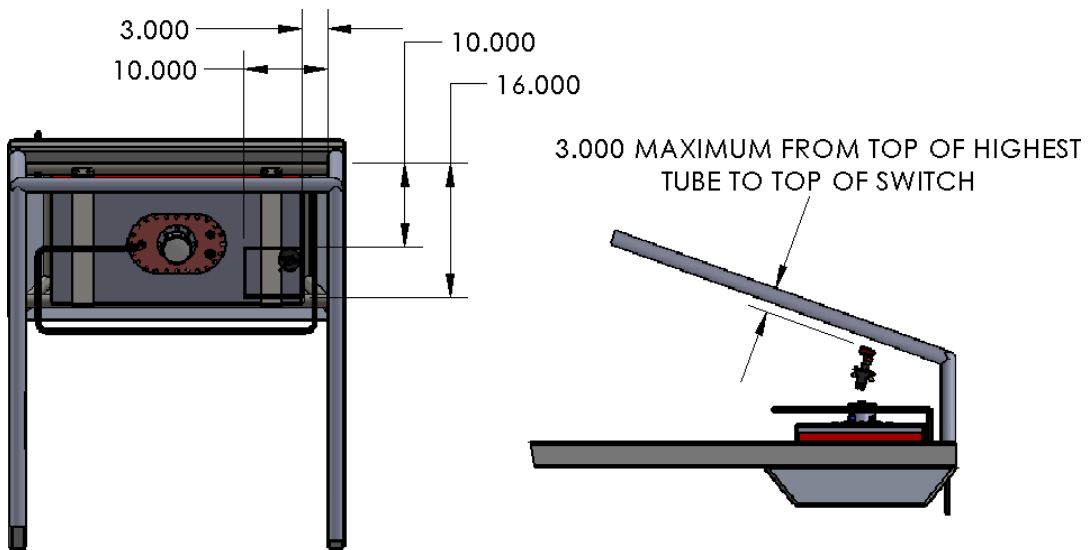


FIG 4



EMERGENCY SHUT OFF SWITCH MUST BE LOCATED AT REAR OF VEHICLE. CENTERLINE OF SWITCH MUST BE WITHIN 3.0-10.0 INCHES IN SIDE OF FRAME LOCATED ON DRIVERS SIDE. SWITCH MUST BE LOCATED WITHIN 10.0-16.0 INCHES OF REAR OF FRAME.

FIG 5

FUEL CELL DIAGRAM

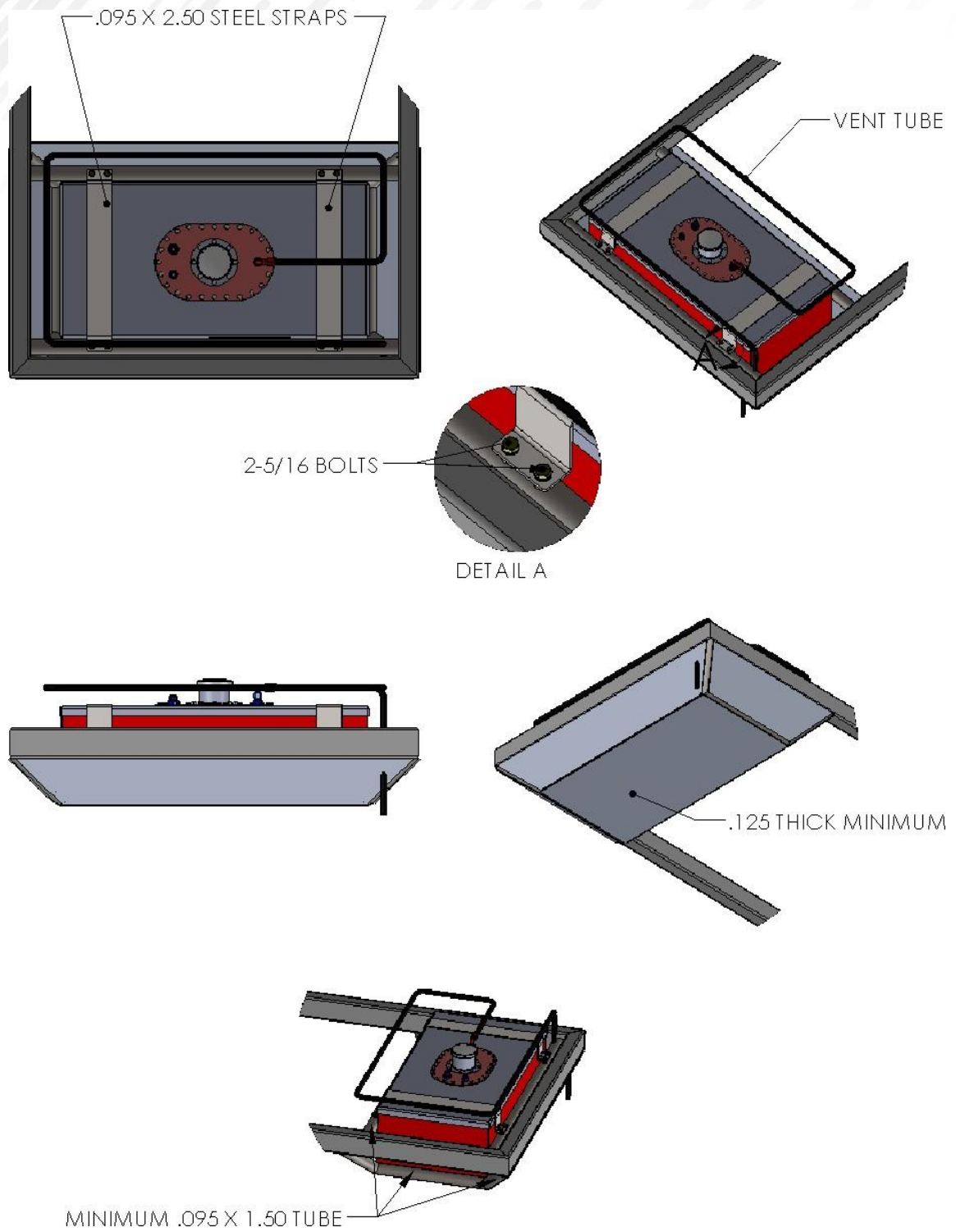


FIG 6

TRUCK MUD FLAPS

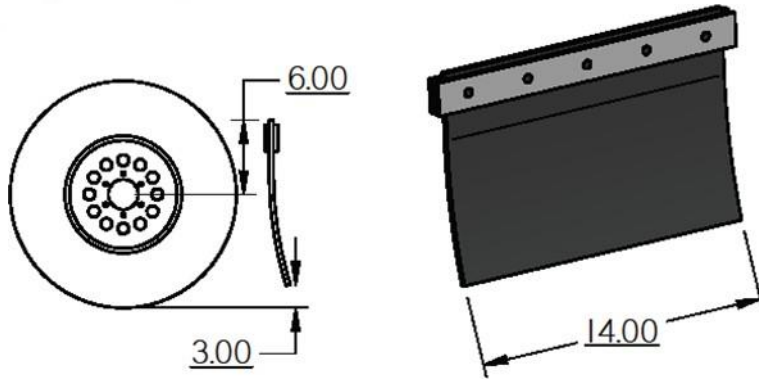


FIG 7

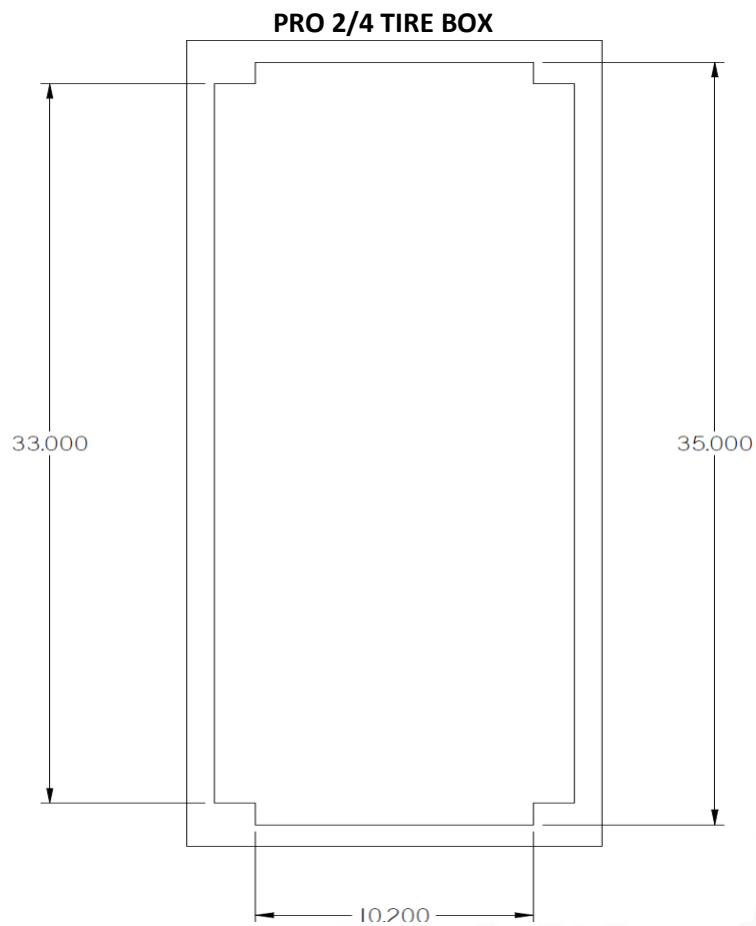


FIG 8

FIG 9

ROLL CAGE CONSTRUCTION

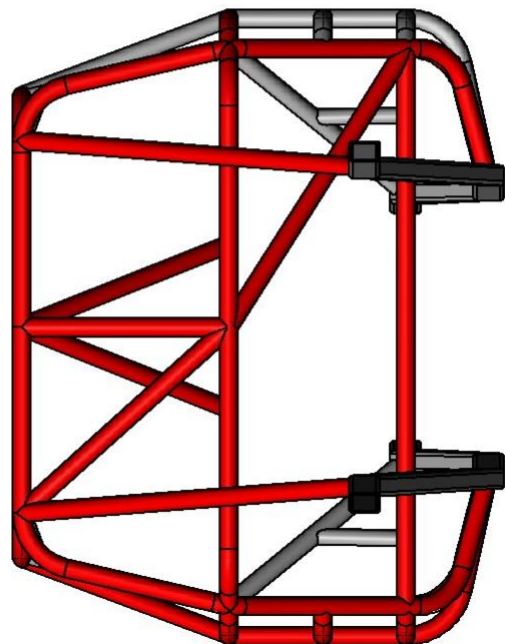
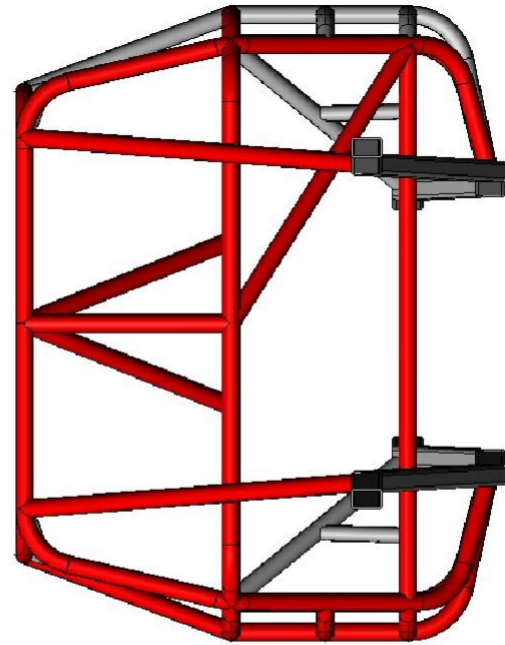
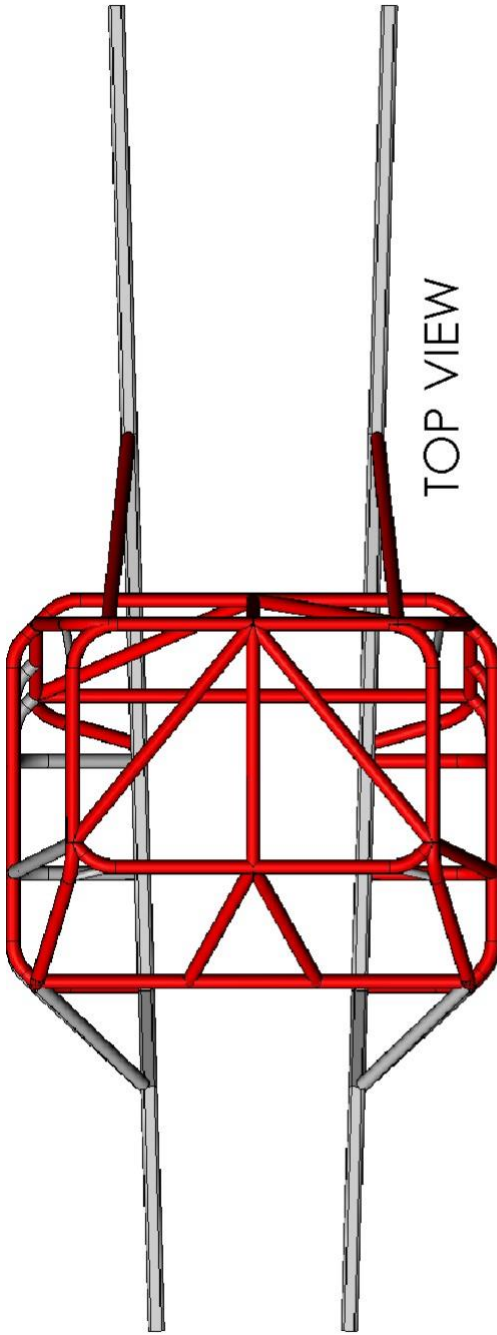


FIG 11

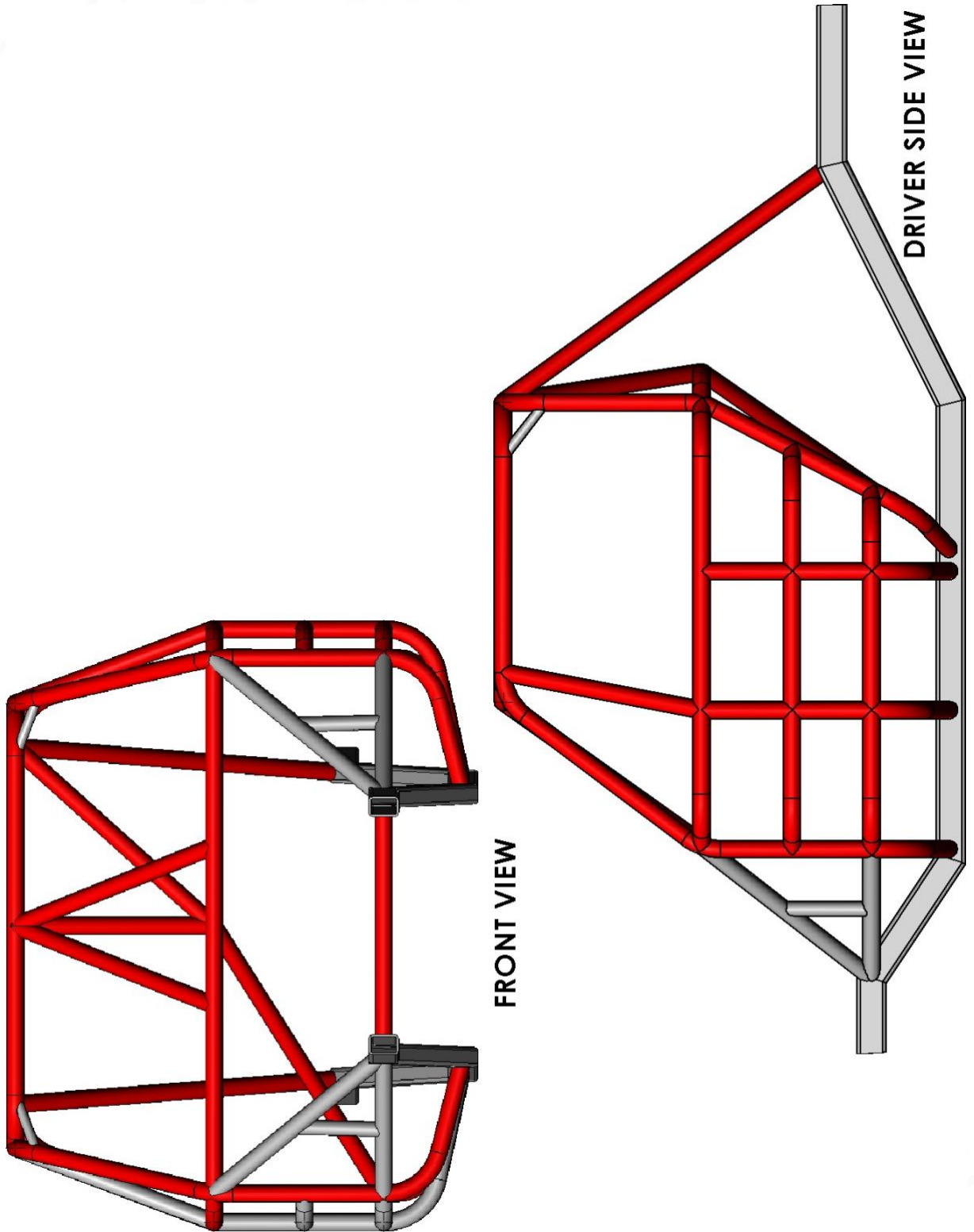
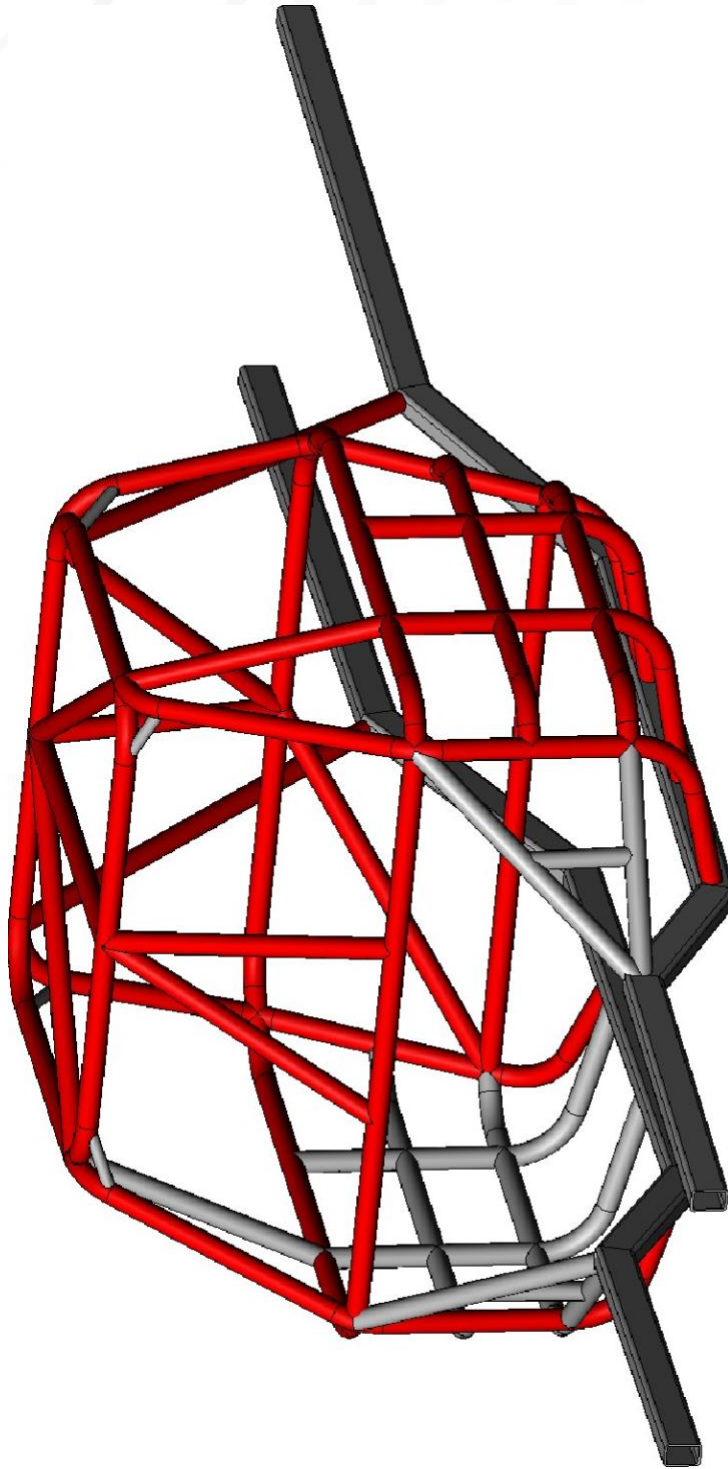


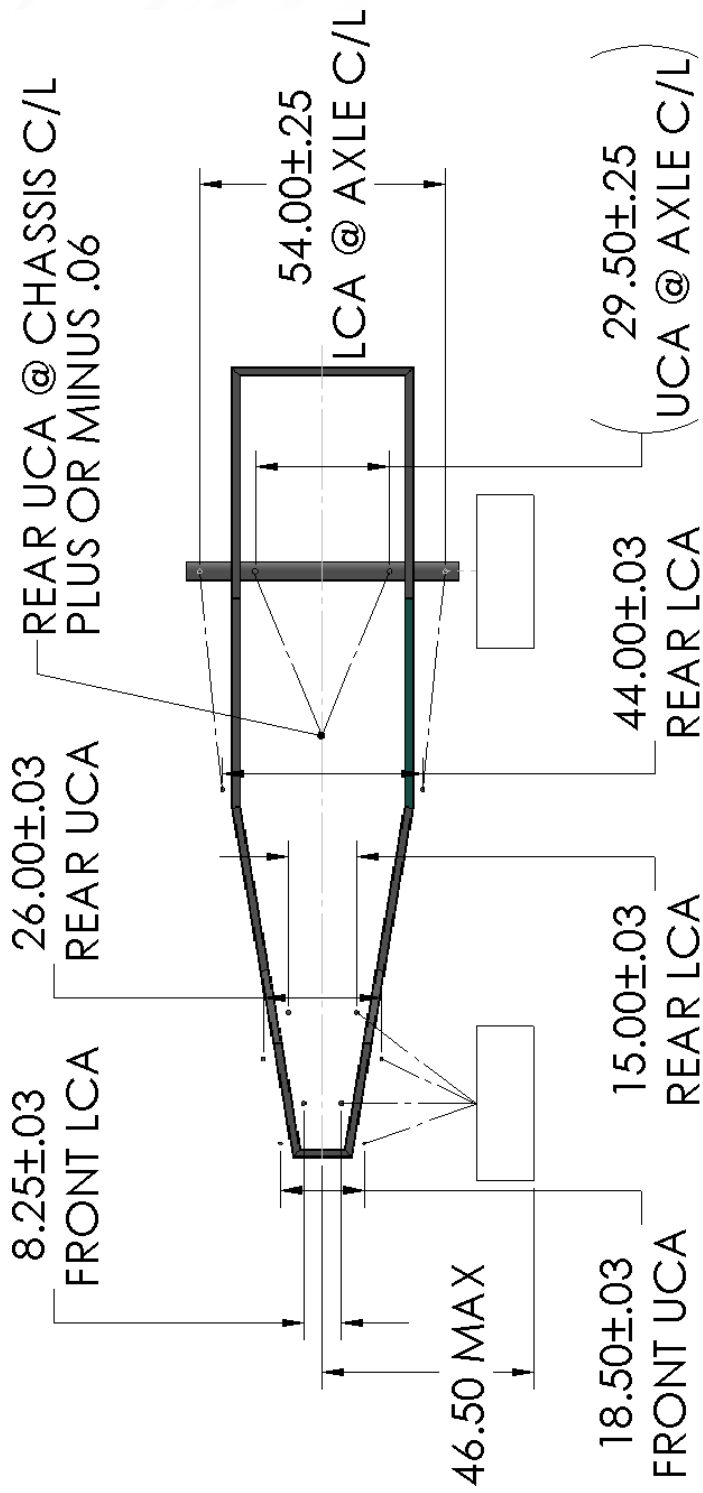
FIG 12



ROLL CAGE CONSTRUCTION:
ALL TUBES IN RED MUST BE LEGAL SIZE AS DEFINED BY MY VEHICLE WEIGHT

FIG 13

PRO 2



ALL MOUNTING POINTS SYMETRICAL TO CHASSIS C/L

FIG 14

PRO 2

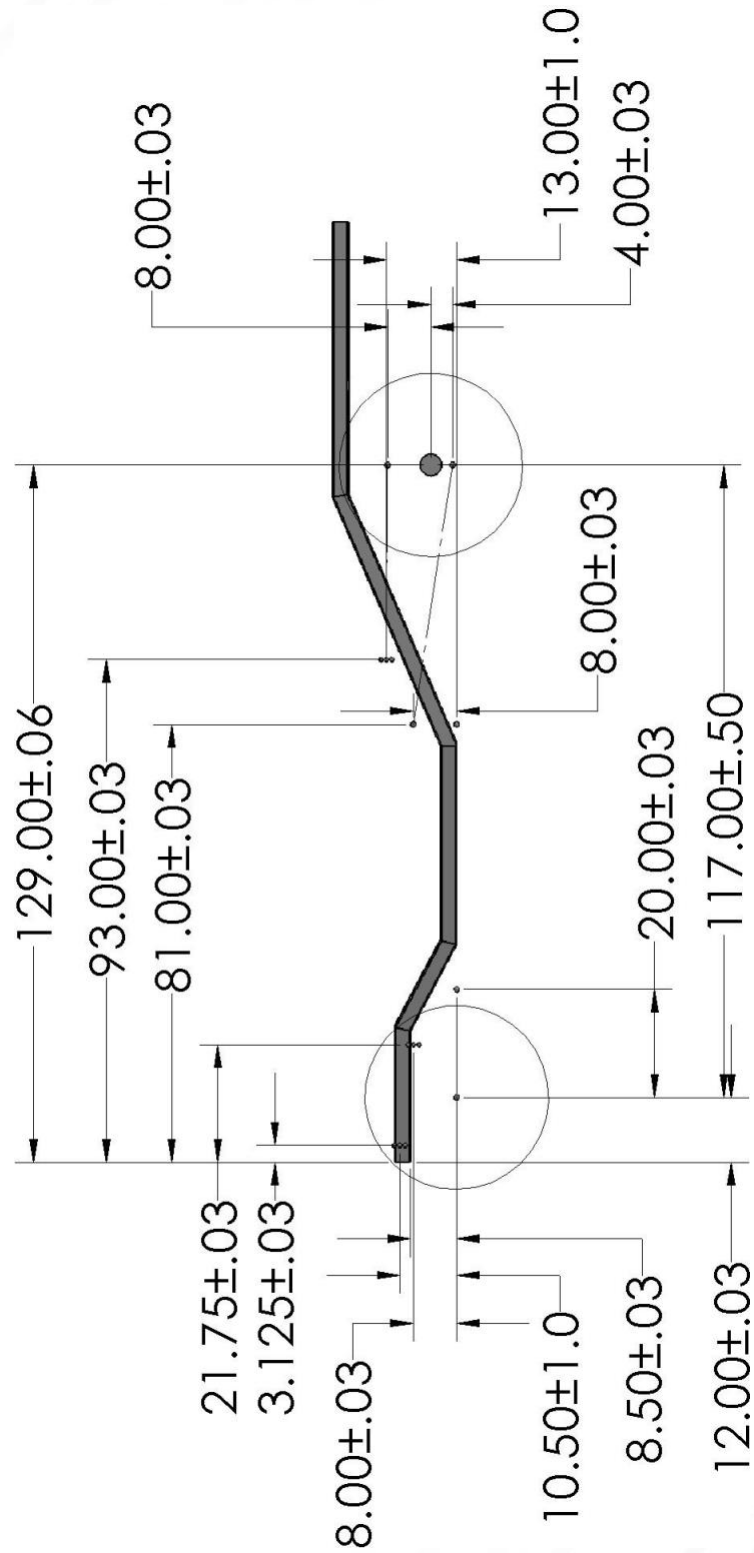


FIG 15

PRO 2

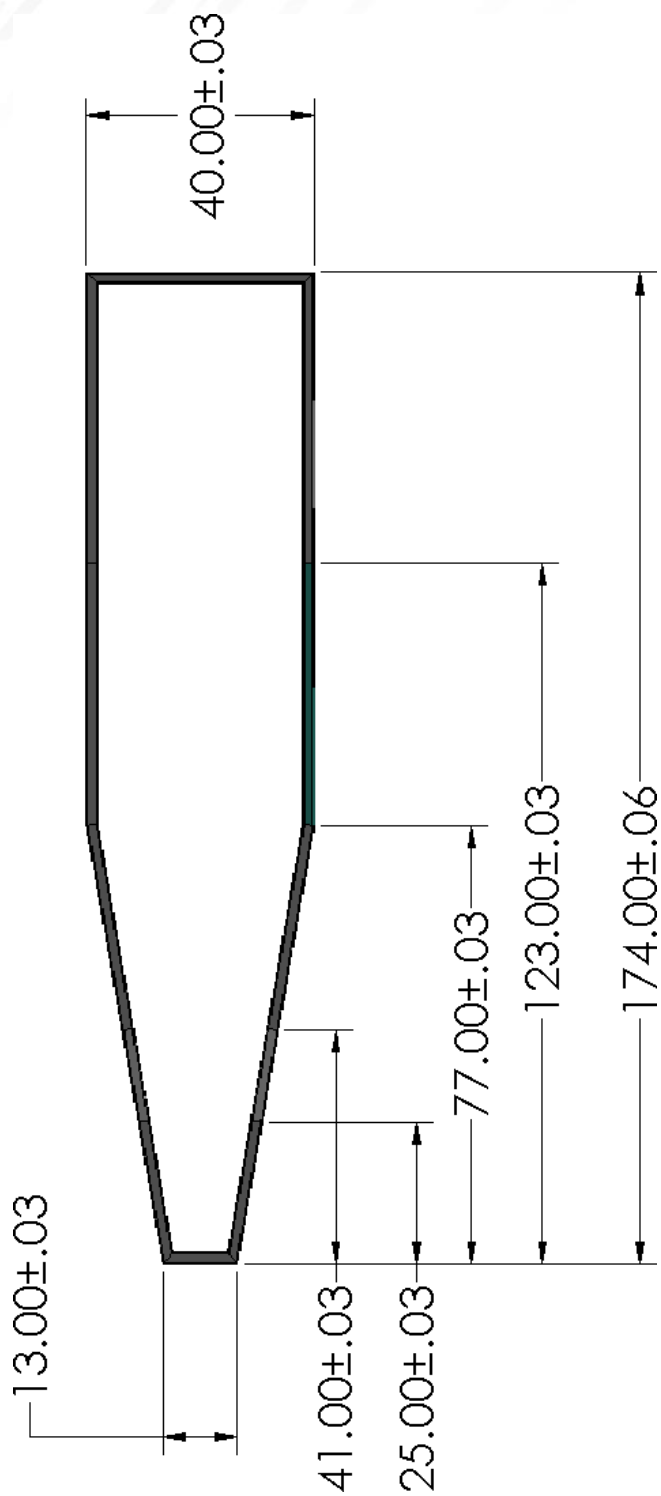
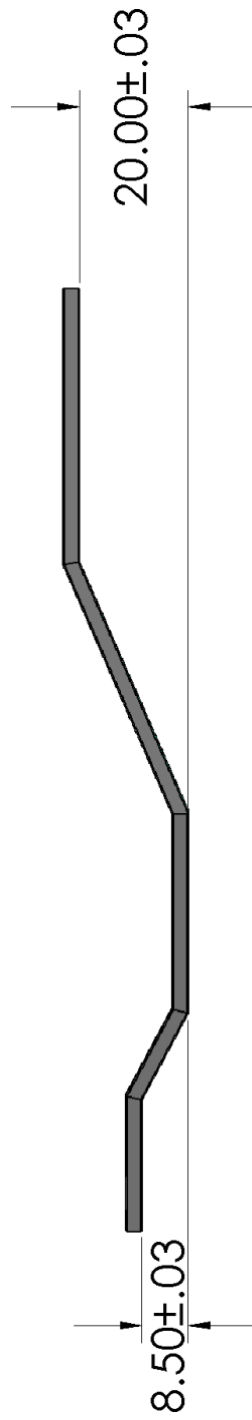


FIG 16

PRO 2





CHAMP OFF-ROAD **PRO4** TRUCK RULES ADDENDUM TO THE GENERAL RULES

PREFACE

"The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all CHAMP OFF-ROAD ("CHAMP OFF-ROAD") events, and, by participation in these events, all CHAMP OFF-ROAD members are deemed to have acknowledged, accepted, and complied with these rules. No express or implied warranty of safety shall result from publications of, or compliance with these rules and/or regulations. The rules are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to participants, spectators, or others."

CHAMP OFF-ROAD rules are the sole property of CHAMP OFF-ROAD. Use of these rules by any other organization or individual is forbidden unless prior written consent is given by the CHAMP OFF-ROAD.

CHAMP OFF-ROAD, its parent, affiliates, members, officers, directors, or staff, assumes no responsibility, legal or otherwise, for failure or malfunction of any products of manufacturers listed in this rulebook. CHAMP OFF-ROAD is NOT liable for actions or decisions made by individuals, promoters, or organizations, etc. using CHAMP OFF-ROAD rules.

Specifications and/or suggested standards contained in this rule book are intended for use as a guide with respect to safety and for no other purpose either expressed or implied. The use of the specifications and/or suggested standards contained herein by any association, organization, manufacturer or individual is entirely voluntary and **CHAMP OFF-ROAD** will NOT accept any responsibility for consequences resulting from the application of said specifications and/or suggested standards.



CHAMP OFF-ROAD **PRO4** TRUCK RULES ADDENDUM TO THE GENERAL RULES

The following rules apply to trucks in the Pro 4 division.

PRO4: Truck built or manufactured as a full size 4-wheel drive type utility vehicle, capable of being driven through front wheels.

– All pro trucks must be a standard manufacturer production model available to the general public in the USA. Vehicle style must have a manufacturer production of at least 5,000.

– All makes and models must be approved by CHAMP OFF-ROAD.

PTR-1 MARKING AND IDENTIFICATION

- A. All vehicle numbering is subject to approval and is assigned by CHAMP OFF-ROAD.
- B. Single digit numbers can only be used in truck classes. Division ID must be indicated in lower right-hand corner of number area using 1 1/2-inch minimum numbers and letters.
- C. CHAMP OFF-ROAD officials may require a competitor to use a different number to avoid confusion or duplication at an event.
- D. In the event that a vehicle number is not visible from the timing and scoring area, the competitor will not be scored. It is the competitor's responsibility to make sure that the number is visible during all race conditions.
- E. Advertising on race vehicles must be in good taste.
- F. Foil or reflective numbers are not permitted.
- G. All CHAMP OFF-ROAD vehicles are required to have CHAMP OFF-ROAD stickers on each side of the front of the door area, 4 inches down from the window opening.
- H. CHAMP OFF-ROAD may require the use of specific sponsor decals.
- I. Team vehicles with the same paint and colors must have distinguishing markings of some kind.

PTR-2 NUMBERS

- A. Numbers are 1-99 for each truck class.
- B. All numbers must be block style only.
- C. Numbers must be side by side. No outlines, stacking or shadows allowed. Italic slant of 25 degrees or less is allowed.
- D. Fonts must be chosen from one the below approved styles only:
 1. Impact
 2. Helvetica Black
 3. Mechanical Bold
- E. Numbers will be located in the following positions:
 1. (1) number plate on each side, front edge of number plate to be 6 inches from back of cab. Bottom edge to be 4 inches above top of bed side. Number plate must be below roof line. (must also include division identification in this area)
 2. Roof of vehicle, as viewed from passenger side
 3. (1) number plate on the back of vehicle facing rear
 4. Driver's side upper left-hand corner of windshield area (must also include division identification in this area)
- F. The side number plate must be white with a minimum size of 17 by 20 inches. Numbers must be solid black with a minimum height of 15 inches.

- G. Roof numbers must be a minimum height of 24 inches.
- H. Rear facing numbers must be on a white number plate measuring 10 inches by 12 inches. Numbers must be solid black with a minimum height of 8 inches.
- I. Windshield number and division must be solid black on a white surface with a minimum height of 4 inches.

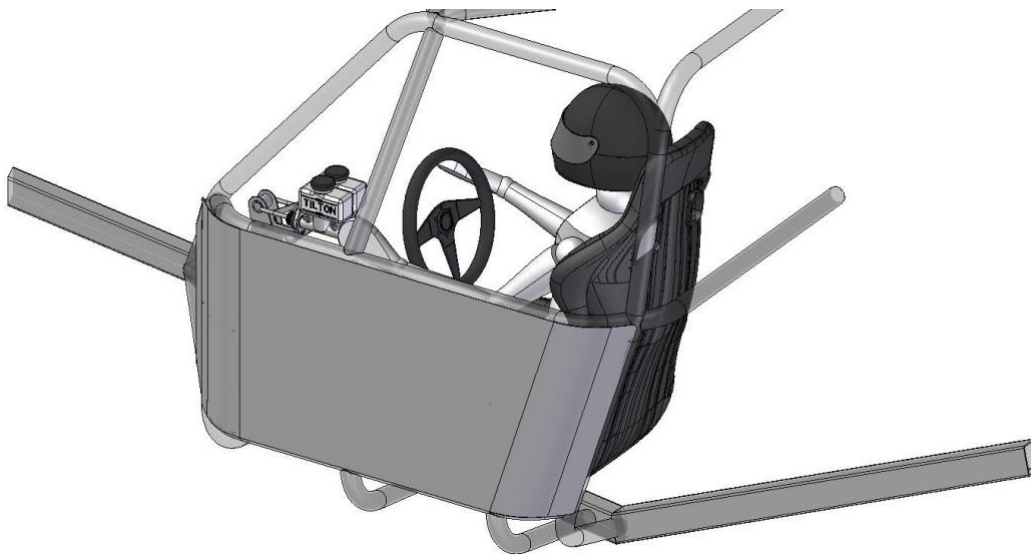
PTR-3 CHASSIS/ROLL CAGE

- A. All trucks must be left side steer only. Steering wheel, seat, and pedals must be in approximate stock location.
- B. All tubing, welds, gussets, and roll cage construction must be approved by CHAMP OFF-ROAD.
- C. Material for roll cage construction must be 4130 chromoly or ASTM 1018/1026 CDS/DOM round tubing (see SR-9).
- D. Minimum tubing diameter and thickness for vehicles weighing:
 - 1. -Up to 3000 pounds – 1 ½ inch diameter by .120
 - 2. -3001 to 5000 pounds – **1 ¾ inch** diameter by .120
 - 3. -Over 5000 pounds – 2-inch diameter by .120
 - 4. **No trucks weighing less than 3000 pounds may run 1 ½ inch tubing diameter.**
- E. All tubes must be welded 360-degrees around the circumference of the tube.
- F. Gussets are required on all intersections in driving compartments within 3 inches of intersection.
- G. All plate gussets must be of the same material and thickness as the roll cage, measuring 3 inches by 3 inches.
- H. Tube gussets and wrap gussets must be a minimum of 1.0 diameter x .065 thick.
- I. All trucks must have 3 horizontal door bars per side. Effective immediately all newly built trucks must incorporate the driver's side extended impact zone bars. See diagram. Existing race vehicles will be required to update to the new driver side extended impact door bars before the 2013 race season. The drivers seating location and head area in relation to the left side window opening and roof area tubing locations and construction will be under review on all trucks to maximize the driver's safety and head protection.
- J. All roll bars that may come in contact with driver must be covered with high density flame proof roll bar padding certified to SFI Spec 45.1 or better.



- K. There must be a minimum of 2 inches of clearance between the driver's helmet and the cage.
- L. Diagonals or similar bracing is mandatory for all truck roof openings as well as front and rear roll bar hoops.
- M. Driver's side door bars must be covered with a minimum of .125-inch steel plate bolted on, using a minimum of 3/8" bolts on 6" centers.
- N. Door plating must completely cover from bottom of main rail to top of door bar and extend a minimum of 4 inches in front of pedals to a minimum of 4 inches behind the seat.

- O. Under driver Floor Plate: .125" thick steel or .250" 6061-T6 aluminum plate bolted every six (6) inches with 3/8 bolts. Plate must cover entire floor opening from front fire wall to back firewall side tube to side tube of driver's compartment. Plate must extend to centerline of all floor tubes. Mounting tabs must be made of .090 thick steel.
- P. Seat back plate: .125" thick steel or .250" 6061-T6 aluminum plate 12 inches wide must be centered on seat back. Plate must start at centerline of shoulder harness tube and extend to drivers compartment floor. Plate must be located inside the vehicle, between the seat and the rear firewall. Plate maybe me welded in (stitch welded one inch every six inches) or bolted in place. Vehicles using metal tube frame seats may attach plate to seat. Plate must be spaced away from seat 1.5 inches if attached to seat.



- Q. Top roll cage minimum width shall be 43 inches from outside of bar to outside of bar.
- R. Elbow bar shall be a 60-inch minimum from outside of bar to outside of bar.

PTR-4 EXOTIC MATERIALS

- A. No titanium or any other exotic materials or fasteners may be used anywhere in the vehicle with the exception of the engine components.

PTR-5 MEASUREMENTS

- A. Trucks may be measured as they enter and or leave the racetrack and must comply with measurements at alltimes. Common sense will be used for any trucks coming off the track with heavy obvious damage at the discretion of the Technical Director.
- B. All measurements will be performed with CHAMP OFF-ROAD technical instruments or gauges.
- C. Wheelbase will be measured on one side from center of the front wheel to the center of the rear wheel on the same side. Maximum allowable tolerance cannot exceed ½ inch plus or minus on the other side.
- D. Front wheel travel is measured on a vertical plane from the center point on the end of the spindle. Rear wheel travel is measured on a vertical plane from the center of the rear axle.
- E. All wheel travel measurements will be from stop to stop with spring removed.
- F. Track width measurement will be taken at the widest outer surface of the tire. Gauge must



- pass freely all the way to the ground.
- G. CHAMP OFF-ROAD officials determine all measurements and center points.
 - H. Maximum track width is 93 inches.
 - I. Minimum wheelbase is 113 inches and maximum wheelbase is 122 inches.

PTR-6 RIDE HEIGHT

- A. Truck must race at a minimum 10-inch ride height. This will be measured at the lowest point from front firewall bulkhead to rear firewall bulkhead. This includes belly pan bolt heads and any other items that may be under the chassis or belly pan.
- B. Trucks may be measured for proper ride height before and after competition.

PTR-7 BODY

- A. All trucks must have complete bodies, cabs, hoods, doors, fenders, grills, and roofs in top quality condition, in standard location. All body lines must meet CHAMP OFF-ROAD approval.
- B. Complete bodies must be attached at start of competition, practice, or any on track activities. Bodies must be attached in such a fashion as not to create a pointed or sharp extrusion when panels are removed. A rounded loop body mounting bracket construction is mandatory.
- C. All body and fender shapes and configurations must be approved by CHAMP OFF-ROAD.
- D. All body components must be installed in their standard location, plus or minus 1 inch, as referenced by a production model truck.
- E. Additions to the body or the race vehicle, such as fins, scoops, wings, and other extruding additions will not be permitted.
- F. The addition of front air dams under grill is restricted to be no taller than 9" from the bottom of the grill. Air dam must also be a minimum of 12" from the ground at ride height.
- G. The interior of the race vehicle must be completely enclosed by metal with a minimum thickness of .040 from front to rear. This includes both front and rear fire walls.
- H. Vehicles must be equipped with a complete set of CHAMP OFF-ROAD approved bumpers.
- I. Roof line, rocker panels, and top of bed side must be parallel to horizontal frame members.
- J. Body hangers **MUST** be constructed from aluminum flat materials with a minimum thickness of .090". All hangers must have a minimum of 4 bolts attaching the aluminum hanger to the main chassis. Bolts must be evenly spaced. The inner attachment points of the body hanger must have a minimum span of 12 inches. Bolts must be a minimum of ¼" diameter. All parts must not have any sharp corners or dangerous edges. All hangers must be rounded. All parts must be approved by the Tech Director.
- K. Bed sides must be full length including the tail light wrap around.
- L. Bed sides must have a minimum of four ¼ inch minimum bolts or Dzus buttons evenly spaced at front of bedside and four ¼ inch minimum bolts or Dzus buttons evenly spaced at rear of bedside. Bolts or Dzus buttons must have 2 inch washers and be aligned in a vertical fashion. Forward bed side hangers must be independent of cab. See diagram on FIG 3.
- M. Door panels must retain all factory-molded contours and accent lines and be fastened with Dzus buttons or hex head bolts only. Cab and bed side mounting must be independent of each other.
- N. Driver's compartment of CHAMP OFF-ROAD must be a minimum of 1/8 inch for all classes. Floor must extend from 4 inches in front of pedals to 4 inches behind seat.
- O. Mud flaps are required and must extend from 6 inches above center line of rear axle to 3 inches from ground at ride height. See diagram on FIG 7
 - 1. Flaps must be 14 inches wide and made from hard plastic polymer or equivalent with a minimum thickness of ¼ inch.



2. No mounting with zip ties or chains.
 3. Must be captured between two ½ inch by 1-inch metal plates and mounted to resist folding back.
 4. Each flap must be installed with a minimum of five ¼ inch bolts.
 5. Must be centered on tire.
- P. Roof must be properly attached to the roll cage of the truck and be fastened with Dzus buttons or 5/16-inch hex head bolts only. Bolts must be hex head only for use with a 6 point, ½ inch socket or wrench, with clear access for removal from the top of vehicle. All nuts must be fixed in place underneath to the roll cage mounting tabs either by welding, use of captive nut plates or clip-on threaded nuts.
- Q. Aluminum or steel sheeting (minimum thickness of ¼ inch aluminum or 1/8-inch steel) must completely cover the top left of the roll cage above driver's head from the front to the rear of the roll bar tube. Right hand side must be sheeted with minimum .060 thick aluminum securely fastened (i.e. bolts or Dzus fasteners)
1. Sheeting must be firmly attached to the cage and extend ½ inch past the center line of tubes in all four directions.
 2. Sheeting must be installed with a minimum of 6 evenly spaced 5/16-inch bolts, not protruding toward the driver. Bolts must be hex head only for use with a 6 point, ½ inch socket or wrench, with clear access for removal from the top of vehicle when bodywork is removed. All nuts must be fixed in place underneath to the roll cage mounting tabs either by welding, use of captive nut plates or clip-on threaded nuts. No use of Riv-nuts or press in Captive nuts permitted unless they are welded in place. Bolts should be lubricated for easy removal. Use of Lock-tite should be avoided.
 3. Mounting tabs must be at least .095 thick.
- R. The hood must be locked down with 4 hood pins or 4 bolts with 2-inch washers evenly spaced across the front of the hood. The rear of the hood should be fastened securely to retain body integrity with bolts, hood pins, etc. Must be approved by CHAMP OFF-ROAD official.
- S. The maximum body width is 80 inches as measured between the A-pillars.
- T. Fenders may be flared to the outside of the tire.

PTR-8 BUMPERS

- A. Race vehicles must have front and rear bumpers. CHAMP OFF-ROAD officials must approve all bumpers.
- B. Front bumper must be 1 inch in front of and cannot extend more than 12 inches beyond grill. Bumper can be no wider than the inner sidewall of the front tire when straight.
- C. Rear bumper must have a minimum of 6 inches between bumper and fuel cell and may not extend more than 1 inch beyond the outside front to rear tire line.
- D. Bumpers must be constructed of tubing with a minimum of 1.5-inch diameter by .095.
- E. Any bumper brackets must be a minimum of .095.
- F. Rear bumper must be 1 inch behind bed side as measured in a straight line between the rear of stock production length bedsides.
- G. Nerf bars may not extend more than 2 inches beyond the outside front to rear tire line.
- H. Nerf bars and bumpers must be rounded.
- I. All rookie drivers must have the rear bumper painted or taped yellow.
- J. Minimum front and rear bumper width is 36 inches.

PTR-9 SUSPENSION



- A. All four corners must be coil over suspension.
- B. No suspension or sway bar adjustment of any kind is allowed when vehicle is moving. This includes but is not limited to hydraulic, electric, mechanical, and manual adjustment.
- C. Front wheel travel limit is 18 inches maximum.
- D. Rear wheel travel limit is 20 inches maximum.

PTR-10 STEERING COMPONENTS

- A. CHAMP OFF-ROAD officials must approve universal joints in steering shaft.
- B. Hydraulic power steering is permitted.
- C. Steering wheel quick release metal coupling is mandatory and must be approved by CHAMP OFF-ROAD officials.
- D. All race vehicles are required to have a steering wheel pad.

PTR-11 SHOCKS

- A. CHAMP OFF-ROAD officials must approve all shocks.
- B. All trucks must have at least one working shock on each wheel and a maximum of 2 shocks per corner.
- C. Shocks may have external bypass tubes and reservoir cans.
- D. External bypass is allowed on 1 shock per corner.
- E. Shocks cannot be adjusted while truck is in motion.
- F. Heating or cooling liquids or chemicals in shock is not permitted.
- G. Shocks cannot be linked together in any way. This includes but is not limited to hydraulic, electric, manual, or mechanical links.
- H. No linkage mounted shocks.
- I. Determination of air shock usage will be done in the following manner: Truck will be presented to CHAMP OFF-ROAD officials on level ground at existing ride height. Truck height will be measured from a given point on the chassis and all canisters will be purged of air, nitrogen, or other charged support. If truck droops more than 1 ½ inches, the truck will be illegal.
- J. Bump stops will be allowed on the front and rear.
- K. 1 spring stack is allowed per corner with a maximum of 3 springs on 1 shock.

PTR-12 BRAKES & BRAKE COOLING

- A. Brakes must be operational on all four wheels at all times. All brake operation must be CHAMP OFF-ROAD approved.
- B. Only disc brakes with steel (magnetic) rotors using standard metal mounting hats are permitted.
- C. Electronic wheel speed sensors or brake actuators will not be permitted.
- D. Brake pressure sensors are allowed.

PTR-13 WEIGHT

- A. Driver will be included in race vehicle's minimum weight seated in the driving position with drivers back contacting back of seat.
- B. Vehicles can be courtesy weighed prior to competition.
- C. CHAMP OFF-ROAD officials must approve all weight material.
- D. Added weight must be in block form.
- E. Blocks must weigh no less than 5 pounds each and cannot be made of liquid of any type, pellets, or other granulated weight.
- F. Added weight must be securely bolted in place on the race vehicle on a primary chassis component / tube(s).
- G. Dislodged weight cannot be returned to the vehicle for weighing at the end of the race.
- H. All block ballast must be painted white and identified with vehicle number.
- I. Weight can be sealed at the discretion of CHAMP OFF-ROAD officials.
- J. No weight shifting devices of any kind are allowed. This includes but is not limited to hydraulic or



electronic devices.

- K. All vehicles will weigh in before and/or after competition at the discretion of CHAMP OFF-ROAD officials. Failure to do so will result in disqualification.
- L. All vehicles must meet minimum weight and front percentage both pre and post-race.
- M. All weight lost on track will result in a \$5.00 per pound fine.
- N. Trucks must weigh a minimum of 4000 pounds.
- O. Minimum front axle weight is 48% of total truck weight.
- P. Truck weight is set according to the following formula:
 - 1. 2 valves per cylinder must weigh 10 pounds per cubic inch.
 - 2. 3 or more valves per cylinder must weigh 11.5 pounds per cubic inch.

PTR-14 ENGINE BLOCK

- A. Cubic inch of race vehicle motor must be declared at time of inspection.
- B. Engines are subject to inspection by CHAMP OFF-ROAD officials at any time.
- C. CHAMP OFF-ROAD officials' method of measuring the weight to displacement ratio is the only valid method of cubic inch P & G testing.
- D. At CHAMP OFF-ROAD officials' discretion, engines will be prepared for mechanical cubic inch certification and measurement.
- E. Engine block must be of OEM design and made from steel or aluminum.
- F. Block must be available to the general public.
- G. No more than 8 cylinders are allowed.
- H. Engine builder must seal head to block, and present to tech a statement declaring bore and stroke. CHAMP OFF-ROAD Tech Director will provide the format for statement declaration sheets to be used

PTR-15 ENGINE HEADS

- A. Any engine head may be used

PTR-16 ENGINE OILING SYSTEM

- A. Any oiling system may be used.

PTR-17 IGNITION SYSTEMS

- A. All ignition systems must be approved by CHAMP OFF-ROAD.

PTR-18 ELECTRICAL ACCESSORIES

- A. At the request of television, certain vehicles may compete with telemetry systems, as so installed by the series production television network requesting such information.
- B. All carbureted trucks:
 - 1. Vehicle digital dashes, data recording devices and/or any other form of measurement, sensors or recording of any kind or nature is permitted only for the following:
 - a. Engine Related items - engine RPM, water temperature, engine oil temperature, engine oil pressure, fuel pressure, voltage, lambda O2 (Oxygen Sensors), exhaust gas temperature, intake manifold vacuum/pressure (the same sensor may be used in intake or crank case), water pressure, power steering pump pressure, power steering oil temperature



- b. Transmission Related items – transmission fluid / oil temp, Transmission main pump PSI. Sensors may not be directly connected to the transmission and must use a minimum of 12-inch soft line type hose to eliminate any direct connection to the transmission of any wiring. Electronic gear indicators for manual transmissions only in Pro 4 may be connected to the digital dash.
 - c. Shift spark interrupters may be wired to shifter and / or transmission shift drum when using manual transmission
 - d. Other Drive Train Related Items – Transfer case oil temperature, Transfer case oil pressure, gear oil temperature, brake pressure sensors. Sensors may not be directly connected to the transfer case or gear case and must use a minimum of 12-inch soft line type hose to eliminate any direct connection to the transfer case or gear case of any wiring.
 - e. No other sensors, measurement, GPS, track mapping, lap timing device or recording device of any kind is permitted at any time during the entire CHAMP OFF-ROAD event weekend.
- c. All CHAMP OFF-ROAD **PRO 4** MoTec Fuel Injected trucks:
- 1. Vehicle digital dashes, data recording devices and/or any other form of measurement, sensors or recording of any kind or nature is permitted only for the following:
 - a. Engine Related items - engine RPM, water temperature, engine oil temperature, engine oil pressure, fuel pressure, voltage, lambda O2 (Oxygen Sensors), exhaust gas temperature, intake manifold vacuum/pressure (the same sensor may be used in intake or crank case), water pressure, power steering pump pressure, power steering oil temperature
 - b. Transmission Related items – transmission fluid / oil temp, Transmission main pump PSI. Sensors, Electronic gear indicators for manual transmissions may connect to main dash.
 - c. Shift spark interrupters may be wired to shifter and / or transmission shift drum when using manual transmission
 - d. Other Drive Train Related Items – Transfer case oil temperature, Transfer case oil pressure, gear oil temperature, brake pressure sensors.
 - e. other sensors are permitted, accelerometers, GPS, lap timing device or recording device of any kind is permitted (except those listed as restricted for traction control below in letter F. Any sensors listed in letter F will not be allowed.).
 - D. Any configuration of data measurement or recording must be completely open and available for CHAMP OFF-ROAD inspection at any time during a CHAMP OFF-ROAD event weekend. All stored Data must be cleared before the start of competition; this will include any practice or qualifying data. If data is stored on a removable chip (i.e. RacePack style) the chip must be installed and sealed by CHAMP OFF-ROAD prior to entering the track. A “lack” of data or no data may result in a penalty including disqualification.
 - E. The following Digital dash units are permitted
 - 1. Motec – any model
 - 2. RacePack – any model
 - 3. AIM – any model
 - 4. Life-any model
 - 5. All other Digital dashes subject to CHAMP OFF-ROAD approval.
 - F. No traction control devices allowed.
 - G. No wireless devices in or on the vehicle are permitted.
 - H. No data transfer is allowed to or from vehicle when in motion.



- I. CHAMP OFF-ROAD OEM Platform Engine specific
 1. Only CHAMP OFF-ROAD mandated sensors may be used as issued.
 2. No modifications to any wire loom or sensors is permitted for any reason.

PTR-19 ENGINE & RACE VEHICLE ELECTRICAL SYSTEMS

- A. All ignition systems must be approved by CHAMP OFF-ROAD.
- B. No computerized systems are permitted unless CHAMP OFF-ROAD approved.
- C. Any make or brand of spark plug may be used.
- D. All vehicles must have a working alternator/generator system.
- E. All vehicles must have a self-starter in working condition and must be capable of starting on their own power.
- F. All electrical switches must be located on the dash panel.
- G. All vehicles must have a master on/off switch wired to the battery in a manner that will cut off all electrical power and the engine.
- H. Master switch must be labeled as such, have a red circle around it, be located on the left-hand side rear of, and must be accessible from the outside of the race vehicle. Switch centerline must be 8 inches inside frame, 10 inches forward of frame rear. Switch must turn counterclockwise for off. Red circle must be at least 1 inch wide.

PTR-20 ENGINE COOLING SYSTEMS

- A. Installation, location, and type of electrical cooling fan must be acceptable to CHAMP OFF-ROAD.
- B. No icing refrigerant chemicals may be used in or near the engine compartment or in any place on the truck.
- C. Electrical engine cooling fans are optional.

PTR-21 ENGINE EXHAUST SYSTEMS

- A. Exhaust mufflers are required on all exhaust systems.
- B. Muffler must meet a maximum decibel of.
 1. A penalty of 1 percent per DB over the maximum allowed level front weight bias will be added for first offense.
 - i. Consecutive events of non-compliance will result in weight penalty doubling with each event.
 - ii. Any competitor that remains out of compliance after 4 consecutive events will not be permitted to compete or may be disqualified
 - iii. DB readings may not grow more than 2 DB from the first readings of any event leading into the last race of the weekend
- C. Exhaust pipes must be attached to headers or manifolds in a secure manner.
- D. Exhaust pipes must extend past driver compartment to the outer edge of the truck and to the rear of the driver.
- E. All exhaust must discharge downward or outward to either side of vehicle.
- F. Exhaust heat shields are permitted.
- G. Exhaust pipes that enter the cab of the truck must have a protective heat shield.

PTR-22 CARBURETOR

- A. No turbo, nitrous, or superchargers permitted.
- B. All carbureted vehicles must use a CHAMP OFF-ROAD approved float bowl vent catch tank system, roll over vent valve, or tube vent line exiting at rear of vehicle behind rear axle to limit fuel leakage or escape when the vehicle is upside down.
- C. 1 four-barrel carburetor permitted.
- D. Or CHAMP OFF-ROAD regulated Fuel Injection system may be used as listed in PTR-25



PTR-23 CARBURETOR RESTRICTOR PLATES

- A. No devices between the carburetor and the intake manifold designed to increase or redirect airflow will be allowed.
- B. Trucks must use open plenum or straight bore design spacer with standard design gaskets only.
- C. Restrictor plates maybe added to a carburetor or throttle body at any time CHAMP OFF-ROAD deems it necessary

PTR-24 AIR AND INTAKE CLEANERS

- A. Intake air or filtered air cannot be blended with alcohols, ether, or other oxygenates, nor blended with aniline or its derivatives, nitrous compounds, or any other nitrogen containing compounds.

PTR-25 FUEL INJECTION

ECU

- 1. Must use MoTeC/ CHAMP OFF-ROAD M130 ECU only. ECU must be registered with CHAMP OFF-ROAD Technical department before installed into vehicle. CHAMP OFF-ROAD may change the ECU programming at any time.
- 2. An RJ45/8P8C Ethernet port must be located within easy reach of outside of vehicle to allow connection for technical inspection of ECU.
- 3. Must use a CHAMP OFF-ROAD/MoTeC wiring loom. Loom may not be tampered with or repaired without permission of a CHAMP OFF-ROAD tech official. If any equivalent sensor is used and requires a pig tail adapter it must be inspected and approved by CHAMP OFF-ROAD Tech Director prior to use.
- 4. Only the following sensors or their equivalent will be allowed to connect to ECU:

Engine Management:

Sensor Type	Manufacturer	Part Number
Lambda	MoTeC	M 0258 001
Position – Crankshaft (Mag)	MoTeC	M 6-APX-003 DTM
Position – Camshaft (Hall Effect)	MoTeC	M MHALL 437-DTM – OR - M DHALL 437 - DTM
Position – Throttle	MoTeC	M 518-2846-100K
Pressure – Barometric	MoTeC	M 16-6835
Pressure – Engine Coolant	MoTeC	M APT-G2-DTM-150G
Pressure – Engine Oil	MoTeC	M APT-G2-DTM-150G



Pressure – Fuel	MoTeC	M APT-G2-DTM-150G
Pressure – Manifold	MoTeC	M 16-9886
Temperature – Engine	MoTeC	M 25-2197D
Temperature – Engine Oil	MoTeC	M 25-2197D
Temperature – Fuel	MoTeC	M 25-2197D
Temperature – Inlet Air	MoTeC	0 280 039 – OR – M 25-7225

ECU

Outputs:

Lambda Sensor 1 Heater
Lambda Sensor 2 Heater
Engine radiator fan-1 Engine
radiator fan-2 Engine oil
cooler fan -1
Fuel Pump (A-B switch on dash)
Tach output

***** CHAMP OFF-ROAD at any time may add or remove sensors and/or outputs.**

INJECTORS

a. Injectors are restricted to M ID 1050.

- b. Only one (1) injector per cylinder is allowed. Injectors must be located in the intake manifold.
- c. Injectors must be perpendicular to throttle body mounting face (plus or minus five (5) degrees).
- d. Injectors must be located on top of the manifold within five (5) inches from edge of manifold that mounts to the head.
- e. Injectors must be mounted in a straight line, parallel to intake port centerlines.

FUEL RAILS

- a. Fuel rails must be constructed of stainless steel or aluminum.
- b. The fuel rail layout may be a one-piece, continuous U-shaped fuel rail or two individual fuel rails. Fuel rail bore must be cylindrical or "D" in shape and internal diameter and shape must be maintained for its entire length.
- c. Each fuel rail must be securely mounted to the intake manifold using a minimum of one positive fastener per end.
- d. Only "fuel in" and "fuel out" lines, injectors, fuel temperature sensor, and fuel pressure sensor maybe attached to fuel rail. No pressure damping devise of any type allowed.

INTAKE MANIFOLD

- a. Must use production cast aluminum intake manifold and be approved by CHAMP OFF-ROAD prior to



- installation.
- b. No sheet metal, fabricated, plastic intake manifolds are allowed.

THROTTLE BODY

- a. Throttle bodies are limited to the following;
 - 1. Braswell 1590, with a maximum venturi bore of 1.595 inches.

THROTTLE BODY MUST REMAIN AS DELIVERED BY THE MANUFACTURER.

- b. Throttle body must have four (4) venturi's. The throttle body venturi is defined as the constricted throat in the main body air passage.
- c. The throttle body venturi's constricted throat must have a maximum diameter of 1.595 (+0.000) inches.
- d. A riser no taller than two (2) inches may be used between throttle body and intake manifold.
- e. Restrictor plates maybe added to a carburetor or throttle body at any time CHAMP OFF-ROAD deems it necessary

Throttle Body Plates (Butterfly Plate assembly)

- a. Must have four (4) round butterflies.
- b. Maximum butterfly bore diameter 1.790 (plus .000) inches.
- c. Butterfly linkage may be progressive or 1:1.

Ignition Coils

Must use one (1) coil per cylinder. Coils must be M Delco 180

Contact and Order Information:

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 F: 704-799-3874
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PTR-26 FUEL CELL

- A. All fuel cells must be CHAMP OFF-ROAD approved.
- B. CHAMP OFF-ROAD will reject any previously approved fuel cell, which appears to be defective, damaged, or not in proper condition.
- C. No pressure systems will be allowed. Any concealed or not concealed pressure type containers, feed lines or actuating mechanisms will not be permitted, even if inoperable.
- D. Icing, Freon type chemicals, or refrigerants may not be used in or near the fuel system.
- E. Electric fuel pumps must have oil pressure shut-off. Loss of oil pressure will automatically shut off fuel pump. A momentary on bypass may be installed. The momentary on by pass may be like a push button, 2-pole starter button, which can be mounted in a position best suited to the driver. The oil pressure-sending unit is either AC Delco part number 25036938, Niehoff part number OP23481, Wells part number PS119 or PS122, Napa part number OP6624 or OP6616, Standard ignition Blue Streak part number PS126 or Niehoff Borg Warner part number OP23311. The sending unit receives power from the ground.
- F. Digital dash or electrical device such as Performance Engineering's Fuel Pump Safety Switch may replace mandated mechanical fuel pressure switch for operation of electric fuel pump, provided operation can be verified by the tech team to only allow power to fuel pump for a maximum of 4 seconds when engine is not running.
- G. No material other than standard foam as provided by the fuel cell manufacturer is permitted.
- H. Rear mounted fuel cell must have a chassis or body cross member of substance between the fuel cell and driver and be protected from ground obstacles.
- I. Fuel cells must be dated by manufacturer. Fuel cells will become obsolete five (5) years after date of manufacture and must be replaced.
- J. All fuel cell fillers and vents must have check valves installed.
- K. Fuel pressure regulator vent line must do one of the following:
 - 3. Connect to intake manifold vacuum.
 - 4. Connect to air cleaner so that any fuel enters engine.
 - 5. Connect to fuel cell.
 - 6. Have vent hose routed past the rear axle.
- L. A splash shield must be in place to direct any spill away from the driver, motor, and motor exhaust. A body panel is considered sufficient splash shield.
- M. Fuel cell cannot be vented into the driver's compartment of any truck.
- N. The fuel cell must be located behind the cab. The fuel cell must have a ½ inch skid plate minimum covering the complete bottom, sides and rear of the cell. All mountings must be CHAMP OFF-ROAD approved. Fuel cell cannot be mounted to skid plate. Cell must be mounted to chassis. See diagram on FIG 1
- O. Fuel cell must have a minimum of two 2 ½ inch steel straps, evenly spaced on top of the cell with a minimum of two 5/16 inch bolts or one 3/8 inch bolt on each end of strap. Fuel cell must also have two 2 ½ inch steel straps or 1 ½ inch tubing underneath cell. Alternative mounting methods may be approved at the discretion of the CHAMP OFF-ROAD Technical Director. See diagram. See FIG - 1
- P. All fuel cells must be housed in a metal can, .060 thick aluminum minimum. Slip over lid must be .090 thick aluminum minimum with 1.0 inch return.

FUEL VENT ROUTING

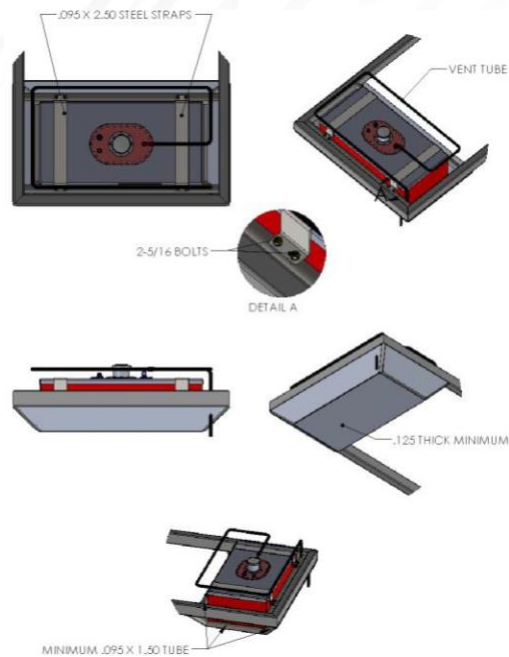


FIG - 1

ALL FUEL CELL LINES AND VENTS MUST COME OUT OF THE TOP OF THE FUEL CELL (PICTURED ABOVE).

PTR-27 FUEL

- A. All cars shall use fuel, as defined in the following graph, unless a specific exemption is made in the provisions for a specific category/class.
 - B. Permitted Fuel: Permitted fuel is herein defined as gasoline meeting specified dielectric constant standards and not contain any prohibited substance in excess of stated limits. Gasoline is a mixture of refined hydrocarbons. Gasoline is an electrical insulator and its relative effectiveness as an insulator is represented by its dielectric constant (D.C.). The D.C. of gasoline will be measured by an CHAMP OFF-ROAD FTK01 Fuel Check Meter. The 0 (zero) calibration of the CHAMP OFF-ROAD Fuel Check Meter is set against reagent or laboratory grade cyclohexane. Gasoline may be tested and certified at CHAMP OFF-ROAD events by the determination of the dielectric constant using the CHAMP OFF-ROAD Fuel Check meter and through the application of various chemical analyses. If a competitor's fuel is not compliant with the fuel standards below, CHAMP OFF-ROAD shall take appropriate action. Penalties for use of non-compliant fuel can include fine, and/or reduction of points, and/or suspension.
 - c. Cooling: The cooling of fuel is not permitted during competition.
- Fuel Samples: CHAMP OFF-ROAD has the right to sample a Competitor's fuel at any time during the Event. Samples will be impounded for observation and or testing by CHAMP OFF-ROAD and/or any

outside laboratories at CHAMP OFF-ROAD discretion.

If the services of an outside laboratory were used and the fuel was found to be non-compliant by the laboratory, the racer will be assessed the cost of the fuel transportation to the laboratory and laboratory fees.

- D. Restricted Substances: The fuel must not be blended with other alcohols, ethers, or oxygenates, and it must not be blended with aniline or its derivatives, nitroparaffins or other nitrogen containing compounds. Nitrous oxide is forbidden.

Fuel Standards		
Classes	Type	DC Max
All Classes Except Karts	Gasoline without added oil	3
Karts	VP MS98L	1.5
The user of any substance in the following table in excess of the stated limit is prohibited either in fuel or otherwise introduced into the engine		
Chemical Compounds Prohibited or Restricted in CHAMP OFF-ROAD Race Fuels		
Compounds	Examples	Maximum Weight or Percentage by Weight Allowed
Total Aldehydes	Acetaldehyde, Acrolein, Formaldehyde	1.00%
Benzene		5.60%
3,3-dimethyl-1-butene		0.05%
Total ethers	1,4 Dioxane, ETBE, Furan, MTBE, Tetrahydrofuran	0.00%
Total Dienes (Diolenes)	1,4 Butadiene, Isoprene	1.00%
Ethanol		0.00%
Total Epoxides	Ethylene oxide, Propylene oxide	0.00%
Total Nitrogen Compounds	Nitromethane, Nitroethane, Nitropropane, and all aromatic nitrogen compounds such as Nitrobenzene, Ammonia, Amines, and their salts, Aniline, Hydrazine, Pyridine, Pyrrole, Benzidine	0.00%

- E. Specified Fuel: CHAMP OFF-ROAD reserves the right to have all cars use the same blend of fuel in a given event or series class. When this right is exercised, it will be stated in the CHAMP OFF-ROAD rule book and/or in other CHAMP OFF-ROAD bulletins. In all such cases, fuel used for practice, qualifying and the race itself must be the specified fuel blend as produced by the manufacturer of the fuel. At an event where a specified fuel has been named, CHAMP OFF-ROAD will use a sample of the actual fuel provided at the event by the specified fuel supplier to determine whether the fuel used by a competitor conforms to the specifications of the specified fuel blend. The addition of chemicals additives or fuels to the specified fuel is strictly forbidden.
- F. If CHAMP OFF-ROAD officials suspects maskers in fuel, chemical testing will be conducted at possible



expense to the competitor.

- G. Penalties for use of hazardous chemicals will be severe including fine, and/or reduction of points, and/or suspension.

PTR-28 OIL COOLERS

- A. All oil coolers and their installation must be approved by CHAMP OFF-ROAD.
- B. Engine and transmission oil to air or oil to water heat exchangers are permitted.
- C. Cooling fans are permitted. No coolers are allowed in the driver's compartment.

PTR-29 CLUTCH

- A. Any number of disks may be used.
- B. Centrifugal or manual clutch activation allowed.

PTR-30 TRANSMISSION

- A. Transmissions must be standard production, catalogued, and available through regular dealer channels.
- B. All forward and reverse gears must be in working order.
- C. Components must be installed in stock order: engine to transmission to differential via a drive shaft. Engine must be located in front of truck.
- D. All transmissions must be approved by CHAMP OFF-ROAD officials.
- E. Motor crankshaft must be connected to transmission input shaft via a conventional clutch assembly or vane type torque converter.
- F. Automatic transmissions must operate through a conventional torque converter.
- G. Manual shifting of all transmissions is mandatory, unless other method is needed to accommodate handicap condition of driver. CHAMP OFF-ROAD officials must approve all non-manual shifting procedures.
- H. Use of any Turbo 400 based automatic transmission must use SFI 4.1 approved case and SFI 30.1 approved bell housing. Will allow stock case with shatter-shield but must be pre-approved from CHAMP OFF-ROAD tech official prior to entering race track.
- I. Auxiliary under drive or over drive units or transferase may be shifted electronically, but only by manually operated switch.
- J. Sequential shift transmissions are allowed.
- K. No paddle shifters, solenoids, wires to transmission other than to shift drum for shift interrupter, bell housing, shifter, or linkage. No interfaces between ECU and transmission will be allowed with the exception of the shift interrupt circuit.
- L. Shift spark interrupter will be allowed. Can be wired to shifter and transmission shift drum.
- M. Temperature gauge will be mechanical on transmission.
- N. No electrical gauges allowed on transmission.

PTR-31 DRIVE PARTS

- A. Engine to transmission adapter plate can be a maximum of 1 ½ inch thick.
- B. A combination of multiple adapter plates can be used if it does not exceed 1 ½ inch thickness.

PTR-32 PROTECTIVE SHIELDS

- A. Location of all shields must be approved by CHAMP OFF-ROAD.
- B. Transmission must be covered completely by a protective shield placed to protect the driver from exploding parts from beginning of transmission case/bell housing to 4 inches before a bolt on tail housing. All shields must be approved by CHAMP OFF-ROAD.
- C. Shields must be constructed of a metal covering with a thickness of ¼ inch aluminum or



1/8 inch steel or be SFI approved.

- D. If you have an SFI 4.1 approved transmission case and SFI 30.1 approved bell housing no shield will be required.

PTR-33 DIP STICKS

- A. All dipsticks must be secured in dipstick tube with a positive locking or secured method.

PTR-34 DRIVE SHAFT

- A. One 360-degree solid steel bracket, no less than 2 inches wide and ¼ inch thick or 1 inch tubing with a minimum thickness of .095 inches must be placed around each drive shaft. Must be located within 4 to 6 inches aft of the centerline of front u-joint.
- B. Drive shaft must be painted white and have vehicle number on it.

PTR-35 REAR AXLE/DIFFERENTIAL

- A. Quick change rear ends are not allowed.
- B. Only steel axles are permitted.
- C. Independent rear suspension is not allowed.
- D. Must be in stock location as approved by CHAMP OFF-ROAD officials.
- E. Rear differential must be spool type only and approved by CHAMP OFF-ROAD officials.
- F. Rear differential must have a minimum of 1 ½ inch inspection bung or plate placed in such a manner that CHAMP OFF-ROAD officials can see and identify the spool. If inspection area does not exist, crew chief will remove differential for CHAMP OFF-ROAD technical inspection.

PTR-36 TIRES

1. Tires must be DOT only.
 - a. DOT tire classes are restricted to tires that are intended for highway use. All tires must be designed, built, and sold for use on passenger car or pickup truck ONLY.
 - b. Tires must be available to the general public through standard dealers or normal internet retail stores. All tires must be listed in dealer communication as available prior to use and must be listed on company web site in the same size and model of tires. Internet only or one store only tires are NOT acceptable. Tires must be able to be purchased by the general public and or CHAMP OFF-ROAD officials before being allowed to be used in any race.
 - c. Tires need to be part of a multiple line of tire sizes within a currently sold design. A minimum of 2 sizes in addition to what is allowed in the class must be offered. A tire used in the race should be identical in construction: rubber compound, durometer, construction, sidewall with identical tread design as other sizes not used in the race (Example – if the tire used is a 35” tire, other tires from the manufacturer in sizes like 31” and 33” will be the same as the tires raced upon).
 - d. The tire must not exceed \$400.00 in cost.
 - e. No studded tires or any hard-inserted items into the tread area of the tire will be permitted for any reason.

2. Maximum tread width is 10.200
3. Maximum tire diameter is 35"
4. Tire circumference may not exceed 110.5".
5. All tires will be measured on a 17" diameter x 9" maximum width race ready wheel with tire pressure at 13 psi.
6. Tires will be measured without load of vehicle, from the widest and highest point, inflated to 13 psi, and mounted on a race ready wheel.
7. Durometer testing will be done and shall not be below 58 points. Tires may be Durometer tested with race ready conditions prior to any competition on the track.
8. Tire soaking is not permitted.
9. **Inner Liners are allowed.**
10. Minimum air pressure on the starting line is 13 psi.
11. Equipment used to adjust air pressure during the race is not allowed.
12. Tires will be measured using calipers as well as a box provided by the CHAMP OFF-ROAD technical staff. See diagram on FIG 8 All tires, to include the spare, must fit through the box at all times when race vehicles are competing on the track to include pre/post qualifying and pre/post-race. This applies to new, used or second-hand tires.
13. Each Tire Manufacturer who wishes to compete in the CHAMP OFF-ROAD series must submit application of "intent to participate" to the Series Director or Competition Director prior to any competitor using that brand of tire. CHAMP OFF-ROAD will have the sole right to approve or deny any application from any Tire Manufacturer. Upon approval of any new to the CHAMP OFF-ROAD Pro 2 class Tire Manufacturer, must complete a Tire Vendor Agreement with CHAMP OFF-ROAD in order to compete in CHAMP OFF-ROAD each year.
14. Each Tire Manufacturer must submit for approval from CHAMP OFF-ROAD up to two D.O.T. Light Truck Productions Tires they wish to use in competition no less than 6 weeks prior to any event they wish to compete with said tire. This notice should be sent by mail and copy by email to the Technical director and is not considered received if no confirmation of receipt is sent by the Technical director of CHAMP OFF-ROAD. The notice must include tire line name, size, load range, part number, and manufacturer's suggested retail sales price. It is the responsibility of the Tire manufacturer to submit the tire use request list before expecting to use any tire make or model or size at any CHAMP OFF-ROAD event. Once any tire make / model / size has been submitted and approved for use the manufacturer may consider that approved for the rest of the race season and is not required to submit again unless a change is made in construction or compound of the tire in question. Any change to construction, compound, or tread design will be considered a "new" tire and must be re-submitted and follow all tire guidelines for the class.
15. CHAMP OFF-ROAD at its sole discretion may purchase tire(s) from a retail outlet of its choosing at any given time to be brought to the track to be used in the inspection process. Any cost associated with CHAMP OFF-ROAD obtaining the required tire(s) for comparison to the tire(s) brought to the track will be billed back to the participating



manufacturer at the same cost incurred by CHAMP OFF-ROAD in the process including any and all testing procedures and lab costs. CHAMP OFF-ROAD officials may at their sole discretion dis-assemble or cut the tire(s) apart for testing purposes as part of the testing process. At the end of the inspection process time the purchased tire(s) will be returned to the Manufacturer by CHAMP OFF-ROAD tech officials.

16. All Pro 4 teams will be restricted as to how many tires may be used at a race event. All tires will be logged and marked at the tech trailer prior to any practice sessions and prior to any truck getting on the track.
 - a. Each truck will be allocated 16 tires per 2 race weekend.
 - b. Each truck will be allocated 10 tires per 1 race weekend.
 - c. All tires will be marked at tech with the appropriate race markings Tech will only mark tires within the first two hours that Tech is opened each day. You may have all allotted tires marked at the beginning of the first practice day or one set at the beginning of each day of practice or qualifying.
 - d. CHAMP OFF-ROAD officials may grant the use of additional tires for that race event if there are safety concerns. If permission is granted, that competitor must start at the rear of the field in all remaining races at that event. If a team is found falsifying information and or circumventing this rule in any way, they will be disqualified.
 - e. When a team is found using tires other than the allocated and marked tires without prior CHAMP OFF-ROAD approval, they will be disqualified from competition and will not be permitted to qualify for the next two races and must start at the rear of the field.

PTR-37 WHEELS

- A. All wheels must be in good repair and free from cracks or defects that could cause wheel failure.
- B. Lug nut must be open ended, and of proper size.
- C. Studs must extend a minimum of 2 full threads past the end of the lugnut.
- D. Wheel studs may be no closer than ½ inch from the outer most face of the bead lock ring opening. Stud ends must be rounded.
- E. All bead locks must have recessed bolts only that do not protrude past the face of the ring.
- F. Foam mud plugs are the only wheel cover allowed. Snap on, clip-on, or bolt on covers will not be permitted.
- G. No race wheel may exceed a 9" width.
- H. Minimum backspacing for all wheels will be 3.75".

PTR-38 RADIOS

- A. Radios must be of two-way voice communication type only. Each race team is responsible for meeting FCC requirements.
- B. Radio communication between drivers is not permitted.
- C. All radio frequencies must be approved and reported to CHAMP OFF-ROAD prior to their use.
- D. All race vehicle radio communication systems must be approved by CHAMP OFF-ROAD.
- E. See Section 5 of CHAMP OFF-ROAD General Rules for spotter requirements.
- F. Spotters are required for all race teams.



- G. Any 2-way radios used at a CHAMP OFF-ROAD event may not exceed 6 watts output.
- H. Each competitor race vehicle must use at all times while on the track an override race receiver to listen to race control that overrides any communication from the spotter when race control is transmitting to the vehicles. The receiver device must be approved by CHAMP OFF-ROAD and meet CHAMP OFF-ROAD standards at all times. Competitors will not be allowed on the track at any time without the race receiver installed and functional.

PTR-39 TRANSPONDERS/TIMING

- A. Remote score timing devices will not be permitted by teams, owners, or anyone associated with an entry, unless approved by CHAMP OFF-ROAD.
- B. All teams are required to purchase remote timing transponders. Transponders can only be purchased through CHAMP OFF-ROAD and numbers must be recorded with CHAMP OFF-ROAD officials.
- C. Drivers are responsible for the charging and installation of all transponders. Any entry without a properly charged, properly installed, functioning transponder may not be scored and may be subject to further penalty.
- D. Transponders must be placed from front face of the front bumper to transponder center line 115 inches back on the driver's side of the truck.

CORNER GUSSETS

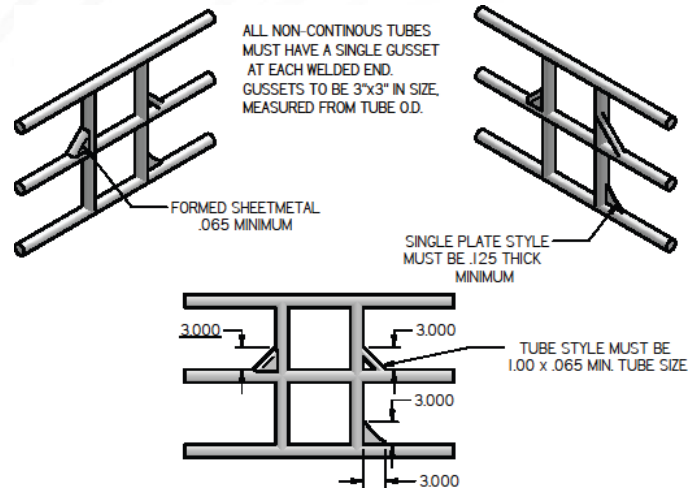


FIG 2

TRUCK BEDSIDE PANEL

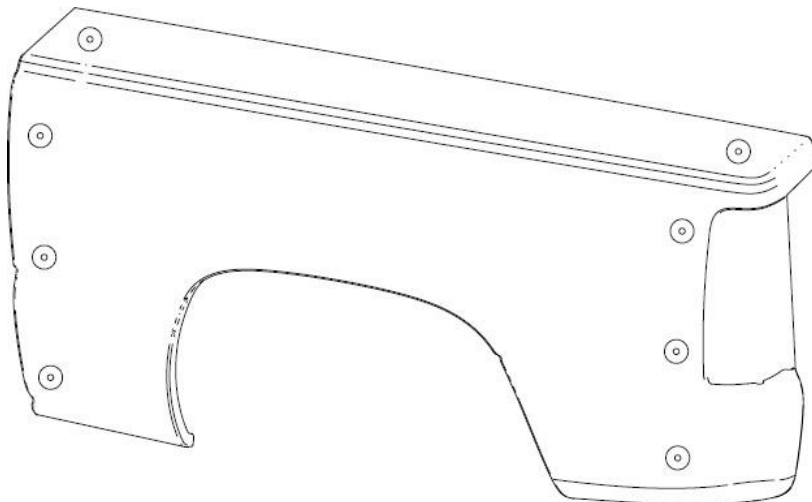


FIG 3

WINDOW NET

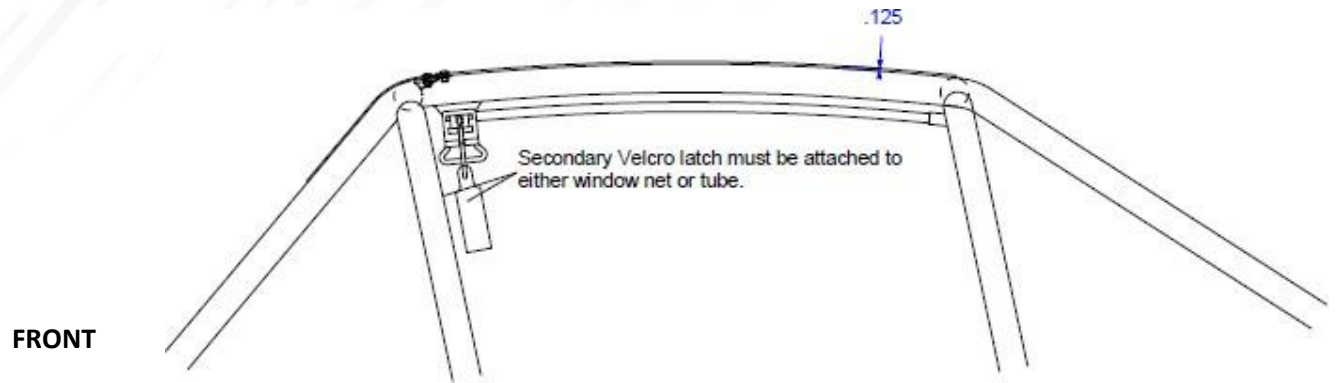
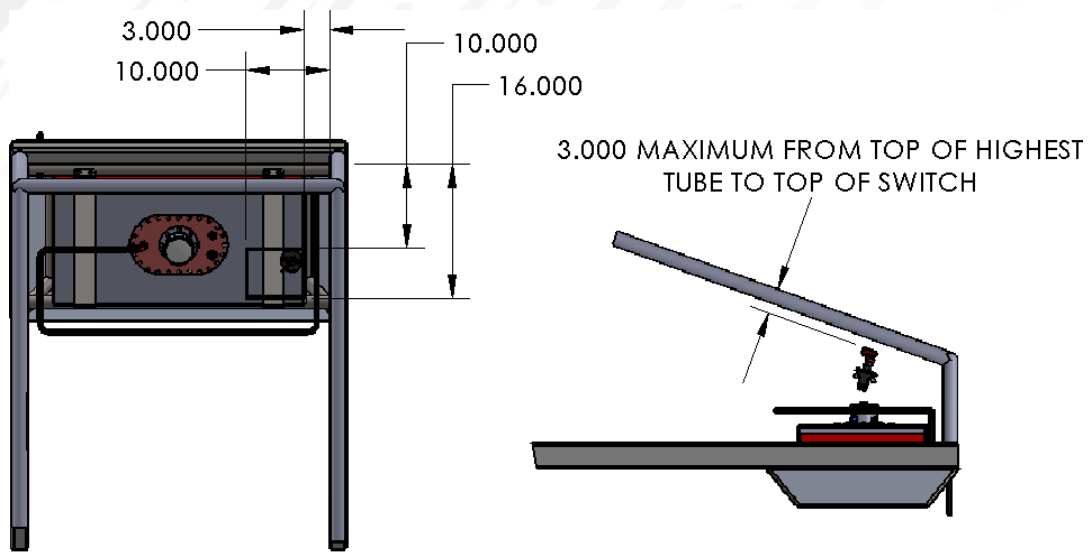


FIG 4



EMERGENCY SHUT OFF SWITCH MUST BE LOCATED AT REAR OF VEHICLE. CENTERLINE OF SWITCH MUST BE WITHIN 3.0-10.0 INCHES IN SIDE OF FRAME LOCATED ON DRIVERS SIDE. SWITCH MUST BE LOCATED WITHIN 10.0-16.0 INCHES OF REAR OF FRAME.

FIG 5

FUEL CELL DIAGRAM

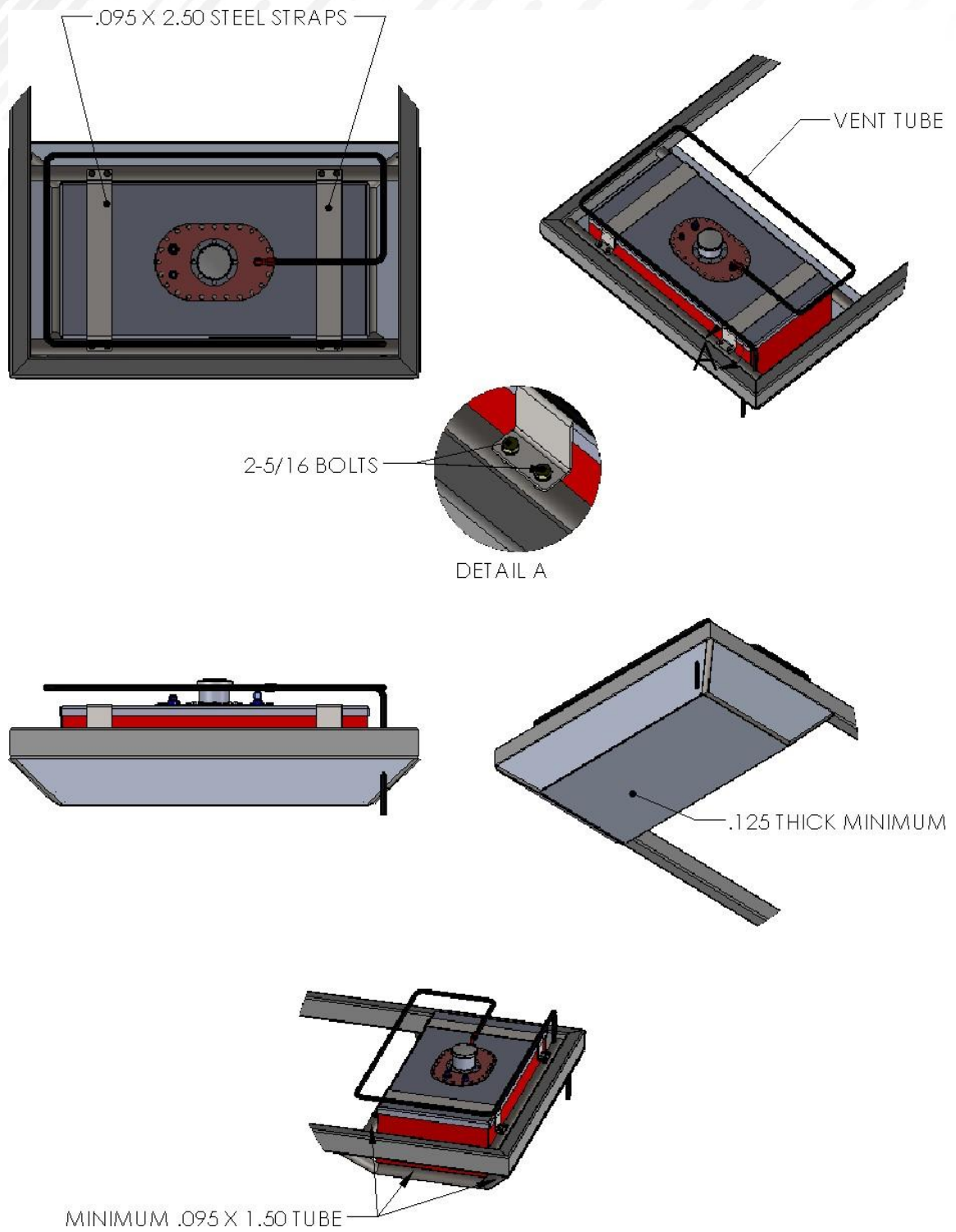


FIG 6

TRUCK MUD FLAPS

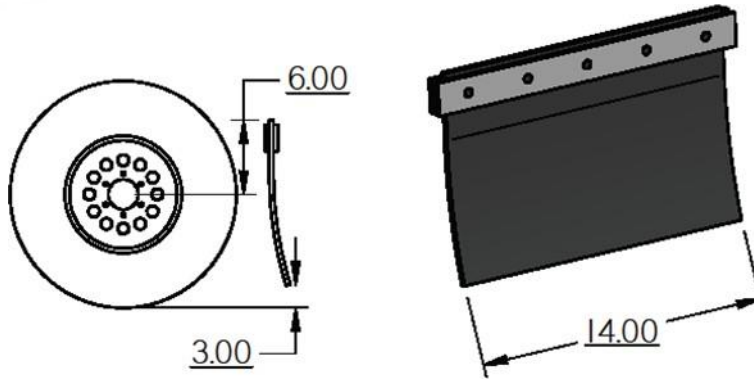


FIG 7

PRO 2/4 TIRE BOX

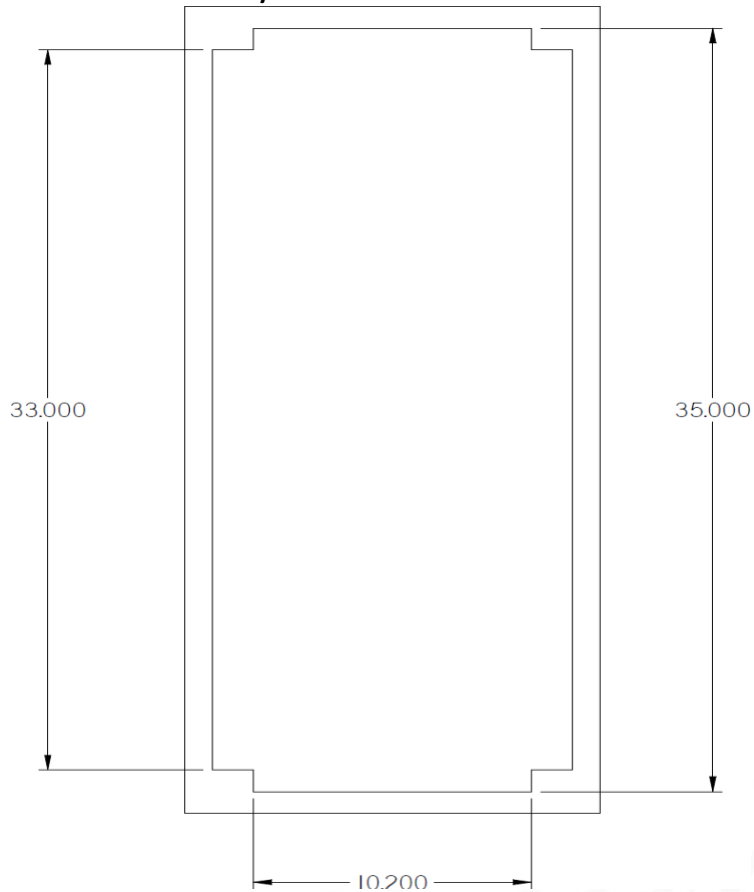


FIG 8

FIG 9

ROLL CAGE CONSTRUCTION

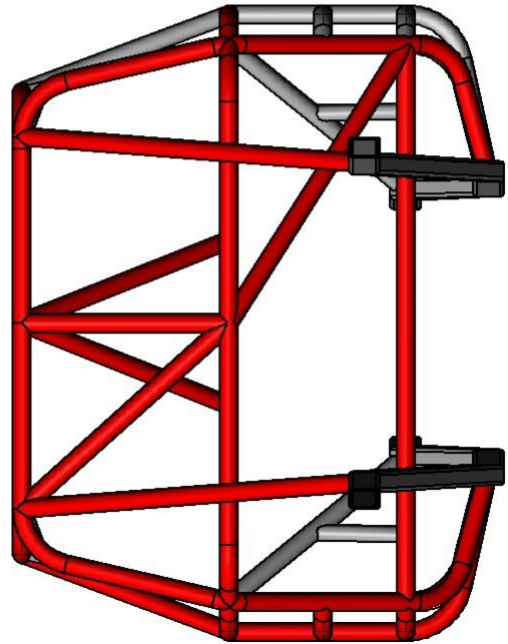
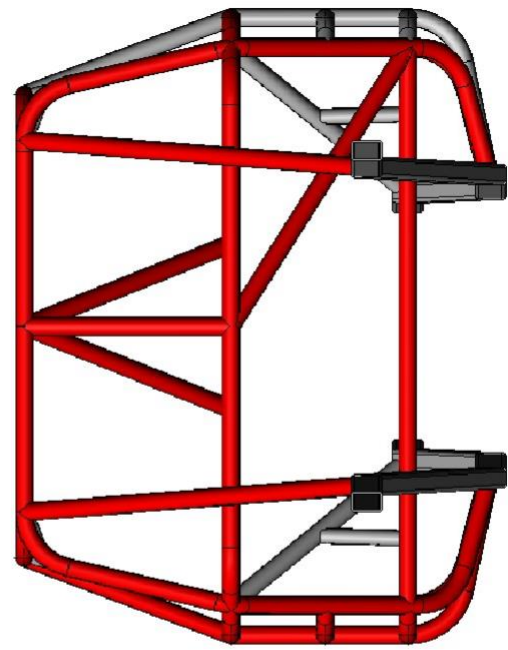
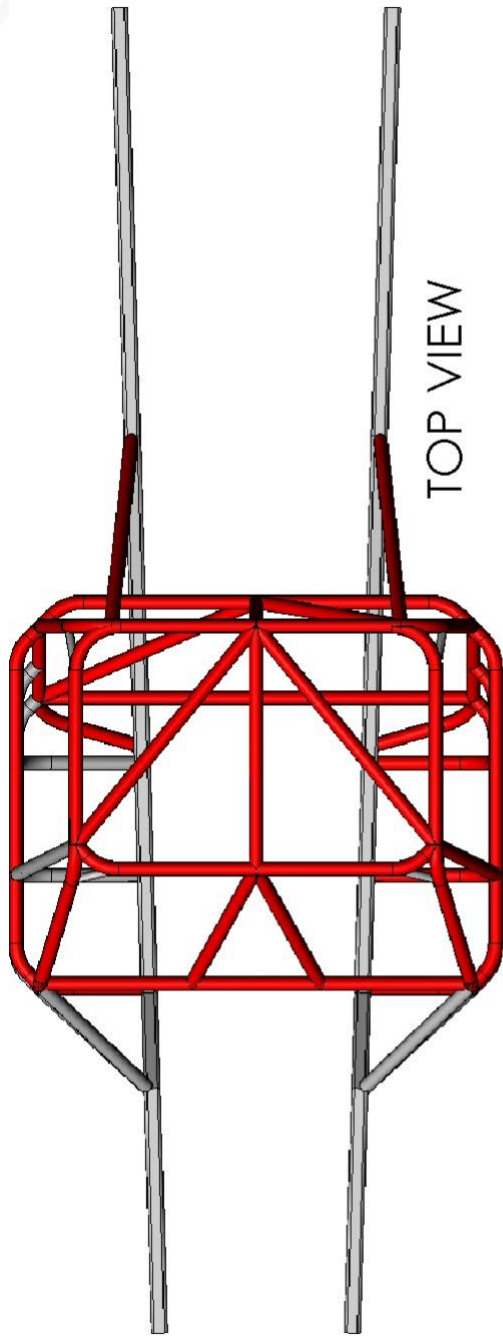
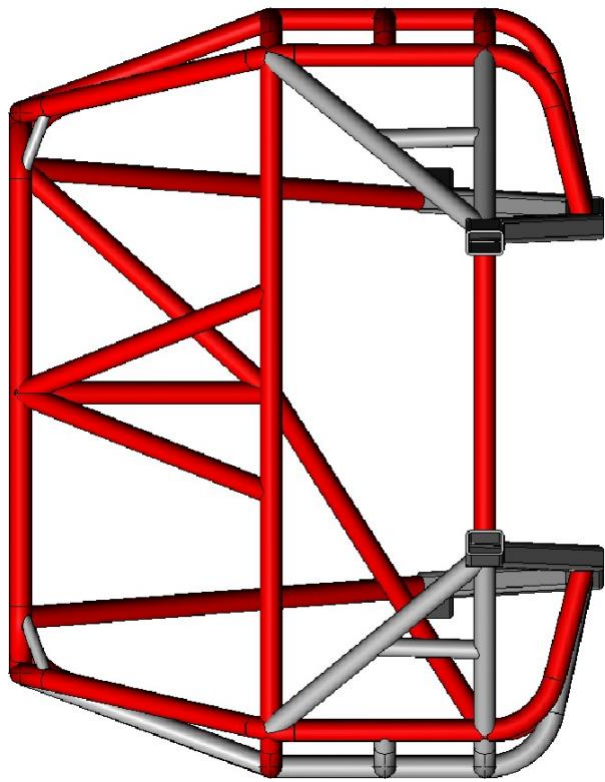
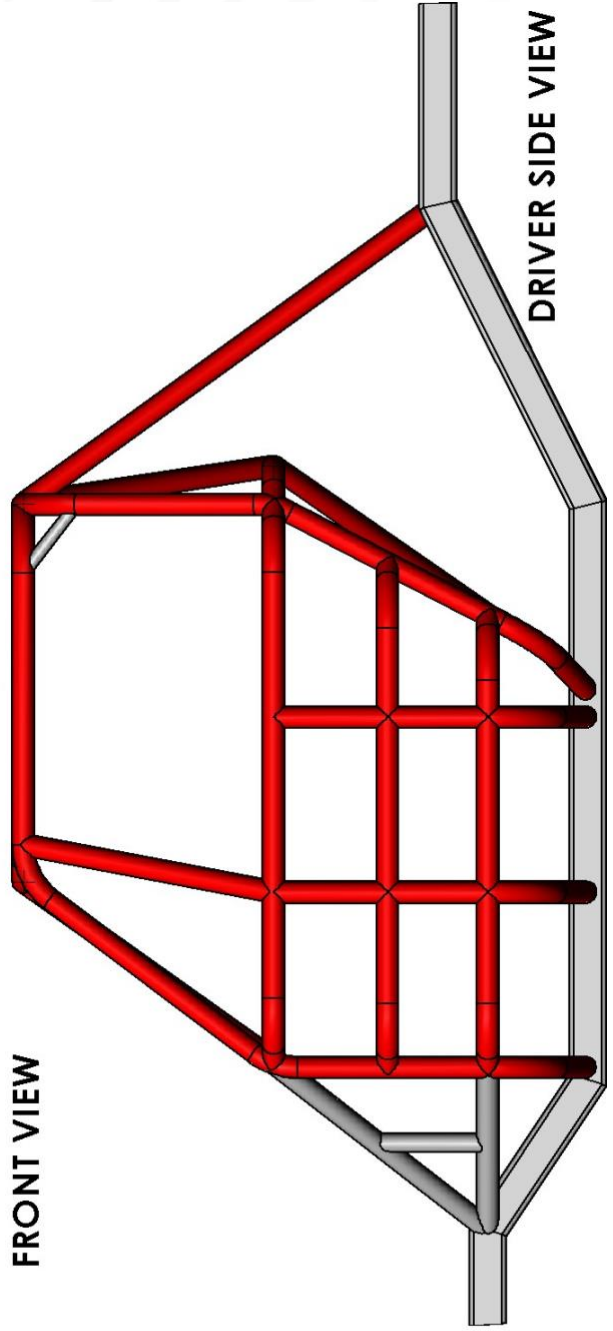


FIG 11

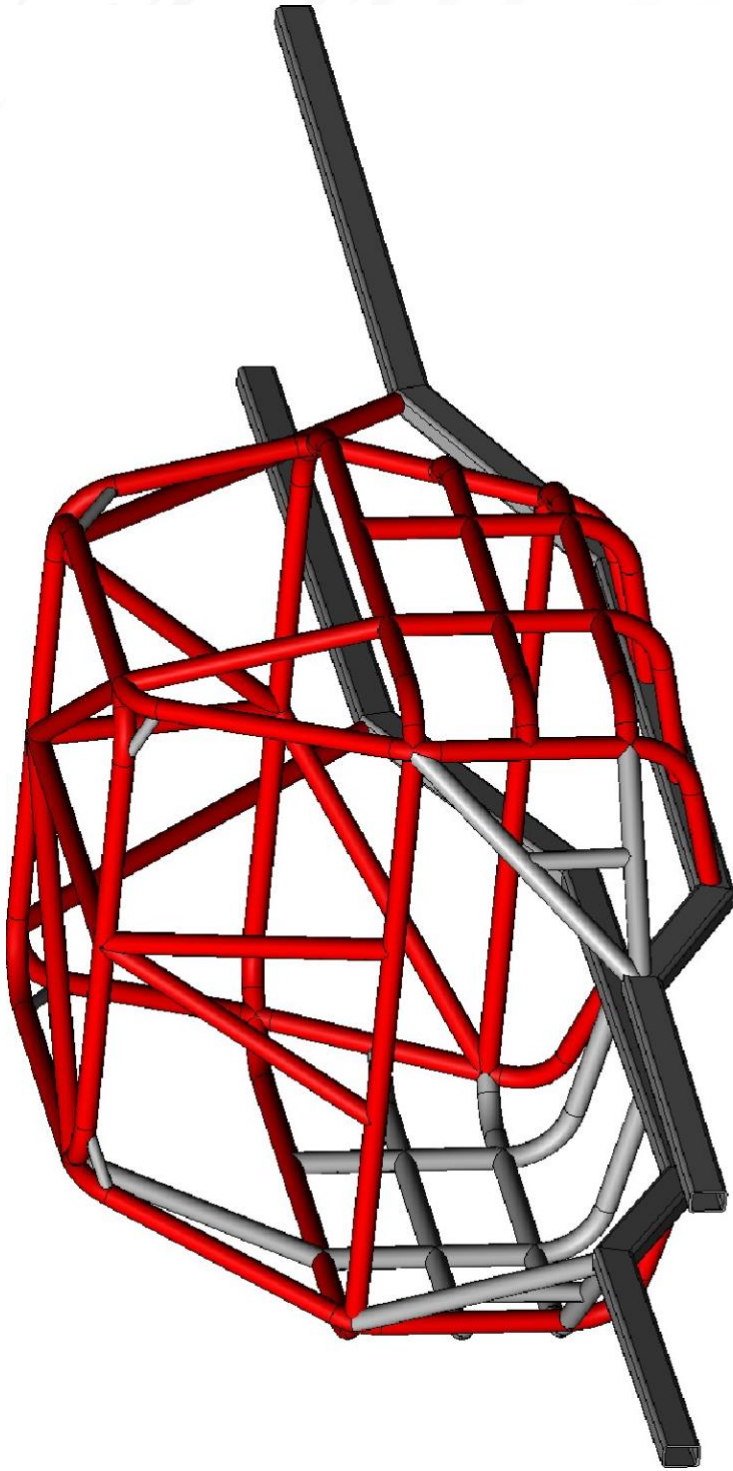


FRONT VIEW



DRIVER SIDE VIEW

FIG 12



ROLL CAGE CONSTRUCTION:
ALL TUBES IN RED MUST BE LEGAL SIZE AS DEFINED BY VEHICLE WEIGHT



****Text in red has been updated for 2020. Please read through the entire rulebook as we have changed the formatting and it is possible that some of the rule updates for 2020 may not have been highlighted in red text. It is the competitor's responsibility to read, understand, and follow these rules.****

Note: In addition to the class specific rules herein, all general rules written for each applicable series apply as well. Please refer to the series general rule book for more information.

2020 CHAMP OFF-ROAD PRO SXS Class Rules

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all CHAMP OFF-ROAD (CHAMP OFF-ROAD) events, and, by participation in these events, all CHAMP OFF-ROAD members are deemed to have acknowledged, accepted and complied with these rules. No express or implied warranty of safety shall result from publications of, or compliance with these rules and/or regulations. The rules are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to participants, spectators or others.

CHAMP OFF-ROAD rules are the sole property of the CHAMP OFF-ROAD. Use of these rules by any other organization or individual is forbidden unless prior written consent is given by CHAMP OFF-ROAD.

CHAMP OFF-ROAD, its parent, affiliates, members, officers, directors or staff assumes no responsibility, legal or otherwise, for failure or malfunction of any products of manufacturers listed in this rulebook. CHAMP OFF-ROAD is NOT liable for actions or decisions made by individuals, promoters, or organizations, etc. using CHAMP OFF-ROAD rules.

Specifications and/or suggested standards contained in this rule book are intended for use as a guide with respect to safety and for no other purpose either expressed or implied. The use of the specifications and/or suggested contained herein by any association, organization, manufacturer or individual is entirely voluntary and **CHAMP OFF-ROAD will NOT** accept any responsibility for consequences resulting from the application or said specifications and/or suggested standards.

Pro Stock SxS: Up to 1000cc Production based Normally Aspirated Side by Side (SxS) vehicles.

Pro Modified SxS: Up to 1000cc Modified Production based Turbocharged & Normally Aspirated Side by Side vehicles.

The spirit and intent of the rules is going to be the standard by which CHAMP OFF-ROAD is guided. **These Side by Side (SxS) classes are production based, and as such if this rule book does not specifically say that you can do something, then you must consider that the change or modification is illegal.** It is the responsibility of each participant to ensure that his/her conduct and equipment complies with all applicable rules. **These rules are subject to amendment or change by CHAMP OFF-ROAD headquarters at any time in the interest of competition.**



This rule book is intended to serve as a guide for the conduct of short course racing and is in no way a guarantee against injury or death to participants, spectators, or others.

The Technical Director holds final decision-making power on any stock/ non-stock component deemed legal or illegal to race. **Any general questions or ruling with "Pre-Approval" attached to it, must have the racer submit photos via email to CHAMP OFF-ROAD Tech Director (Ryan Mulder – ryan@isocracing.com) for pre-approval prior to the start of the season. On event day, these rulings will be verified at discretion of the race director.**

SXS-1 VEHICLE SIGNAGE:

- A. Advertising on race vehicles must be in good taste.
- B. CHAMP OFF-ROAD may require the use of specific sponsor decals.
- C. Team vehicles with the same paint and colors must have prominent distinguishing markings of some kind. Tech Director reserves the right to require additional markings to help distinguish between vehicles.

SXS-2 NUMBERS AND STICKERS:

- A. All CHAMP OFF-ROAD vehicles are required to have CHAMP OFF-ROAD stickers on each side of the front of the door area, 4 inches down from the window opening.
- B. All UTV vehicle numbering is assigned by CHAMP OFF-ROAD.
- C. All UTV classes will have vehicle numbers from 0 through 99.
- D. **The Pro Stock SxS class will have solid black numbers on white background for all 5 number plate locations.**
- E. **The Pro Mod SxS class will have solid white numbers on black background for all 5 number plate locations.**
- F. Numbers on all number plates must be applied side by side. **No slanted (or italic'd) numbers.**
- G. **Fonts must be chosen from one the below approved styles only:**
 - a. Impact
 - b. Helvetica Black
 - c. Mechanical Bold
- H. Numbers must be mounted in a manner that keeps them as clean and unobstructed as possible.
- I. CHAMP OFF-ROAD officials may require a competitor to use a different number to avoid confusion or duplication at an event.
- J. In the event that a number is not visible from the timing and scoring area, the competitor will not be scored. It is the competitor's responsibility to make sure that the number is visible during all race conditions.
- K. Foil or reflective numbers are not permitted.
- L. Side number plates: One number on each side of the vehicle, on a number plate mounted high and close to the back of the roof, **and parallel with the front to rear tire line.** Minimum number plate size: 10 inches high by 14 inches long. Minimum number size: 8 inches by 1 ½ inches.
- M. Rear of vehicle: The back of the vehicle facing the rear, on a number plate mounted **directly in the center rearmost area of the vehicle so that it can be seen above (but not attached to) the bumper when viewed from the rear of car.** Minimum number plate size: 6 inches high by 8 inches wide. Minimum number size: 5 inches by 1 ½ inches.



- N. Roof of vehicle: **Positioned so that the number is read from the passenger side, parallel with the passenger side outer roof bar.** Minimum number plate size: 10 inches high by 14 inches long. Minimum number size: 8 inches by 1 ½ inches.
- O. Upper left-hand corner of windshield area: Minimum Number plate size 5 inches high by 6 inches long. Minimum number size: 4 inches.
- P. All numbers are required to be BLACK on a solid WHITE background.
- Q. All numbers must be easily visible with no obstructions by bodywork or chassis.

SXS-3 ROLL CAGE AND CHASSIS:

- A. All vehicles must utilize the stock chassis and maintain stock appearance. The stock chassis (frame) is defined as the main lower rails running along the inner sides of the SXS and the front and rear tubes that connect them. The chassis may be modified for durability and strength but must retain the stock width, length, and configuration. Any **modifications and/or repairs** must be pre- approved by CHAMP OFF-ROAD officials **in writing**.
- B. No carbon fiber or titanium materials allowed in chassis or body construction. Carbon Fiber and titanium allowed in engine configuration, only if produced OEM **or in the construction of a CHAMP OFF-ROAD approved exhaust system**. Carbon fiber may **only** be used in exhaust mufflers, cans, and resonators.
- C. **Unnecessary tabs and brackets on the OEM chassis may be removed only if pre-approved in writing by CHAMP OFF-ROAD officials.**
- D. Series approved aftermarket roll cage required.
- E. **No titanium nuts or bolts unless originally equipped by the manufacturer.**
- F. Cages may be constructed with one front vertical hoop, one rear vertical hoop, two interconnecting top bars, two rear down braces, one diagonal brace, **or with one vertical hoop on each side of the vehicle with interconnecting bars at the bottom of the windshield area, the top of the windshield area (between C pillars/ windshield side support bars), and between the tops of the B pillars.**
 - 1. On cages with side to side main hoops, the two top interconnecting bars must be placed as far to the outside of the top part of the front and rear hoops as possible.
 - 2. Rear down braces and diagonal brace must angle a minimum of 30 degrees from vertical. At the bottom of the diagonal brace there must be a cross member of the same tubing material and dimensions as the hoop.
- G. There must be a minimum of 3 inches clearance between driver's helmet and roll cage and roof.
- H. **All single tube intersections must be reinforced with gussets.**
- I. Gussets must be installed at all intersections, including diagonal and rear down braces, where single weld fractures can affect occupant's safety.
- J. Triangular gussets may be constructed of minimum .095 inch x 3 inch x 3 inch flat plate or tubing gussets made of same material and thickness as roll cage.
- K. Roll cage terminal ends must be attached to a frame or body member that will support maximum impact and not shear or allow more than 1 ½ inches of movement in the cage terminal end.
- L. **Minimum tubing diameter and thickness is 1 ½ inch diameter by .095 for main roll cage tubes. This includes the front to back mid rail shoulder bar. 2021 race vehicles must all be .120 cage size**
- M. Roll cage material must be 4130 chromoly or DOM.

- N. All tubing, welds, gussets, and roll cage construction must be approved.
- O. Entire roof must be covered with sheet metal or .063 inch minimum aluminum.
- P. It is recommended that stock cage and seat belt mounting plates be reinforced, especially on Pre-2012 vehicles.
- Q. Rear Firewall: Complete vertical portion of the rear firewall is required. Stock plastic is allowed, but competitors are encouraged to use .063 aluminum minimum. This means that the whole firewall is required from the floor all the way up to the portion that makes the bend rearward at the top, NOT just the lower portion.
 - a. Pro-Stock vehicles are not allowed any openings in the rear firewall and the firewall must remain full height from side to side of the vehicle.
 - b. Pro-Mod vehicles are allowed to relocate the radiator, and/or intercooler into the driver's compartment **but they must be completely covered on the driver's side and top.** If relocated, rear firewall may be modified.

SXS-4 DOORS:

- A. Door area must be covered with sheet metal or a minimum of .063-inch thick aluminum. Panel must be attached with bolts or dzus buttons.
- B. Fully integrated door bars to OEM chassis are also allowed. Driver and passenger side tubes must be a minimum 1-½ inch diameter by .095, 4130 Chromoly or DOM.
- C. U shaped tube must be attached in multiple spots to stock frame or chassis.
- D. Doors must have 'X', 'A', 'V' or Ladder design bracing designed to provide maximum protection to the driver's side.
- E. X, A or V designs must use a minimum 1-¼ inch diameter by .095, 4130 chromoly or DOM.
- F. Ladder design must use a minimum 1-¼ inch diameter by .095 for main rails and 1-¼ inch by .095 for rungs.

SXS-5 DRIVER COMPARTMENT:

- A. Driver must be able to enter and exit, unassisted and with great ease, the driving compartment with the vehicle in any position. Firewalls and/or bulkheads must separate the driving compartment from any fuels, engine fluids, and acids.
- B. Driver's seat must be mounted within 2 inches of stock location and be bolted in. Seat may be moved two inches from left or right of stock location while moving forward/backward within the drivers compartment. Race seat is required. Must meet SFI Requirements. If it does not meet SFI 39.2 standard, it is subject to approval by CHAMP OFF-ROAD. Seat may be lowered. Stock plastic panel below seat to floor may not be cut down or trimmed with the exception of minimal holes allowed for seat tabs or mounting of seat. Minimal trimming may be allowed in the case of full containment seats. Any interior trimming for seat installation must be pre-approved by CHAMP OFF-ROAD officials.
- C. If no passenger seat is used, gas tank area must be completely covered with aluminum firewall.
- D. A 5-point motorsports specific harness is mandatory. It must be SFI 16.1 or 16.5 rating with the manufacturer's date tag not expired (on harness' manufactured after Jan 1, 2018), or less than 2-years from the punch date on belts manufactured.
- E. Driver side window net is mandatory, and must be latch style mounted in the top left corner as per the roll cage drawing,
 - a. No spring loaded retention bars allowed.
 - b. Both top and bottom mounting rods must be 1/2 inch solid steel rod and extend past any retaining bracket at least 1 inch.
 - c. No holes will be allowed in the roll cage tubes for window net rods.
- F. The driver's side front triangle window opening must be covered if the driver's hand can reach out past the side bar in front of the C-pillar (side windshield support bar)
- G. Rock screens must cover entire area in front of driver.
 - a. Construction to be a minimum of .120 rod and rod spacing shall



- be no greater than a maximum 1.5" opening.
- H. Dash and all floor and interior panels in stock location are required. Stock dash is recommended, however aluminum will be allowed. Minimal cuts or openings are allowed for roll cage and tabs. Glove box and door and center foam lined storage box may be removed.
 - I. Rear Firewall: Complete vertical portion of the rear firewall is required. Stock plastic is allowed, but competitors are encouraged to use .063 aluminum minimum. This means that the whole firewall is required from the floor all the way up to and including the portion that makes the bend rearward at the top, NOT just the lower portion.
 - a. Pro-Stock vehicles are not allowed any openings in the rear firewall and the firewall must remain full height from side to side of the vehicle. Holes or cutouts are allowed for a radiator relocation but must be kept to a minimum.
 - b. Pro-Mod vehicles are allowed to relocate the radiator, and/or intercooler into the driver's compartment but they must be completely covered on the driver's side and top.
 - J. With pre-approval, the lower front firewall (foot box area) can be covered or replaced with .063" aluminum for safety.
 - K. If the vehicle has a .095" or thicker aluminum or steel floor on the driver's side (from front firewall to rear firewall, and center console to outer driver's side tube of chassis), the center console may be removed to allow easier relocation of the shifter handle. If the removal of the console exposes any parts of the driveline they must be completely covered by .063" aluminum.
 - L. Pro Stock Radiator Relocation: Radiator is allowed in passengers compartment as long as it is completely enclosed to the driver compartment.

SXS-6 MEASUREMENTS AND WEIGHTS:

- A. All measurements will be performed with CHAMP OFF-ROAD technical instruments and gauges. CHAMP OFF-ROAD officials determine all measurements and center points.
- B. Weights: *Weights may be adjusted throughout season based on data acquired after initial rounds.*

Pro Stock minimum vehicle weight and width: Maximum overall width is 72.5"

- a. RZR: 1600 LBS with driver
- b. CAN-AM: 1600 LBS including driver
- c. Yamaha: 1775 LBS with driver
- d. Textron XX: 1775 LBS with driver
- e. Honda Talon 1000 R: 1700 LBS with driver
- f. Kawasaki Teryx KRX 1000: 1750 LBS with driver
- g. Any new models not listed above will be required to begin competition at the same weight as the heaviest existing model until sufficient data has been collected in order to determine a new minimum weight to maintain long term competition parity among the different makes and models

Pro Modified minimum vehicle weight and width: Maximum overall width is 78"

WEIGHTS MAY BE ADJUSTED WHEN MORE INFORMATION IS GATHERED FROM 2020 VEHICLES

Turbo Engines:

- a. All RZR Turbo up through 2020 with non-Pro XP Engine: 1750 LBS with driver
 - b. 2020 model year Polaris RZR Pro XP and all pre-2020 Turbo cars with Pro XP engine: 1850 LBS with driver
 - c. All CAN-AM X3 & CAN-AM X3 Turbo, X RS up through 2020 with non-RR engine: 1850 LBS with driver
 - d. 2020 model year Can-Am X3 Turbo RR models, and all pre-2020 X3 Turbo Models with 2020 RR engines: 1950 LBS including driver
 - e. Yamaha YXZ with GYTR Turbo: 1850 LBS with driver
 - f. Honda Talon with Jackson racing installed turbo: 1850 LBS with driver
 - g. Any new model not listed above will be required to begin competition at the same weight as the heaviest existing model until sufficient data has been collected in order to determine a new minimum weight to maintain long term competition parity among the different makes and models.
 - h. N/A car in the mod class: 1580 LBS with driver
- C. Added weight must be securely bolted in place to the chassis in a safe and strong manner using at minimum 2 3/8" Grade 8 (or better) bolts for each 10 lbs added. For blocks of weight over 10 lbs, 2 x 1/2" Grade 8 (or better) bolts are required. Weights cannot be attached using Velcro or clamps.
- D. Dislodged weight cannot be returned to the vehicle for weighing at the end of the race.
- E. All block ballast must be painted white and identified with vehicle number.
- F. Weight can be sealed at the discretion of officials.
- G. No weight shifting devices of any kind are allowed. This includes but is not limited to hydraulic or electronic devices.
- H. All vehicles will weigh in before and/or after competition at the discretion of officials. Failure to do so will result in disqualification.
- I. All weight loss on track will result in a \$5.00 per pound fee.
- J. Weight may be adjusted at the discretion of officials throughout the season in the interest of competition.

SXS-7 BODY & FENDERS:

- A. Fenders must be securely attached to vehicle. The removal of fenders during competition during any reason other than damage incurred during the race will result in disqualification.
- B. Fenders must be attached in such a fashion as not to create a pointed or sharp extrusion when removed. A loop body mounting bracket construction is mandatory.
- C. Additions to the body of the race vehicle, such as fins, scoops, wings, and other extruding additions will not be permitted.
- D. Vehicles must maintain an appearance similar to the stock SXS.
- E. Beds can be removed for the purposes of strengthening the integrity of the rear framework.

- F. Hoods must remain stock and mounted exactly in the stock location.
- G. All other body panels must be stock or aftermarket stock replacement and mounted in OEM location. No rolling fender flares under or sucking rear fenders in at the back!
- H. Additions to the body of the race vehicle, such as fins, scoops, wings, and other extruding additions will not be permitted.

SXS - 8 BUMPERS:

- A. Vehicles must have front and rear bumpers. CHAMP OFF-ROAD officials must approve all bumpers.
- B. Bumpers must be designed in such a way as to inhibit two vehicles from becoming locked together.
- C. Ends must be capped and rounded with no sharp edges.
- D. All classes are to have side nerf bars.
 - a. Nerf bar to be a minimum 1" x .095" diameter mild steel.
 - b. Must be as wide as centerline of tire or wider from front of vehicle to back.
 - c. Must be **capped and have rounded (looped) ends, no sharp edges exposed.**
 - d. Distance of protection must be no greater than 12" from rear tire.

SXS - 9 SKID PLATES AND FLOORBOARDS:

- A. Skid plates designed to reasonably protect the front suspension, steering, and brake components are recommended on all vehicles. Plates must be made of metal and be securely attached.
- B. Stock SXS floorboards are acceptable but extra protection made of metal or aluminum is highly recommended.
- C. **For the 2021 season, Driver side foot well must be covered or replaced with .095" (or thicker) aluminum or steel, from the front firewall to the rear firewall, and from the outer OEM chassis tubes to the center console (or center of the car if the center console is removed) 3/8 UHMW Skidplates will be allowed.**

SXS-10 SUSPENSION:

- A. All A-arm mounting points must remain in the stock location and position as delivered from the manufacturer, however they may be reinforced for strength.
- B. Pro Stock:
 - a. Maximum width is 72.5" as measured at the widest part of the tires (front and/or rear) with the vehicle at ride height.
 - b. **Aftermarket hubs are allowed as long as stock dimensions are maintained. No ceramic wheel bearings. Stock or steel replacement wheel bearings only.**
 - c. Control arms and trailing/ control arms must remain stock lengths and stock shock mounting locations (i.e. leverage ratio) and fit into a jig that has stock pick-up points, shock mounting points, and ball joint



location.

1. RZR1000 trailing arms will be allowed to relocate the shock side to side on the trailing arm provided that the leverage ratio is not altered from OEM.

Pro Modified:

- a. Maximum width is 78" as measured at the widest part of the tires (front and/or rear) with the vehicle at ride height.
- b. Only OEM dimension, or CHAMP OFF-ROAD pre-approved commercially available long travel suspension components are allowed.
- C. Minimum ride height of 8" as determined by technical inspector measuring to any chassis, floor, or skid plate along the bottom of the vehicle. This includes any suspension mounting points that may hang down below the main chassis.
- D. Aftermarket sway bars are permitted.
- E. CHAMP OFF-ROAD approved stock dimension aftermarket hubs are allowed.
- F. No ceramic or polished wheel bearings will be allowed.
- G. Trailing/ control arm mounting points may be re-enforced but may not be moved or relocated.

SXS-11 STEERING:

- A. All steering components must be in good condition and proper working order. Drag link and tie rod ends must be secured with a cotter pin or safety wire in each one.
- B. Power steering is permitted.
- C. Steering "quickeners" are permitted.
- D. CHAMP OFF-ROAD officials must consider steering reasonably safe before vehicle is permitted to compete.
- E. CHAMP OFF-ROAD approved steering wheel quick release is allowed
- F. Tie-rods may be replaced with heim joints provided they mount like stock at each end.
- G. Aftermarket direct replacement rack and pinion allowed provided it mounts in the stock location and accepts all stock steering components.

SXS-12 SHOCKS:

- A. There must be at least one and only one shock absorber per wheel in working condition at the start of the race.
- B. Pro Stock:
 - a. All shock mounts must remain in stock location.
 - b. No bolt on extensions.
- C. Pro-Mod:
 - a. Shock mounts may be relocated.
- D. BUMP STOPS - Suspension bump stops must be of the solid type.
- E. TORSION SYSTEM - The only torsion system that is acceptable is a coil- over shock.
- F. On-board shock adjustments are NOT permitted unless using unmodified OEM original equipment shocks (i.e. Polaris Dynamix) and must use OEM control system. Shock ECU can only be remapped with pre-approval by CHAMP OFF-ROAD officials.

- G. Aftermarket externally adjustable shocks are allowed, but can't be able to be adjusted while the vehicle is on track
- H. Bypass shocks are not permitted unless using unmodified (only allowed to modify piston valving and nitrogen pressure) OEM original equipment shocks (i.e. Can Am X3 rear shocks and Polaris Velocity shocks) that came on the same model vehicle from the factory).

SXS-13 BRAKES:

- A. Brakes must be in safe working condition and be able to apply adequate force to lock up all four tires.
- B. Brakes must remain in safe working condition during entire event. **If at any time a competitor loses any brake function, they should exit the track and park the vehicle.**
- C. Turning or cutting brakes are not permitted.
- D. **Rotors, calipers, and brake pads may be upgraded provided all components are commercially available, bolt on (no welding required) using OEM mounting holes and are CHAMP OFF-ROAD approved.**
- E. OEM master cylinder is required.
- F. **Brake bias adjusters are not allowed.**

SXS-14 ENGINE:

- A. All vehicles must use OEM engine cases and cylinder head. CHAMP OFF-ROAD reserves the right to mark engine blocks prior to event. All Engines must use OEM internals and stock configuration.
- B. All vehicles must use same fuel delivery system as stock and designed by factory.
- C. Electric fuel pumps are permitted in accordance with CHAMP OFF-ROAD safety requirements for fuel pumps.
- D. Engines may be replaced during a CHAMP OFF-ROAD event only after competitor has notified CHAMP OFF-ROAD officials and brought the engine being removed to the tech trailer.
- E. **Two adjacent valve cover bolts** must be drilled with a .125" minimum diameter hole so that a CHAMP OFF-ROAD official can install an engine seal. Failure to drill these head bolts may result in a penalty. **Engine seals may only be removed by CHAMP OFF-ROAD officials. If a sealed engine is found to be illegal in any way the engine will be confiscated and disqualification for all rounds of competition said engine was used in during the event the engine was inspected for.**
- F. Head bolts may be replaced with a head stud kit with CHAMP OFF-ROAD approval. Approved .125" holes will still be required so that CHAMP OFF-ROAD officials can install an engine seal.
- G. All vehicles can replace cam chain tensioners with commercially available CHAMP OFF-ROAD approved manual timing chain tensioner.
- H. All vehicles can replace the fuel rail with a commercially available CHAMP OFF-ROAD approved fuel rail provided that it is a direct replacement and serves no other purpose other than to route fuel to the fuel injectors.

- I. Pro Stock specific engine rules:
 - a. Engine displacement not to exceed 1000 cc.
 - b. Engines must remain completely stock. No internal modifications.
 - c. All internal engine components must remain OEM untouched with single exception of a valve job which may be performed, but in doing so all cuts must be done only on the steel valve seat inserts. You may not at any time touch or extend the aluminum above or below the valve seat insert and must be concentric about the valve guide centerline. No surfacing of the block or head is allowed. Even the gasket must be used as it is delivered from the manufacturer. Piston rings may not be removed, and valve springs may not be shimmed to increase pressure. All bearings must remain OEM. No factory performance parts are allowed (i.e. GYTR, HRC, KHI, etc..) unless specifically allowed in the this rulebook.
 - d. Stock throttle body must be used. No modifications allowed.
 - e. All internal and external components must be used in their original OEM condition.
 - f. All Yamaha YXZ1000R can update to 2019 connecting rods
 - g. All Polaris XP1000 and RS1 can replace the cam buckets with OEM XP900 cam buckets, lash shims, and retainers.

J. Pro-Modified specific engine rules:

a. Normally Aspirated engines:

- 1.) Approved pistons and rings with an increased bore size may be used so long as the displacement does not exceed a maximum of 1075cc.
- 2.) Stroke may not be increased or decreased. Crank must remain unaltered as delivered by the OEM.
- 3.) Approved steel aftermarket rods can be used but must retain OEM critical dimensions (center to center length, big end diameter and width, and wristpin diameter and width)
- 4.) Block may be sleeved with CHAMP OFF-ROAD pre-approval
- 5.) Head Gaskets are open
- 6.) Intake and exhaust ports as well as the combustion chambers may be ported.
- 7.) Camshaft(s), valves, valve springs, retainers, and cam followers can be changed but must be approved by CHAMP OFF-ROAD officials and available to all competitors
- 8.) Fuel Injectors, fuel pump, and fuel pressure regulator can be replaced/ upgraded with CHAMP OFF-ROAD approval
- 9.) Flywheel may be modified with CHAMP OFF-ROAD approval

b. Turbocharged Engines:

- 1.) All engine components and engine modifications not specifically mentioned in these rules must remain unaltered as delivered from OEM.
- 2.) Only OEM wastegate actuators will be allowed.
- 3.) Upgraded impellers with factory inducer and exducer diameters are allowed with CHAMP OFF-ROAD pre-approval.
- 4.) Upgraded blow-off/ air recirculating valves are allowed with CHAMP OFF-ROAD approval
- 5.) Polaris RZR 1000 & RS1 may use RZR 900 cam buckets, lash shims and retainers. No aftermarket cam buckets or retainers are allowed. OEM rods, pistons and rings can be replaced with approved replacement parts. No modifications may be made to approved rods or piston kits other than file fitting the ring end gaps.

- a. Approved rods: Carrillo pn #12949, marked with LP1000POL-R1b. Approved piston kit (includes



- pistons, wristpins, wire-locs and rings): JE Pistons pn #363686, marked with LP1000POL-P1.
- 6.) All vehicles may replace OEM fuel rail with aftermarket replacement as long as it serves no other purpose than to supply the fuel injectors with fuel.
 - 7.) GYTR internal parts are not allowed.
 - 8.) Yamaha YXZ1000R may all use the 2019 or newer OEM connecting rods.
 - 9.) All brands may use an aftermarket manual timing chain tensioner in place of the OEM tensioner.
 - 10.) All brands may replace the head/ cylinder bolts with direct replacement aftermarket stud kits or bolts provided that no modifications are needed to make the upgrade.
 - 11.) All Production Turbo vehicles must add/have a female 1/8" NPT port (with .125" minimum through hole) in the intake manifold plenum for measuring boost between the throttle body and the intake runners. At any time an official may require the installation of a series specified boost measuring device. In the future, we reserve the right to restrict boost in an effort to create parity of performance between multiple vehicle models.
 12. Shim-less valve buckets are allowed.

SXS-15 ECU:

- 1.) OEM fuel injectors are the only fuel injectors allowed with CHAMP OFF-ROAD.
 - 2.) A female 1/8" npt port in the intake manifold must be provided for CHAMP OFF-ROAD officials to verify boost pressures when required. Boost pressure can be checked at any time. If a competitor does not provide the necessary 1/8" npt vacuum/boost port for series officials when requested a penalty may be assessed.
 - 3.) Intercoolers may be upgraded and/or relocated but must not be mounted in a manner that extends outside the roll cage. Aftermarket Intercoolers are allowed upon approval from a CHAMP OFFROAD tech.
 - 4.) Polaris air to water intercooler may be replaced with air to air intercooler. If the heat exchanger is located inside the intake manifold it may be removed and a bolt on cover used in its place.
 - 5.) Flywheel may be modified with CHAMP OFF-ROAD approval
 - 6.) YXZ1000R vehicles can install a COMPLETE unmodified GYTR turbo kit on an unmodified engine/longblock. No alterations, deletions, additions or substitutions are allowed on any GYTR turbo kit components, other than the following:
 - Adjustments to the required female 1/8" npt port in the intake manifold,
 - Adding the 2019 or newer OEM rods,
 - The exhaust after turbo outlet
 - Blow Off Valve
 - ECU Tune, including Boost Control
 - Dataloggers must be used.
 - Upgrade GYTR intercooler
- K. All OEM CAN protocols must remain unaltered.
- L. Competitors must install a CHAMP OFF-ROAD Y-cable and data logger if requested by CHAMP OFF-ROAD officials.

SXS-16 AIR INTAKE BOX:

- A. Pro-Stock class requirements:
 - a. Any air filter/ velocity stack/ plenum is allowed on the



inlet side of the throttlebodies.

- b. Air intake must not extend forward of the rear firewall or extend out past the roll cage.

B. Pro-Modified class requirements:

a. Turbocharged vehicles:

1.) Any air filter/ intake system allowed provided that all OEM sensors are used and mounted in their OEM locations. **YZX1000R vehicles must run the filter and intake system as delivered in the GYTR turbo kit. Talon Vehicles must run the filter and intake system as delivered with the Jackson Racing kit.**

2.) Air intake must not extend forward of the rear firewall or extend out past the roll cage.

b. N/A vehicles:

3.) Any air filter/ velocity stack/ plenum is allowed on the inlet side of the throttlebodies.

4.) Air intake must not extend forward of the rear firewall or extend out past the roll cage.

SXS -17 SUPERCHARGERS & TURBOCHARGERS:

A. Superchargers or turbochargers are not permitted in Pro Stock class.

B. **Superchargers are not permitted in the Pro Mod class.**

C. **Aftermarket turbochargers are not permitted without pre-approval of CHAMP OFF-ROAD officials.**

D. **At this time, the only aftermarket turbo kits allowed in the Pro-Mod class is the GYTR(Yamaha) and Jackson (Honda) with specific requirements outlined under the engine requirements.**

E. **Dealer installed superchargers or turbochargers are considered "aftermarket".**

SXS-18 AUXILIARY EQUIPMENT:

A. All vehicles must start race with a functional generator or alternator, fan, water pump (water-cooled vehicles), and a complete functional electrical system.

SXS-19 IGNITION:

A. All vehicles must use a stock ignition switch or have a positive action on/off switch in good working order. Switch must be labeled "ignition on/off", have a red circle around it, be located on the left-hand side of the dash panel, and must be accessible from the outside of the race vehicle. Red locator decal/circle must be at least 1 inch wide around switch.

B. All electric fuel pumps with independent switches must be labeled "fuel on/off" and be within easy reach of the driver and accessible from the outside of the vehicle. **(all power to the fuel pump must be run through the factory on/off switch or a master cut-off switch for the entire vehicle. At no time can the fuel pump be powered while the ignition switch or master disconnect switch is in the off position)**

SXS-20 BATTERIES:

A. Batteries must be securely mounted with metal-to-metal tie downs.

- B. Wetted fiber or gel cell batteries only. Liquid lead acid batteries are not permitted.
- C. Batteries may be located in the driver's compartment with an adequate firewall or factory engine cover.

SXS-21 COOLING:

- A. Oil coolers, transmission coolers, and radiators located ahead of the driver, behind the cockpit or in the passenger compartment must have a shroud that will prevent liquids from blowing back or leaking onto the driver in the event of a rupture or leakage. All radiator caps must be shielded from driver.
- B. All hoses running through the driver compartment must be shielded. Steel braided hose does not constitute a shield.
- C. Radiator may be relocated to back behind passenger cab area. If radiator is mounted close to driver, panels are required to keep hot coolant off of driver. Radiator must have a rock screen to protect it with maximum opening size of ½ inch by ½ inch.

SXS-22 EXHAUST:

- A. Pro-Stock: Aftermarket exhaust is allowed.
- B. In all classes, exhaust systems must be a minimum of six inches away from fuel lines and twelve inches away from fuel filler.
- C. Titanium exhaust is allowed but must be pre-approved by CHAMP OFF-ROAD officials.
- D. All vehicles must have functioning CHAMP OFF-ROAD approved muffler.

SXS-23 STARTER:

- A. All vehicles must be self-starting by use of an onboard electric starter.

SXS-25 FUEL:

- A. Competitors must use either Sunoco SS100, 260GT or VP UTV96 fuel.
- B. No mixing of fuels at any time.
- C. Each competitor must designate which fuel they will be running on for the entire event weekend when they come through tech.
- D. No switching fuel types during an event.
- E. If a competitor is found with fuel that doesn't match either of these fuels at any time during the event the competitor will receive a dis-qualification.
- F. If the fuel is found before or after qualifying the competitor will receive a disqualification for qualifying and will have to start at the rear of the field for the race. A competitor found with illegal fuel before qualifying will not be allowed to compete in the qualifying round.
- G. If the fuel is found before or after a race, the competitor will receive a disqualification for that race.



- H. If a competitor is found with illegal fuel before a race, he/she will not be allowed to compete in the race.
- I. Cooling of any type of fuel is not permitted during competition.
- J. CHAMP OFF-ROAD has tested fuel samples of both SS100, 260GT and UTV96, and the CHAMP OFF-ROAD test results are the benchmark from which all competitor's samples will be judged.
- K. CHAMP OFF-ROAD has the right to sample a competitor's fuel at any time. All samples will be impounded for observation and/or testing by CHAMP OFF-ROAD or outside laboratories at CHAMP OFF-ROAD discretion.
- L. No nitrous oxide.
- M. If CHAMP OFF-ROAD officials suspect maskers in the fuel, chemical testing will be conducted at possible expense to the competitor.
- N. Penalties for use of hazardous chemicals will be severe including fine, and/or reduction of points, and/or suspension.
- O. No adding any chemicals or compounds to the required fuels. Fuels must be run exactly how they come from the manufacturer.

SXS-26 FUEL CELLS:

- A. Stock OEM fuel tanks in the stock OEM location plus or minus twelve (12) inches may be used, subject to CHAMP OFF-ROAD pre approval.
- B. CHAMP OFF-ROAD will reject any previously approved fuel cell, which appears to be defective, damaged, not in proper condition, or one that no longer meets the series requirements.
- C. No pressure systems will be allowed. Any concealed or not concealed pressure type containers, feed lines or actuating mechanisms will not be permitted, even if inoperable.
- D. Icing, Freon type chemicals, or refrigerants may not be used in or near the fuel system.
- E. The use of a commercially manufactured fuel cell is mandatory. Aluminum cans with foam inside are not allowed.
- F. Safety fuel cells shall consist of a bladder enclosed in a smooth skinned container. The container shall be constructed of 20-gauge steel, 0.060- inch aluminum or 0.125inch Marlex. Rotary molded polymer cells are acceptable **only if they have an internal bladder**.
- G. No material other than standard foam as provided by the fuel cell manufacturer is permitted.
- H. Fuel cell must have a chassis or body cross member of substance between the fuel cell and driver and be protected from ground obstacles.
- I. Fuel cells must be dated from manufacturer. Fuel cell bladders will become obsolete five years after date of manufacture and must be replaced.
- J. **All fuel cells will be required to have a vent hose routed so that fuel will not drain out no matter what direction the cell is turned. Vent hose must extend the length of the fuel cell in length, height, and width along with the end being routed away from driver and any exhaust or electrical components.**
- K. Fuel filler lines and positive-locking non-vented fuel filler caps must be located and secured in such a manner as to prevent them from being knocked off or opened during movement, rollover, or impact.



- L. A splash shield must be in place to direct any spill away from the driver, motor, and motor exhaust. A body panel is considered a sufficient splash shield.
- M. Fuel cell cannot be vented into the driver's compartment of any vehicle.
- N. All mountings must be CHAMP OFF-ROAD approved. Fuel cell must be mounted to chassis and cannot be mounted on skid plate.
- O. All fuel cells mounted in the passenger compartment area must be fully enclosed with sheet metal or aluminum.
- P. Any battery or electrical components mounted in the passenger compartment with the fuel cell must be separated by sheet metal or aluminum.
- Q. Minimum 1/8 inch aluminum plate must be added on right outer side of chassis to protect the fuel tank/ fuel cell.

SXS-27 FUEL VENT ROUTING:

- A. All fuel tank/ cell vents and lines must come out of the top of the fuel tank/ fuel cell
- B. All fuel cell vent hose routing must be routed to extend past the width of the cell, length of the cell, the height of the cell, and extend out of the driver's compartment away from any hot components or electrical components.

SXS-28 TRANSMISSION & DIFFERENTIALS:

- A. Every vehicle must use the OEM transmission and clutch design.
 - a. No aftermarket, performance, or gear sets from a different model vehicle allowed.
 - b. Vehicles may update or backdate transmission and front/rear differential ratios so long as they are currently available through OEM dealers and were original equipment in the same model of vehicle.
 - c. Cryo treating and/ or polishing is not allowed.
- B. The stock front & rear differentials used must be from the model of vehicle used. Polaris XP1000 and XP Turbo models may replace the sprag and armature plate in the front differential with pre-approved CHAMP OFF-ROAD components.
- C. All vehicles must have a functional High, Low, and Reverse gear at all times.
- D. Aftermarket CV's and axles may be used.

SXS-29 CLUTCH:

- A. Pro Stock: Must use OEM clutch and design as delivered from manufacturer.
 - a. Yamaha YXZ100R: Coil spring conversion is allowed with CHAMP OFF-ROAD approval.
 - b. CVT clutches may only be upgraded with CHAMP OFF-ROAD approved helix, springs, and weights



- c. No billet or unapproved aftermarket clutches.
- d. Clutches may not be modified in any way.
- e. OEM flywheel may not be modified in any way.
- B. Pro Modified:
 - a. Aftermarket clutches may be used but must be approved by CHAMP OFF-ROAD
 - b. Yamaha YXZ100R: Coil spring conversion is allowed with CHAMP OFF-ROAD approval
- C. Factory paddle shifters as delivered from factory are allowed. No retrofitting to other years, makes or models.

SXS-30 WHEELS AND TIRES:

- A. Original or aftermarket SxS tires, or light truck tires must be used. Tired must be mud/all-terrain style and be molded to 3/8inch or deeper when new. **Tires must be readily available to all competitors. No limited production or specialty tires.**
- B. Maximum tire size is 31 inches outside diameter.
- C. No more than 1 tire per corner is permitted.
- D. Tires will be visually checked and must be considered reasonably safe by CHAMP OFF-ROAD prior to competing.
- E. Bead locks allowed, must have recessed bolts only that do not protrude past the face of the clamp ring, or must use button head style bolts.
- F. Any wheel offset combination is permitted.

SXS-31 FASTENERS:

- A. All components on the vehicle's suspension system, chassis, and running gear must be secured with S.A.E. Grade 8 or better nuts and bolts.
- B. Bolts must be secured with either lock nuts, lock washers, cotter pins, or safety wire and have at least one full thread showing through the nut.

SXS-32 HOSES

A. All fuel and brake line hoses including metal lines and fittings must be clamped and/or safety wired.

SXS-33 MIRRORS:

- A. Rear view mirror with at least 6 square inches of mirror surface and a reasonably unobstructed view of area behind vehicle is recommended on all vehicles.

SXS-34 TRANSPONDERS/TIMING:

- Remote score timing devices will not be permitted by teams, owners, or anyone associated with an entry, unless approved by CHAMP OFF-ROAD.



- All teams are required to purchase remote timing transponders. Transponders can be purchased through CHAMP OFF-ROAD and numbers must be recorded with CHAMP OFF-ROAD officials.
- Drivers are responsible for the charging and installation of all transponders. Any entry without a properly installed, functioning transponder may not be scored and may be subject to further penalty.
- Transponders must be mounted 10 inches back from the leading edge of the front bumper and a maximum of 15 inches in height with a clear view to the track surface.

SXS 170 Class:

SXS 170: Stock Polaris RZR 170 SxS driven by children ages 6-12 (racers age will be determined on the day of the event). Vehicles must be a standard manufacturer production model that is currently available to the general public in the USA. Vehicle style must have a manufacturer production volume of at least 1000. All new models/brands are subject to series pre-approval process which may include (but is not limited to) inspection, track time and data collection before being deemed legal for competition. To be considered for approval for the CHAMP OFFROAD during the 2020 season, all new models must be available and on dealership floors at least 30 days before the first national event. All pro stock rules apply to the RZR 170 class unless otherwise expressed here. Unless otherwise stated unless the rules specifically say you may do something it is to be assumed it is illegal and not allowed. All general rulebook rules apply to the RZR 170 class.

SXS-170 Rules:

1. Aftermarket Suspension is not allowed.
2. 170cc engine or 150cc engine must be used with no modifications.
3. Aftermarket or re-flashed ECU's not allowed.
4. Exhaust only modifications allowed.
5. Driver window net is mandatory.
6. No passengers allowed.
7. Driver must wear helmet, eye protection and fire suit.
8. Approved head and neck restraints are required.
9. Race numbers are required on both sides of vehicle and the rear of the vehicle; must be white background with black numbers. Minimum 6 inches tall.
10. Aftermarket roll cage is mandatory.
11. Pump gas with a maximum rating of 91 octane must be used.
12. Roof panel mandatory minimum thickness .060
13. Minimum weight 700 LBS.



MORR Sportsman Class General Rules

(These General Rules only apply to MORR Sportsman Classes and not Champ Classes)

- **Effective Date:** These CHAMP OFF-ROAD rules become effective when published and supersede all previous rules, amendments, bulletins or supplementary regulations.
- **Amendment:** Rules may only be amended by the publication of a bulletin issued by CHAMP OFF-ROAD pursuant to the authority of Series principals. An amendment is effective upon the date the bulletin is released by Series Officials.
- **Applicability:** CHAMP OFF-ROAD Rule Book is applicable to all CHAMP OFF-ROAD sanctioned events.
- **Interpretation and Application:** CHAMP OFF-ROAD Official's interpretation, clarification or application will prevail upon disagreement or dispute regarding the meaning or application of the CHAMP OFF-ROAD rules. Notwithstanding the foregoing or any other provision in the CHAMP OFF-ROAD Rule Book, CHAMP OFF-ROAD may review an interpretation, clarification or application of the rules where the CHAMP OFF-ROAD Officials deems such review to be necessary.
- **Finality of Interpretation and Application:** All MOOR members agree that determinations by CHAMP OFF-ROAD Officials as to the applicability, clarification and interpretation of the CHAMP OFF-ROAD rules are not subject to litigation and not subject to appeal and agree that all CHAMP OFF-ROAD decisions are final. Member further agrees that they will not initiate or pursue litigation or any kind against CHAMP OFF-ROAD, or anyone acting on behalf of CHAMP OFF-ROAD to reverse or modify such determinations or to recover damages or to seek any other kind of relief allegedly incurred or required as a result of such determination unless CHAMP OFF-ROAD Officials made such determinations for no purpose other than a bad faith intent to harm or cause economic loss to the member or Official. If a member, competitor or Official initiates or maintains litigation in violation of this covenant, that same person agrees to reimburse CHAMP OFF-ROAD and/or for the costs of such litigation including attorney's fees. Member, competitor or Official further agrees that if any litigation brought against CHAMP OFF-ROAD for any reason, the matter will be tried before a judge of competent jurisdiction in the State of Wisconsin, in Forest County, and hereby waives any right to trial by jury in such action.
- **Principal Rule of Interpretation, Clarification or Application:** CHAMP OFF-ROAD Rules are intended to ensure that CHAMP OFF-ROAD sanctioned events are conducted in a manner that is fair to all competitors, consistent with prompt finality in competition results. Circumstances may be presented that are unusual, in which strict application of the CHAMP OFF-ROAD rules may not achieve this goal. In such rare circumstances, CHAMP OFF-ROAD, may make a determination regarding the operation of the race, the eligibility of a competitor, or similar circumstance that



are NOT consistent with CHAMP OFF-ROAD rules, in order to achieve this goal. Such determinations are reviewable by CHAMP OFF-ROAD as contemplated above. All such determinations are subject to the finality rules stated above.

- Special Rules: Extraordinary circumstances or conditions regarding an event, member or competitor will necessitate the application of special rules as determined and applied by CHAMP OFF-ROAD. Such special rules must apply to the event and be properly published or announced prior to the event.

MEMBER OBLIGATIONS/AGREEMENTS/RELEASES

- General Agreements – By submitting an entry blank and/or participating in any activity related to a series event, a participant agrees to the following:
 - All rules set forth in the series rule book and its amendments are applicable and will be followed.
 - All decisions of series officials are final, non-appealable, and non-litigable
 - All participants voluntarily assume the risk of damage to the race vehicle, the driver, pit crew, or any other person and have no claim for said damages against the series, track owners, officials, agents, or employees of the series.
 - All participants assume full responsibility for any and all injuries sustained, including death and property damage, anytime they are in the racing areas or en-route to or from the racing areas.
 - All participants understand the risk of serious injury or death, which may result from racing, and that participants solely assume that risk when choosing to participate in a series event.
 - No participant may enter the racing areas (to include the hot pits) unless he/she has personally signed all required entry forms, waivers, release of liability forms, and pit permits applicable to the event.
- Advertising and Promotion Release – Each participant by entering a series sanctioned event, grants to the series and authorized agents and assigns a license to use and sub-license on an exclusive basis with regard to the products/services of the series sponsors, and otherwise a non-exclusive basis his/her name, likeness and
- performance, including photographs, images and sounds of the participant and/or any of the participant's race vehicles in any way, medium, or material for promoting, advertising, and publicizing any series sanctioned event or related telecast or programming. Each participant hereby relinquishes to the series in perpetuity all rights there to for such purposes.
- Telecast and Other Rights – Each participant, by entering a series sanctioned event, acknowledges that the series, and licensees and assigns, exclusively and in perpetuity own any and all rights to broadcast, transmit, film, tape, capture, overhear, photograph, collect, or record by any means, process, medium or device whether or not currently in existence, all images, sounds, and data arising from or during any series sanctioned event or the participant's performance in the event, and that, except for works created pursuant to the fair use doctrine or the series Media Access Policy, the series is and shall be the sole owner of any and all copyrights, intellectual property rights, and proprietary rights worldwide in and to these works and in to any other works, copyrightable or otherwise, created from the images, sounds, and data arising from or during any series event or the participant's performance in the event. Each participant agrees to take all steps reasonably necessary and all steps requested by the series, to protect, perfect or effectuate the series' ownership or interest in these rights. Each participant agrees not to take any action, nor



cause others to take any action, nor enter into any third-party agreement that would contravene, diminish, encroach, or infringe upon these rights.

- Substance Abuse – No series participant (Driver or crew member) may use or be under the influence of alcohol, drugs or any other controlled substance while competing. The Series reserves the right to require drug testing in order to assist its enforcement of the Series' no alcohol and no drugs policy. Decision on drug testing and disciplinary action (which may include, but is not limited to immediate ejection from an event, a fine of \$500.00, a 90-day suspension, and/or a denial of further entry to any series events is at the sole discretion of the Series.
- Substance Abuse – No series participant may use or be under the influence of any stimulants, depressants, or tranquilizers during an event. This includes but is not limited to alcohol, narcotics, etc.
- The series reserves the right to require drug and/or alcohol testing of any event participant.
- General Conduct – No series participant or team member is permitted to come into race control for any reason during the race event time. Any discussion or communication during a race weekend with the Competition Director may be done at the end of the race day at the Tech trailer.

LICENSES

- License Required: Any person who desires to participate in a series sanctioned event as a driver, crew member, or spotter must apply for, purchase, and receive a valid, current series license. No person will be allowed in the hot pit or spotter area without the proper license.
- Eligibility/Requirements: To secure a series driver's license, a person must:
 - Participants must be 14 years of age, unless specified by a specific classes' rules.
 - Age eligibility is determined for entry to a class as of the persons actual birthday. Maximum age eligibility or "Age Out" will be determined by using the persons age on **June 1st** of that season. The series will use the age as of that date for the entire season of racing.
 - Be approved by the series officials prior to competing. Drivers may be removed from competition, qualifying or testing any time at the sole discretion of the series.
 - If required by series officials, submit list of prior racing experience, pass driving ability tests and/or compete in specified number of regional events conducted by and at the discretion of series officials.
 - Be physically fit in the sole discretion of the series. The series reserves the right to require an applicant to pass a physical examination by a qualified physician at the applicant's expense.
 - Execute and deliver all authorizations, releases, applications, consents, waivers, and other documents as maybe required by the series.
- Application Process – Application forms must be fully executed, signed, and submitted to series headquarters accompanied by the requisite fee. Receipt of an application does not guarantee a license will be issued. Applicants will receive a license following series approval of their application. The series reserves the right to reject a license application for any reason.
- Minors – Any applicant legally considered a minor under the laws of his/her state must also submit a fully executed and signed minor's release. This release must be signed by the applicant's legal guardian.
- License Non-Transferable – A series driver's license is non-transferable. Any attempt to transfer, lend, or permit any other person to use any license shall result in a penalty imposed on the licensee and/or the driver that licensee is affiliated with. The series will not be responsible for any



damages arising in connection with such unauthorized use of a license.

- Suspension/Termination – The series may suspend or terminate a license in the interest of off road racing or the series.
 - The participant will not be obligated to a refund of any license fees submitted.
- Expiration – A license automatically expires on the last day of the calendar year in which it was issued.
- Ejection – A series official may eject a licensed participant from an event or from the racing premises to promote the orderly conduct of an event. An ejection is final and not appealable.
- Interim Review of Qualifications – The series may review the qualifications of a licensee at any time and may require the licensee to submit to additional physical exams, to pass additional driver tests, to submit a resume of experience, or take any other action that the series deems appropriate to determine whether the licensee continues to qualify for a license.

SANCTIONED EVENTS

- A CHAMP OFF-ROAD event is a racing venue that CHAMP OFF-ROAD has agreed to sanction in accordance with a fully executed Sanction Agreement with the events Promoter. The Sanction Agreement in effect, at the time of the event, cannot be canceled or rescinded by CHAMP OFF-ROAD or the Promoter except as provided in the Sanction Agreement.
- Only individuals holding a current and valid CHAMP OFF-ROAD license are eligible or authorized to participate in CHAMP OFF-ROAD sanctioned events.
- Any changes or additions to the event schedule relating to a race program including time trials, hot laps, press runs, practice and pre-race off-road racing contests must be approved by CHAMP OFF-ROAD Officials.
- The use of any stimulants, depressants or tranquilizers, including but not limited to alcoholic beverages, narcotics, and other controlled substances during an event is strictly prohibited. It is the sole responsibility of the promoter to provide sufficient security personnel at all time during an event to enforce this provision. Failure of the promoter to provide sufficient security personnel may result in the termination by CHAMP OFF-ROAD of the sanction and the refusal by CHAMP OFF-ROAD to approve future sanction applications.

SAFETY

- Responsibility – Off road racing is a dangerous sport. Each participant assumes the risk of bodily injury, death, or property damage when he/she participates in an event. Although safety is a concern, the series cannot be held responsible for the safety of participants.
- The series considers safety a top priority and works with competitors, track owners, manufacturers, and outside experts to exchange useful information regarding safety designs, products, practices, and procedures and to publish and amend rules to reflect the latest safety practices as needed. The series is not and does not claim to be an expert in safety standards, designs, practices, or procedures, nor is the series a standards organization or a designer, manufacturer, or seller of safety-related products, facility, or vehicle designs.
- All officials and participants are obligated to inspect the racing facilities, safety personnel, equipment, and



conditions at the track on a continuing basis throughout the event. Any inadequacy should be reported to senior series officials immediately.

- Participants are solely responsible for their own safety when performing duties as a driver, owner, or crew member and should carry out these duties in a way that ensures minimum amount of risk or injury to themselves and others.
- Neither the series nor the track owner will be responsible for the adequacy of a participant's race vehicle, equipment, or racing activity.
- Injury Reports – Any participant involved in an accident while on the racing premises must report to a series official before leaving the premises if able to do so, or as soon as the participant is physically able.

ENTRIES

- Entry Requirements – In order to compete in a series event, a participant must complete and submit an official entry blank for each event by the deadline specified. The series is not responsible for forms not received or filled out incorrectly.
- Entry Approval – Acceptance of any entry is at the discretion of the series. A participant is not eligible to compete until entry blank is received and approved by series headquarters regardless of fees submitted.
- Late Entries – In the event an entry is submitted after the specified deadline, the series may accept the late entry with a late registration fee.
- Refund Policy – All refunds must be requested through series headquarters within 14 days of the scheduled event. Once a vehicle enters the racecourse, whether in practice or competition, a refund can no longer be issued.
- Vehicle Eligibility – Only vehicles, parts, components, and equipment determined by series officials to meet the specifications set forth in the stated rules are eligible to compete in a series event. Determinations can be made at any time before, during, or after an event.
- No current pro driver in any short course off road race series may participate in a CHAMP OFF-ROAD sanctioned race, except for Pro Buggy drivers racing in the Super Buggy class.

RACE VEHICLE INSPECTION

- Time/Manner – All vehicles, parts, components, and equipment are subject to inspection by series officials at any time and in any manner. Decisions made in regards to the time or manner of inspection are final, non-appealable, and non-reviewable.
- Inspection Area – Only those persons permitted by series officials are allowed in the inspection area.
 - Technical Inspection area will be restricted to the driver and a maximum of 2 crew members in the Technical Inspection area at all times. Tech Director may allow additional team members to assist for advanced tear down in special circumstances.
 - Staging area will be restricted to the driver and 1 crew member at all times. Once vehicles have cleared pre tech no modifications / adjustments are allowed for any reason while in

staging or on the way to staging after leaving the tech area.

- Competitor Obligations – A participant must take whatever steps requested by series officials, including tear down of the vehicle to facilitate inspection. This may include but is not limited to installing inspection holes, inspection ports, and any other means of inspection deemed necessary. Any inspection that requires tear down or dismantling of any assembly to inspect components is the sole financial responsibility of the competitor and or team.
 - The series is not in any way financially responsible for any tear down or disassembly or reassembly of components to ensure rules compliance. In passing a vehicle through technical inspection, series does not warrant that vehicle's adherence to all rules. The participant is responsible for ensuring his/her vehicle is in compliance with all series rules at every event.
- Pre-Race Inspection – All vehicles must pass a technical inspection before entering the racetrack.
 - If a vehicle does not pass this inspection it will not be allowed to compete unless, in the opinion of the series official, the deficiency: will not adversely affect the race, cannot be corrected in time for qualifying for the race or it is insubstantial and does not warrant disqualification from the race.
 - If technical inspection is passed but a deficiency is noted on the inspection sheet, it must be corrected by the date and time specified or a penalty may be imposed.
 - All helmets and driver gear to be used during the weekend must be presented for pre-race inspection with vehicle. All gear must be clean.
- Post-Qualifying/Race Inspection – All vehicles must either be inspected or released from inspection by a series official at the conclusion of each race/qualifying session. If a vehicle leaves the inspection area without being cleared by a series official a penalty may be imposed. No one including Team members or drivers are permitted to “tamper” with the vehicle in any way in preparation for pre technical inspection or post technical inspection.
- Technical Penalties - Penalties imposed for technical infractions are final, non-appealable, and non-reviewable.
- Equipment/Parts Failing Inspection – The series can confiscate any illegal parts and/or equipment found during any inspection.
- Sealing/Impounding – The series has the right to seal or impound race vehicles or parts for inspection purposes.
- The series assumes no responsibility for those parts or vehicles.

RACE PROCEDURE

- Sportsman Classes Starting Position Determination- A driver may not attempt to enter more than one vehicle in hot laps or the race division event. CHAMP OFF-ROAD Officials will determine the starting positions at the first race of the year by a random draw. All drivers will be included in this draw. Each race event thereafter the drivers starting position will be determined by the total accumulation of points from all previous race events. Up to the first 12 (twelve) will be inverted. If a team goes to a backup car after practice or for the second round of an event, they will start in the rear. Any entrant who misses an event weekend will not be included in the inversion. Said competitor will start outside of the inversion for as many races as is needed to equal the number of races missed. If there is a tie in total accumulated points, the starting position will be determined by the driver with the highest points in the previous event. Any driver may request to start in the rear at any time as long as no competitive advantage is obtained. CHAMP OFF-ROAD Officials have the option of starting any driver in the rear when safety is a concern (driver



inexperience, etc.).

- Race vehicles that fail to enter and/or register before the closing of registration will be placed at the back of the field by CHAMP OFF-ROAD Official.
- All race vehicles awarded a starting position must pass CHAMP OFF-ROAD Technical Inspection. Failure to pass the inspection will be cause for a disqualification of the race vehicle from the Event. Prior to race time if the technical deficiencies can be corrected and pass technical inspection the race vehicle will be allowed to compete in the event.
- Race Start- Starting grid position with respect to spacing, both width and depth, will be established by CHAMP OFF-ROAD Official prior to each event. Drivers must wear a driver's wristband issued at registration. The Official Starter will check for the wristband on the start line
- No wristband, no race, no exceptions.
- Land rush starts will line up with the front row consisting of the top 12 (twelve) in points inverted. The second row will consist of 13th - 24th place in points in order. The third row will consist of all other vehicles in points order.
- Rolling start races will consist of a 12 (twelve) invert field lined up 2 by 2. The leader will start the race between the designated start cones.
- Finality – All decisions made by series officials involving race procedures are final and may not be appealed – subject only to review if one or more officials determine that a review is required. If a review determines that action is required, officials reserve the right to revise race results, impose penalties, and/or award or subtract points.
- Driver/Crew Responsibilities – The driver is ultimately responsible for the behavior and actions of all members of his/her team to include crew members, team owners, and spotters. Penalties can be imposed on drivers for actions taken by members of his/her team.
 - Drivers must check in and attend all driver meetings.
 - Drivers are considered late to Drivers meeting at the time his/her name is called at roll call. If a driver races in multiple classes, this applies to each class roll call.
 - After 10 minutes of being late you are considered not showing up to the meeting at all.
 - If a Driver is determined to be late for a Drivers meeting, he/she will be penalized by losing 2 positions for the start of that day's event after the inversion is drawn.
 - If a Driver fails to show up at any mandatory Drivers meeting, he/she will not be permitted to qualify and may be permitted to start at the back of the pack for that next scheduled race.
- Any post qualifying technical inspection violations will start behind any drivers meeting violation penalties.
- Drivers must be on time to compete in events as scheduled. Any driver or vehicle that is not ready to compete at the designated race time may be sent to the back of the field or be disqualified from the race completely at the discretion of series officials.
- An eligible driver may drive any qualified vehicle in any event. A rookie driver must have practiced in the vehicle before driving it in competition.
- A driver may not attempt to qualify more than one vehicle per race division.
- Starting Positions – Qualifying positions for the first event will be determined by random drawing. Drivers who do not draw or enter after the close of registration for an event will be placed at the back of the field.
- Race Start:
 - Starting grid position will be established by series prior to each event.
 - Race vehicles must be in the staging area thirty minutes prior to the beginning of the race.
 - All vehicles must be ready to race when entering the starting grid.

- Late vehicles may start after the green flag, only with permission from a series official.
- The penalty for making contact with the official pace truck is disqualification. This is not appealable. Passing the pace truck without permission will also result in a penalty.
- Scoring and timing of the race does not begin until the official starter waves the green flag. Any vehicle that does not maintain its designated position to that point may be repositioned and/or penalized by series officials at their discretion.
- Race Halt – The series officials may stop a race at any time the track is deemed unsuitable for racing. Under adverse conditions, a race may be called official after 50% of the laps have been completed, or if any race is halted due to exceeding the allowed time limit for that race of 30 minutes or at the race director’s discretion.
- When a race is halted prior to the completion of one lap, there shall be a complete restart in the original starting position.
- When a race is halted after the completion of one lap, vehicles will line up in the order in which they were running at the completion of the last full lap before the halt. If there is no restart, drivers will be scored and paid on the positions they would have held in a restart.
- When an event is halted due to rain or adverse circumstances prize money shall only be paid for the races completed. The series may reschedule the event to a mutually agreeable date. In that case, the incomplete races would be finished first, and original entries would start in the position they were halted in previously.
- When any event is halted before reaching half of the advertised laps to reach the half-way point no bonus point will be awarded for leading at the half way point.
- Race Start/Finish Line – The official race start line will be indicated at each event during pre-race driver’s meetings.
- The start line may be different from the finish line.
- Race Course Procedure:
 - A vehicle may be pulled from competition at any time if a series official feels it is a hazard to others.
 - Vehicles must race under their own power and in forward gears only.
 - If a vehicle gets off the designated race track, speed must be reduced significantly and the vehicle must merge back into the line safely without gaining time or position.
- Yellow Flag - Caution Procedures:
 - In a caution where no penalty is imposed Any vehicles charged with the caution may be put to the back of the pack.
 - In any caution where a penalty is imposed to a driver at fault for the caution, any other involved vehicles may be given their position in the field back or be placed at the back of the pack at the discretion of the race director.
- Any competitor that has gone one or more laps down must use additional courtesy to the vehicles still on the lead lap. Any competitor attempting to pass the leader(s) to get back on the lead lap must make the passes with very limited or no contact at all. Any contact by the vehicle attempting to pass the leader(s) may be deemed as aggressive driving and result in applicable penalties as deemed necessary by series officials.
- Contact that results in the retirement of any of the vehicles being passed by the lapped competitor may result in severe penalty which may include disqualification and or other penalties at the sole

discretion of series officials.

- A race vehicle that has a tire that is starting to delaminate or come apart in anyway must reduce speed below 30 mph and enter the hot pit and change that tire within one lap, that race vehicle may only pass the flag stand one time in this condition. A race vehicle that continues to throw any debris or parts from their vehicle and or does not comply with the rules above may be disqualified from the race.
- Competition Rules Definitions:
 - Track Limits – the track limit or designated race track is determined by the series as the only area that can be raced on, usually laid out between two or more of the following items, K-rail, fencing, banners, bright colored cones, dirt wall or dirt furrow, sometimes referred to as the racing surface.
 - Competitive racing surface - defined as the area within the track limit that a race competitive speed can be maintained. One example would be, a turn may have a track limit of 80 feet wide but late in the race the competitive racing surface may only be about 40 feet wide, because the dirt beyond the cushion becomes too deep or too soft that a competitive speed cannot be maintained.
 - Cushion – the inside edge of loose dirt that gets pushed and or built up, usually to the outside of a turn.
 - Heavy contact – when one race vehicle contacts another race vehicle with enough momentum and or force, that the other race vehicle is significantly displaced from its current position, path, trajectory and or significantly breaks its momentum.
 - Light contact - when one race vehicle contacts another race vehicle with very low momentum and or force, as not to significantly displace the other race vehicle from its current position, path, trajectory and or significantly breaks its momentum.
 - Defensive move – a race vehicle intentionally moving left or right in order to block or reduce the momentum of another race vehicle.
 - Incidental contact - contact that is believed to be unplanned or unintended, sometimes in conjunction with something else. One example would be but not limited to, two race vehicles racing side by side through a turn, the vehicle on the inside hooks a rut that puts it up on two wheels and instinctively turns outward in order to regain control, in the process of doing so it contacts the vehicle on the outside of the turn.
 - Holding your line – a race vehicle maintaining its course, path or trajectory. (Following the arc or radius of a turn within the track limits).
 - Not holding your line – a race vehicle not maintaining its course, path or trajectory.
 - Aggressive Driving – being at the limit of light contact, multiple light contacts within the same race, the appearance of not being in control and or putting others at unnecessary risk.
- Competition Rules: A competitor may receive a penalty for any of the following listed below.
 - ***If any of the following is believed to be incidental contact, there must be no call (no penalty).
 - ***If two or more race vehicles are involved in an incident and all involved are equally at fault there will be no call, unless all involved are deemed to be overly aggressive or unsafe, then all involved will receive the same penalty.
 - Any contact on the approach to a jump that result in a race vehicle leaving the jump in an unsafe manner.
 - Heavy contact.
 - Light contact that is maintained: both parties must try to detach or break contact immediately.

- When one race vehicle forces another race vehicle outside of, or off the competitive racing surface.
- If a race vehicle makes more than one consecutive defensive move:
 - A race vehicle may make one defensive move, only if the lead vehicle has a clear track in the direction of the move. If the track is not clear, a race vehicle may move over but must avoid contact and must leave space on the competitive racing surface for the other race vehicle to continue racing.
- If a race vehicle makes heavy contact or fails to leave room on the competitive racing surface while making a defensive move.
- If a black flag (penalty) is given in the last two laps of a race, that race vehicle will be scored in last position of the last lap that it completes. If the penalized contact or act results in another race vehicle losing positions or not finish the race, an additional penalty will also be extend to one or more of the following, a points loss, fine, and or next race starting position penalty.
- Driving through another race vehicle:
 - An example would be, if a race vehicle leading another race vehicle has changed its trajectory and or over rotated in front of another race vehicle, the oncoming vehicle must reduce speed and try to avoid contact, (on the brakes and off the gas). If contact is unavoidable (incidental) you may not attempt or continue to push that race vehicle, even if it may result in the loss of position.
 - Not reducing speed when a spin, crash or other unnatural or possible unsafe incident is happening in front of your race vehicle.
 - If there is ANY contact made at any time other than under green flag (racing) conditions.
 - If more than one warning for the same offence is given during the same race to the same race vehicle.
 - If more than one wheel is over or outside of the track limit and an advantage or position is gained.
 - Not holding your line when the track is not clear to do so. (When there is a race vehicle within the length of another race vehicle, each race vehicle must hold its line)
 - Aggressive Driving.
 - Official Competition – All races will run until the checkered flag is shown to the leader.
- Hot Pit Procedures:
 - Hot pit speed limit is 30 MPH.
 - Race vehicles may not be pushed onto the race track from the hot pit area. Vehicles may be started by hand pushing in the hot pit area, but may not be pushed past the flagman at the track entrance.
 - All equipment used to service the race vehicle must be removed from the vehicle before entering the race track and must be returned to the equipment side of the pit wall immediately following the pit stop.
 - Lug nuts must be fully tightened before the race vehicle leaves the pit area. Vehicles will return to pit area for inspection if series officials detect a violation of this rule.
 - All major repairs must be done behind the pit wall.
 - Only one jack may be used for tire changes. The same jack must be used when changing tires on both sides of the vehicle during a pit stop. A second jack may only be used in the event that a vehicle falls off the first jack, in order to facilitate the use of the first jack.
 - Air supply tanks and pressure regulators for all air equipment must remain on the equipment side of the pit wall.
 - There is no fueling in the hot pits.
 - During a pit stop, one crew member must stand at the front of the vehicle in the driver's



- direct view for the duration of the stop. The vehicle may not leave the pit until that crew member sees that all work is completed and signals that it is safe to proceed.
- No more than five crew members may be over the hot pit wall during their division race.
 - Long pants and closed toe shoes must be worn in the hot pits and racetrack area at all times.
 - Correct Crew member credentials or valid series driver license is required for access to the hot pits.
- Team Spotters- All teams in all divisions are required to have one spotter per race vehicle, in the series designated area any time the race vehicle is on the racetrack.
 - Spotter must check in with the series official in the designated spotter area before the start of the race and must remain in the area as long as his/her vehicle is on the track.
 - Spotters must have 2 working radios consisting of 1 working “listen only” radio and headset with the ability to hear the competition director as well as 1 two-way radio to communicate directly with the driver in the race vehicle.
 - Drivers may be penalized for inappropriate spotter behavior.
 - Spotters must have vehicle numbers marked clearly on front and back of person so as to be easily visible to series officials. Numbers must be black on a white background with a minimum size of 2 inches by 3 inches.
 - Spotters for rookie drivers must have yellow stripes on headset on both sides of race car number.

FLAG SPECIFIC RULES

- Green Flag (Start/Restart) – All race vehicles must remain in appropriate positions until the race is started as outlined below signifying the start or restart of the race.
- Each race track will have a designated start box marked by start line and designated end of start area line (the start box). ON any start or re-start the pole sitter will start the race on his/her discretion upon entry of the start box and before leaving the start box area.
- No competitors are permitted to start the race until the pole sitter starts or penalties may be applied.
- It is the responsibility of the pole sitter to maintain a consistent pace to the start area and will not be permitted to “brake check” or slow speed as set by the pace truck or about 25 MPH before entering the start box. Failure to comply may result in a penalty to the pole sitter, including losing positions.
- If the pole sitter does not start the race before leaving the start box area all competitors are free to start at will regardless of the pole sitter actions.
- In the event of a caution on a start or restart before a single lap is completed the following will apply:
 - In the event of a full caution before one lap is completed, we will have a full restart.
 - If a single vehicle caused the incident alone, he/she will be placed at the back of the pack for the restart.
 - The field will be re-gathered based on the starting position from that start attempt. If some vehicles are damaged and will not continue those positions will be vacated and left open in the field. If a full row is vacated the next row may move forward to remove the gap in the field.
 - Only one attempt will be made at a restart. If the restart attempt fails and we have a second caution before that lap is completed, we will go to single file restart at that time.

- Any vehicle that enters the hot pit area in this process will go to the back of the pack for the restart. If multiple vehicles enter the hot pit or leave the track, they will be lined up at the back of the pack based on the previous start position in that order.
- In the event of a complete restart, all vehicles that took the first green flag will be awarded the appropriate finishing position based on the position in the field. Starting grid position settles any multiple vehicle issues in the same location on the track.
- Blue Flag with Diagonal Yellow Stripe (Passing Flag) – Race vehicles given this flag must prepare to yield to overtaking traffic.
- Yellow Flag (Caution) – Race vehicle must immediately slow to 30 miles per hour or other speed indicated by series officials. No passing is allowed under a yellow flag. In-car light activation is to be treated the same as seeing the yellow flag displayed. A call on the Raceceiver by the Race Director of Yellow is to be treated the same as seeing the yellow flag displayed.
 - Stationary yellow flag indicates a full course caution situation. Lap counting will cease during a full course caution. The activation of the in-car yellow caution light will be treated the same as seeing a stationary yellow flag.
 - Penalties will be imposed for vehicles not abiding the yellow flag. Violators will be notified by receipt of a black flag at the finish line. Continued participation in the race after the black flag for this offense may result in disqualification of the vehicle. This is not an appealable disqualification.
 - Only series safety personnel will attend to race vehicles and drivers involved in caution incidents. Series officials may request assistance from trained crew members as needed, but other than that crewmembers may not enter the racetrack to assist their vehicles.
 - Vehicles will be placed at the back of the pack when a caution is called, and the driver is charged with the caution. Multiple vehicles may be charged with a caution.
- Red Flag (Race Stop) – Race vehicle must stop in a safe matter immediately, regardless of your scored position on track. In-car light activation is to be treated the same as seeing a red flag displayed.
 - Failure to obey the red flag will result in disqualification. This is not an appealable disqualification.
 - Repairs, refueling, or service of any nature is not allowed during a red flag. If a vehicle is in the hot pits being serviced, all work must stop immediately when the red flag is displayed, and nothing can be continued until the flag is withdrawn and the race is restarted.
 - Red and yellow flags together designate a complete restart before one lap has been completed. Damaged vehicles may go to the hot pit area for repairs and restart the race in their original position only if they are able to return before the restart of the race. Timing on the restart is at the discretion of series officials.
- Black Flag (Penalty) – Race vehicle must report to penalty area and remain until released by a series official. This flag will be displayed at the finish line only.
 - The black flag may be displayed for rough driving, an unsafe vehicle, failure to acknowledge other flags, failure to adhere to series rules or directives, and other offenses at the discretion of series officials.
 - After a black flag is displayed to the driver for three consecutive laps with no penalty served, scoring of the vehicle will be discontinued for the remainder of the race.
 - If a driver receives a black flag during the final two laps and does not serve the penalty, series officials may drop the finishing position of the vehicle, deduct championship points, or both.
 - Any black flag penalty shall put the offending Drivers' vehicle to the back of the pack.

- Series officials will place vehicle back on track after penalty is served.
- Any competitor receiving a 2nd black flag penalty in the same race will not be allowed to continue.
 - White Flag (One Lap to Go) – Display of the white flag at the finish line means the leader has started his/her last lap.
 - No race vehicle may receive any assistance after the white flag has been shown with the exception of those making regular pit stops.
 - In the event a caution is required on the white flag lap the field will be lined up based on the last completed green flag lap and the last lap will be run to complete the race. Any vehicle entering the hot pit will be placed at the back of the pack.
 - Checkered Flag (End of Race) – display of the checkered flag at the finish line means the race is completed. All vehicles must go to the designated finish area and remain there until released by a series official.
 - When the checkered flag is displayed to the leader, the balance of the field receives the checkered flag in the same lap. Finishing position will be awarded according to most laps completed in the allocated amount of time, whether the vehicle is still running or not.
 - In the event of a caution on the last lap after the leader and or other competitors have crossed the line and taken the checkered flag, any competitors that cross the line will be scored with the appropriate position as crossed before the caution came out. All other competitors that have not crossed the line before the caution comes out will be scored with position from the last completed green flag lap or based on the last restart if the prior lap was not run under green condition.
 - In the event of an exact tie at the finish line the tie will be broken by looking back to the driver with the higher position for the previous lap.

TIMING AND SCORING

- Official Scoring – All decisions of the designated series official scorer for an event are final unless a recheck has been requested by a driver or a series official.
- Scoring Re-Check Procedures – A participant must submit a request for a scoring re-check in person within twenty minutes after the declaration of finishing positions has been made by series officials. Results are not considered official until any requested re-checks have been concluded. Any recheck request must be accompanied by a \$100.00 deposit. If an error is found, the deposit will be refunded. If no error is found, the deposit is forfeited.

VIOLATIONS AND DISCIPLINARY ACTIONS

- General Procedure – If it comes to the attention of series officials that a participant has violated a series rule or has acted in a manner that is detrimental to off road racing or to the series, and the act warrants a penalty, the member will be notified by series officials of the violation, the circumstances involved, and the penalty imposed.
- Emergency Action – The series reserves the right to take temporary emergency action against a participant in the event that he/she acts in a manner that can be considered a threat to the orderly conduct of an event. Such action may include ejection from premises, suspension of license, or any other action designed to remove the threat created. Consumption of alcohol or drugs before or during an event, fighting, inappropriate driving, and failure to obey the black flag or other

directive of a series official are examples of conduct that would warrant emergency action.

- Payment of Fines – Fines shall be paid to the series headquarters promptly after receipt of penalty notice. Teams with outstanding fines will not be permitted to compete in future events. All unpaid fines can be collected by deduction from winnings. Any fines left unpaid at the end of the season will be grounds for refusal of a series license for the next year.
- General Scope of Penalties – Penalties for violation of series rules are determined by the severity of the violations and the effect on fairness of competition, the orderly conduct of the event, and the interests of off-road racing and the series. Penalties may include, but are not limited to: disqualification, probation, license suspension, fines, or loss of points.
- Unsportsmanlike Conduct – Any participant found by series officials to be engaging in unsportsmanlike behavior or any inappropriate behavior that affects the orderly conduct of an event, the interests of off-road racing, or the series will receive a penalty. This includes any aggressive action toward a series official by participant including arguing, yelling or raising your voice when talking to an official, or touching the official in any physical way. Drivers are solely responsible for the actions of all team members at all times and in the event that a team member shows Unsportsmanlike Conduct, series officials may penalize the driver for the actions of the team member in addition to any penalty to the team member for his / her actions.
- Repeat offenses- Any participant found by series officials to be engaged in any repeat offense of any technical violation or any other action that causes the series officials to impose any penalty to the driver or team will see the penalty more than double on the second offense for the same action or violation. In the event that any participant is found repeating any offense for a third time the participant may be removed from the event and put on suspension solely at the discretion of the series Competition Director.
- Physical Altercations – Any competitor or team member involved in a personal confrontation where one person touches another with intent of physical harm to the other will be placed on indefinite probation and the Series may impose additional disciplinary sanctions given the severity of the offense.
- Vehicular Acts of Aggression - In the event that series officials deem that a Driver committed premeditated intentional acts of aggression with their vehicle toward another driver's vehicle at any time during the event will be placed on indefinite probation and will receive a disqualification from that event. Any driver that is involved in a subsequent offense of premeditated acts of aggression with their vehicle toward another driver's vehicle will be subject to review by the executive management of the series and may carry further extreme penalty which can include suspension and or permanent suspension and expulsion from the series. Any driver using their vehicle and attempting to cause another driver bodily harm or cause substantial equipment damage will be disqualified and removed from the property immediately for the remainder of the event and will be subject to further penalties, fines, and the series will exercise the right to allow the local authorities deal with the situation within all limits of the law.

PROTEST

- ***The series reserves the right to refuse any and all protests.***
- General Procedure- If a CHAMP OFF-ROAD Member who is a Competitor believes that another Competitor has or will obtain a significant unfair competitive advantage by some action that the member believes is in violation of the CHAMP OFF-ROAD Rules, the member may protest such action to a CHAMP OFF-ROAD Official. The protest must be made in writing by the Competitor or his or her crew chief, or race vehicle owner if the Competitor is a driver and is on the race track,



within twenty (20) minutes after the checkered flag is displayed signifying the completion of the race. Protest forms signed by more than one competitor will not be accepted. A protest fee shall accompany each separate protest. The CHAMP OFF-ROAD Official shall decide whether the matter is a viable protest, and if so, shall decide the protest as promptly as possible, and shall inform the parties to the protest of the decision. A decision that the matter is not a viable protest is final and cannot be appealed. In deciding the protest, the CHAMP OFF-ROAD Official may take whatever action deemed appropriate to further the interest of fairness and finality in competition results. Such action includes, but is not limited to, revising the Official race results, imposing penalties (disqualifications, suspensions or fines), awarding or subtracting points, or taking no action. In no case, except cases stated in this section, is video allowed as evidence in the protest process. If either of the parties does not accept the decision of the CHAMP OFF-ROAD Official, that Official, along with the race report, shall forward the written protest, all affected purse monies, and the protest fee to CHAMP OFF-ROAD Headquarters.

- Non-viable Protest Subjects or Matters- Protests will not be accepted that are directed at a decision of a CHAMP OFF-ROAD Official on any matter or subject unless specifically provided for in the CHAMP OFF-ROAD Rule Book.
- Official Competition Review- CHAMP OFF-ROAD Officials will utilize available resources as a means of controlling rough driving and other competition infractions. All CHAMP OFF-ROAD video will be used to reach a just and timely resolution to a disputed call as well as a call that may have been missed.
 1. Incidents must have been seen by a CHAMP OFF-ROAD Official or track worker. A request from a competitor to initiate an Official review will not be accepted. This would fall under a Competition Review Protest; see below.
 2. An Official review will include but not be limited to:
 - A. An incident that was not seen clearly enough at the time to make a call.
 - B. A call that was communicated incorrectly to race control.
 - C. A call that was made and later thought to be in error.
 3. CHAMP OFF-ROAD Officials will make every attempt to resolve all issues on race day but reserves the right to do so at a later date.
- Competition Review Protest- Members will be able to protest a call or non-call by filing a written protest form available at CHAMP OFF-ROAD Tech accompanied by a \$500 Sportsman protest fee. The party losing the protest shall pay all cost incurred by CHAMP OFF-ROAD in connection with the protest. If the protest is sustained, the protest fee will be returned to the protesting member. If the protest is not sustained, the protest fee will be forfeited to CHAMP OFF-ROAD, and the other party to the protest shall be compensated for an amount not to exceed \$200.00 for any cost incurred in connection with the protest, such amount to be paid from the protest fee. Any available video can be used, and witnesses will be heard in a private, closed session with competitors and CHAMP OFF-ROAD Officials only. No media. No sponsors. No third parties. All competitors involved will be given a chance to review all video and make a statement. If a call is proven to be made in error or was missed, an attempt will be made to adjust championship points as needed. Only in the most severe cases will a position, suspension, disqualification or fine take place. There will always be some incidental contact made during a race, only the most severe infractions should be reviewed. This system is not intended for and shall not be used to critique the entire race. There is no competitor review board or appeals board. CHAMP OFF-ROAD Officials will ultimately make the final decision and impose penalties. CHAMP OFF-ROAD decision is final, cannot be appealed, further contested or litigated.
 1. Competition Review Items are:
 - A. Rough driving.



- B. Passing under the yellow caution status
 - C. Course cutting
 - D. Driving too fast on or off the racecourse (under yellow, pits, hot pit lane, etc.)
 - E. Un-sportsman like conduct
- CHAMP OFF-ROAD reserves the right to adjust these procedures as needed to guarantee a fair, consistent and timely outcome.

PRIZE & PURSE MONEY

- Teams are required to display the current CHAMP OFF-ROAD and MORR official uniform patch and vehicle decal. Failure to do so will result in the forfeiture of all awards and prize moneys.
- The driver who starts the race will be considered the driver of record for that race. Unless CHAMP OFF-ROAD Headquarters are otherwise notified in writing by the vehicle owner, all checks will be paid to the driver of record.
- Unless otherwise authorized by CHAMP OFF-ROAD, the cash race purse will be established by CHAMP OFF-ROAD for all race divisions.
- All events shall be contested for a guaranteed finishing position purse as set forth in the entry form or the payoff schedule, whichever is applicable.
- CHAMP OFF-ROAD Members agree to abide by decisions of CHAMP OFF-ROAD in establishing the amount of prize money for each Event.
- CHAMP OFF-ROAD competitors are entitled to see entry form, programs of events and prize money distribution before any race or contest.
- CHAMP OFF-ROAD members who compete in any race are entitled to inspect the completed copy of the Official pay back for the race in which they competed.
- In the event of a protest and/or subsequent appeal, filed in accordance with the current CHAMP OFF-ROAD Rule Book, prize money may be withheld. This might include only the parties involved in the protest or could include the entire class. After the protest and/or appeal is resolved, prize money will be distributed immediately.
- In the event of disqualification from an event, a driver must return any prizes or trophies won during that event to the CHAMP OFF-ROAD for redistribution. If a driver refuses to return the prizes/trophies, they will be suspended from participating in CHAMP OFF-ROAD events until the items are returned.

POINTS & POINTS FUND

- Sportsman Division series point's funds will be established by CHAMP OFF-ROAD. The CHAMP OFF-ROAD championship point season will begin with the first CHAMP OFF-ROAD sanctioned event and conclude with the last CHAMP OFF-ROAD sanctioned event, unless otherwise authorized or stated by CHAMP OFF-ROAD. CHAMP OFF-ROAD reserves the right to establish, maintain, compile, publish, and otherwise operate and award points, point funds, and trophies through the rules and regulations of CHAMP OFF-ROAD. All CHAMP OFF-ROAD license holders agree to abide by decisions of CHAMP OFF-ROAD Officials in establishing and administering the point's fund.
- Points will be awarded for official finishing positions only.
- To be eligible to receive points the driver and race vehicle must take the green flag and start the race. A driver cannot receive points for more than one race vehicle in the race.



- In the event that a driver is unable to compete due to an injury or other special circumstance, another series licensed driver may act as a substitute driver. The points attribute to the car, not the chosen driver. This driver substitution can only be done with prior approval from the series Competition Director for one two-race weekend in a season and must be approved by the series competition director in advance of the event.
- Team drivers are allowed and must be signed up prior to each weekend’s entry. Co-drivers must specify which day they will drive.
- All drivers must officially register with CHAMP OFF-ROAD Administration during posted registration hours at each event. Sportsman Division team drivers must officially declare to CHAMP OFF-ROAD Administration which driver will be racing each event.
- All entrants who pass inspection but fail to take the green flag will not be awarded championship or event points.
- All racing events count toward the Sportsman championship points as there will be no “throw out” rounds. If an event is missed, competitor receives no points.
- An event is defined as two consecutive rounds of racing held at the same facility. The driver will receive credit for participation if their vehicle is damaged in the first round of the event weekend and is unable to compete in the second round of the event weekend however if a driver scratches both days it will score the same as a missed round.
- In case of a tie for first place in year-end points, the tie will be broken by using the greatest number of first place finishes. If a tie still exists, seconds, thirds, etc. will be considered until the tie is broken. If a tie still exists, the driver establishing the first victory of the season will prevail. Any ties for second place and lower there is no tiebreaker and those drivers affected will share equally the combined total of the tied positions.
- Points fund money will be awarded at the annual MORR “Night of Champions” Awards Banquet.
- To be eligible to receive points fund money, entrants (and/or their co-driver(s)) must participate in all series point events during that season.
- Eligibility to participate in the points fund may be forfeited by any member violating CHAMP OFF-ROAD rules and regulations prior to the presentation of the awards at the Awards Banquet.
- Even though an unofficial points championship may be declared before the last race of the season the points championship is not declared official until after the last race. Points or other penalties could affect the final outcome.
- Sportsman Championship Points will be awarded for finishes in the following order:

Position	Points	Position	Points	Position	Points
#1	50	#10	32	#19	14
#2	48	#11	30	#20	12
#3	46	#12	28	#21	10
#4	44	#13	26	#22	8
#5	42	#14	24	#23	6
#6	40	#15	22	#24	4
#7	38	#16	20	#25	2
#8	36	#17	18	#26 or less	1
#9	34	#18	16		

- A vehicle that leaves the starting line under power but does not complete a lap, or cross the starting line at some tracks, will be awarded last place points. If multiple vehicles fit these criteria, points will be awarded in accordance with starting positions. Last place will be determined by the number of vehicles leaving the starting line. For example: If there are 12 vehicles that leave the



starting under their own power, last place will be position 12.

- When races include a Competition Yellow, 2 points will be awarded to the leader at this point, and 1 point to second place.
- CHAMP OFF-ROAD reserves the right to amend the aforementioned procedural rules in the interest of fair competition, safety and the overall best interest of the sport of off-road racing.

Safety Standards

(These Safety Standards only apply to MORR Sportsman Classes and not Champ Classes)

- These Safety Standards will apply to all classes.
- All Safety Standards are intended to meet the minimum safety requirements to afford the race classes a safe and competitive event. Any modification of or addition to the Safety Standards is prohibited, unless changed by the proper method of notification by the CHAMP OFF-ROAD Technical Director.
- Any deviation from the Safety Standards will result in disqualification from the event or the series.

GENERAL SAFETY

- No passenger is allowed in or on the race vehicle at any time the vehicle is in motion.
- The event promoter will have safety and emergency equipment on the premises prior to the start of any event.
- No race vehicle will be allowed on the track until the track has been opened for official practice.
- No driver will compete in any race with their head or arm extended outside of the closed body race vehicle.
- Additions to race vehicle bodies, such as fins, scoops, wings or other extruding additions will not be allowed in competition except as allowed in Combined Class Rules.
- Interior of vehicle must be completely enclosed from front to rear with at least .032" material.
- The floor area on the right side of the seat may be raised to the top of drive shaft tunnel and extend to the right door bar. It is permissible to angle the right-side floor panel from the drive shaft tunnel to the top of the door bar and seal off below the window opening.
- Vehicles must be equipped with a complete set of bumpers. Bumpers must be approved by Series.

DRIVER/OPERATOR

- Each race vehicle is allowed only one driver.
- Co-drivers are not allowed.

DRIVER APPAREL

- One-piece driver suits are required. The suits must cover from the neck to the ankles and to the wrists. All suits must have the SFI label attached and meet SFI Spec 3-2A/3 or FIA 8856-2000.



- Drivers must wear gloves and driving shoes that meet SFI Spec 3.3/5 or higher and have the SFI label attached.
- Gloves may not be modified or have any holes in them. If at any time any official notices a driver missing a glove, or having a glove with holes or fingers cut out, the driver will be black flagged from the track immediately and it will be the sole discretion of the competition director if the driver will be allowed to re-join the race or if they will be parked for the duration.
- Drivers must wear full length socks of fire-retardant material at all times.
- Drivers must use a full helmet skirt made of fire-retardant material or approved fire-retardant head sock at all times.
- All driver apparel must be clean, in good condition, and free from rips or worn areas.
- The designated series patch will be attached to the suit on the upper front right breast area, no more than six inches from the top of driver's shoulder. No other racing sanctioning body patches or decals are to be worn on the suit. The series patch must be sewn on to suit with thread.

HELMET

- Classes must use head and neck restraints such as Hutchens or D-Cell devices or any restraint meeting SFI Specification 38.1.
- ALL head and neck restraints must meet SFI Specifications.
- Full face helmets with a Lexan shield are required. No motocross helmets, no open-faced helmets.
- Helmets must be certified to a minimum one or more of the following standards:
 - Snell Memorial Foundation guidelines and have a minimum requirement of the current rating or one prior rating only. Certification information may be found at the following website <http://www.smf.org/stds>.
 - SA 2010/ SA 2015 Snell / SFI Spec 31.1/2010 of higher designation with a legible SFI sticker attached. As of January 1, 2021 SA 2010 will no longer be legal.

EYE PROTECTION

- It is required that drivers wear eye protection in the form of shields.

SEAT BELTS/SAFETY HARNESS

- Seat belts must meet SFI Specification 16.1 or 16.5.
- Seat belts must be replaced every two years from the date of manufacturer, Expiration date is on the SFI label.
- Seat belts may be rejected by Series Technical Director if belts are frayed, oily or in any way considered unsafe.
- Seat belts must be worn in such a manner that they pass around the pelvic area.
- Seat belts must not be worn over the area of the stomach and abdomen.
- Belts passing through or over the seat must be protected by grommets or rolled edges.
- Both ends of the lap belt must be fastened securely to the roll bar cage as specified by the belt manufacturer.
- Shoulder harness belts must meet SFI Specification 16.1 or 16.5.



- Harness belts must be replaced every two years from the date of manufacturer. Expiration date is on the SFI label.
- Y-type shoulder harness belts are not allowed.
- Shoulder belts must be 2" minimum width and SFI approved and labeled 16.1 or 16.5.
- Harness belts must attach directly to a strong structural member of the chassis close behind the driver's neck.
- At the point of attachment belts should be four to six inches apart and two to four inches below the driver's shoulders.
- Harness belts must be secured behind the driver's shoulders so they are prevented from sliding sidewise more than one inch in either direction.
- Five or six-point crotch belts connected to the main belt quick release and securely attached to the chassis are mandatory.

SEATS

- Only manufactured race seats are allowed.
- Aluminum or carbon fiber seats are recommended.
- Custom manufactured aluminum seats must be approved by Series Officials.
- The seat must be mounted in a minimum of four positions with a minimum 3/8 inch steel grade 8 bolt and nut.
- Each mounting hole in the seat must have a large area washer with a minimum O.D. of two inches.
- All seats, rib protectors, leg extensions and head- rests must be padded.
- Sportsman truck classes must have a ¼ inch metal protective shield covering the back and bottom of the seat.
- Round steel seamless aircraft 4130 tubing or D.O.M. tubing is mandatory for the basic roll cage, and must be Series approved.

GLASS

- All stock production glass must be removed from race vehicles.

SIDE WINDOW NET

- Window nets must meet SFI Specifications 27.1.
- The window net must fill the entire left side window opening of the race vehicle with no more than 1 inch gap for access to the drivers.
- All window net mounts must be welded to the roll cage.
- The window net, when in the closed position, must fit tight and be secured with a quick release safety latch.
- Velcro is not allowed.

HEADLIGHTS/PARKING LIGHTS /GRILL ASSEMBLY

- Headlight and parking light openings must be covered.
- Headlight and parking light decals allowed.



- Single section grill pieces, which have been approved by CHAMP OFF-ROAD Technical Director, may be used in place of factory production grills.
- The single section grill piece must fit the required template.
- Single section grills must maintain stock appearance of vehicle representing.

REAR VIEW MIRROR

- Rear view mirrors are allowed.

FIREWALL

- Both the engine and fuel cell must be separated, and sealed, from the driver's compartment by a metal firewall.
- Material thickness minimums:
 - Aluminum: 0.040"
 - Steel: 20 gauge or 0.035"

DOOR

- Door panels must retain all factory-molded contours and accent lines.
- Operating doors must have a positive latching system, stock handles and latches are allowed.
- Secondary latching systems are required on all operating doors.
- Standard production or after-market approved doors may be used.

FIRE PROTECTION CONTROL

- It is mandatory that each race vehicle have, within the driver's reach, a portable UL approved dial equipped fire extinguisher; not less than 2.5 lbs, AVC rated dry chemical or Halon 1211 or equivalent.
- Fire extinguishers must be fully charged and mounted very securely with a quick-release system within easy reach of the driver.
- It is mandatory that all entrants have in their pit area and as part of their equipment a fully charged dry chemical ABC fire extinguisher of 10-pound capacity or larger.
- Sportsman race trucks must have a remote on-board fire suppression system, piped to the engine transmission compartments. (5-pound minimum system). It is recommended that additional nozzle/s be installed in the driver's compartment.
- Sportsman vehicles must have a clearly marked "fire door" in the sheet metal covering the engine/transmission area. The door must be easily opened without tools and accessible through the passenger side window. The minimum opening size is 40 square inches.

BATTERIES

- Lead acid batteries must be inside a non-corrosive container and securely mounted to the chassis.



- Gel cell batteries are recommended.
- Positive battery terminals must be protected to prevent any possibility of contact with a grounded part of the vehicle.

MEDICAL ATTENTION

- If competitor requires medical attention, by track or other medical teams, the attending medical technician must approve the competitors return to competition.
- Failure to comply with advice of the medical technician will result in disqualification from competition for the balance of the event. Competition Director will administer this procedure.
- If a driver loses consciousness at anytime during an event, the driver cannot compete for at least seven days and must be cleared to resume motorsports competition, in writing, by a qualified physician.
- Any member involved in an injury accident while on the event premises must report the accident to an Official before leaving the premises.
- If the injured member is unable to make a report, a representative of the member must inform Officials immediately.

QUALITY OF WORKMANSHIP

- All aspects of race vehicle construction and workmanship must meet with the Technical Directors approval.

FUELING OF RACE VEHICLE

- No fuel may be added to race vehicles in staging or on the starting line prior to a race or practice. Race Stewards may exempt this rule for unusual circumstances.

NOTE: UNAUTHORIZED TRANSPORTING OF FUEL IS DEEMED A SAFETY HAZARD AND MAY VIOLATE FEDERAL D.O.T. AND STATES STATUTES.



MORR Combined Class Rules (CCR)

- The Combined Class Rules will apply to all Sportsman race classes.
- Any modification of or addition to the CCR is prohibited, unless changed by the proper method of notification by the series officials.
- Any specific class rules in the following sections will amend or supersede this section.

APPROVED MAKES OF COMPETITION

- The following truck manufacturers are considered eligible and approved for competition in CHAMP OFF-ROAD race events: Chevrolet, Toyota, Mazda, Jeep, Ford, Nissan, and Dodge.

ROLL BARS/ ROLL CAGE

- Round steel seamless aircraft 4130 or D.O.M. tubing is compulsory for the basic roll cage construction and must be CHAMP OFF-ROAD approved.
- Aluminum and/or other composite soft metals are not allowable. All roll cage construction must be welded.
- Minimum tubing diameter for all Buggy Classes is 1-1/2" diameter by 0.095" wall thickness. If anything, other than this is used for the bottom frame rail you must have prior written permission from Sportsman Tech Director.
- The minimum tubing diameter and thickness for vehicles weighing up to 3,000 lbs. is 1-1/2" diameter by 0.120" wall thickness.
- The minimum tubing diameter and thickness for vehicles weighing up to 5,000 lbs. is 1-3/4" diameter by 0.120" wall thickness.
- The minimum tubing diameter and thickness for vehicles weighing over 5,000 lbs. is 2" diameter by 0.120" wall thickness.
- Gussets are required on all intersections in the driving compartment as well as the bars that attach to the rear of the main roll bar behind the driver. Gussets must be of the same material and thickness as the roll cage and be within 3" of intersection.
- Diagonals or similar bracing are mandatory for all vehicle roof openings as well as front and rear roll bar hoops.
- All vehicles must have three horizontal door bars per side.
- All truck classes must have a 0.250" thick aluminum or 0.125" thick steel plate securely mounted on the outside of the driver side door bars. This plate must cover from A-pillar to B-pillar, and from the window opening to bottom of chassis. The plate must be bolted on with a minimum of 8 bolts with a minimum of 5/16" diameter.
- Sportsman truck classes must have a 0.250" thick metal protective shield covering the back and bottom of the seat.
- A basic roll cage configuration is detailed in the Illustrations Section of these rules.



- A 0.250" thick aluminum or 0.125" thick steel plate must be bolted or welded to the roof directly above the driver's head and must cover the entire side of the roll cage above the driver compartment. A minimum of 6 5/16" bolts must be used if bolted.
- All roll bar tubes and roll bars in close proximity to the driver's helmet must be padded with a securely attached high impact padding meeting SFI Specification 45.1.
- Window nets are required and must use a positive latch (seat belt type) system. Spring-loaded mounts are not allowed. Metal retainers must be used in all areas of the mounting. No zip-ties. Window net rods must be a minimum of 1/2" tubing with 0.083" wall thickness and fastened with bolts.
- All window net latches must have a seatbelt-style Velcro tag at the end of their release. This tag must Velcro to the chassis or window net to prevent accidental opening of the latch.

TRACK WIDTH REQUIREMENTS

- Vehicles cannot exceed a maximum track or overall width as stated in vehicle class technical specifications.
- Track width is defined as the maximum overall width measured at the widest point of the tires.
- All measurements will be performed with CHAMP OFF-ROAD instruments or gauges.

WHEELBASE REQUIREMENTS

- All vehicles must compete with wheel base limitations as stated in vehicle class technical specifications.
- Wheelbase is measured from the center of the front wheel to the center of the rear wheel. Left and right sides must be within $\pm 1/2"$.
- Wheelbase will be measured from a ride height of 10" with all four tires inflated to 20 PSI.
- All measurements will be performed with CHAMP OFF-ROAD instruments or gauges.

METHOD OF MEASUREMENTS

- Leaf springs: Measured from CL rear eye to CL front eye.
- Wheel Travel, Front: Measured on the center of the dust cover.
- Wheel Travel, Rear: Measured on a vertical plane from the center of the rear axle.
- All measurement will be from stop to stop.
- CHAMP OFF-ROAD Technical Director determines all measurements and center points.

STEERING COMPONENTS

- All vehicles must be left side steer only.
- Steering wheel, seat and pedals must be in approximate stock location.
- Sportsman mechanism meeting SFI Specification 42.1.
- Series Technical Director must approve any universal joints in steering shaft.
- It is recommended that the steering wheel be removable by means of a quick release.
- Hydraulic power steering is permitted.

BRAKES AND BRAKE COOLING

- Brakes must be operational on all four wheels at all times.
- All brake components must be CHAMP OFF-ROAD approved.
- Only disc brakes with steel (magnetic) rotors using metal mounting hats are permitted.
- Electronic wheel speed sensors or brake actuators will not be permitted.



DUST LIGHT

- A minimum of one rear dust light is required.
- The light must be an amber LED with a round (approximately 2.5" diameter) or rectangular (approximately 2" x 6") shape.
- Light must meet SAE specification P2. (NAPA part# LIT 1052A-round, or LIT 2150A3-rectangular or similar lights).
- Light must be mounted on, or near the truck's centerline, and in a location that provides good visibility from the rear and side of the truck.
- Must be on at all times when the engine is running.

SHOCKS

- All vehicles must have at least one working shock on each wheel position.
- Shocks must be hydraulic design without electrical or magnetic assistance.
- Shocks cannot be adjusted while vehicle is in motion.
- Heating or cooling liquids or chemicals in shocks are not allowed.
- Shocks may have external bypass tubes and reservoir cans.
- CHAMP OFF-ROAD Technical Director must approve all team-manufactured shocks.
- Remote, rocker arm, or cantilever-mounted shocks are not allowed.
- Each shock must operate independently at each wheel position.

WEIGHT OF VEHICLE

- All class weights are applicable both pre and post-race. The driver is included in vehicle minimum weight.
- Weight shifting devices of any kind are not allowed.
- A complete set of body panels must be presented to CHAMP OFF-ROAD Technical Director for weighing at or prior to first race of season. Excessive loss of body panels during competition will result in crew chief removing all body panels from race vehicle, adding weight of total panels.
- Race vehicle total weight must be declared on event entry form.
- All vehicles may be weighed after competition at the discretion of the CHAMP OFF-ROAD Technical Director.
- Cleaning may be required.
- Failure to present a vehicle to Technical Inspection will result in disqualification.

BALLAST

- Added weight must be in block form of no less than 10-pound blocks.
- No liquid of any type (except the fuel in fuel cell), pellets, or other granulated weight is allowed.
- Added weight must be securely bolted in place. Dislodged weight cannot be returned to vehicle for weighing at end of race.
- CHAMP OFF-ROAD Officials must approve all weight material.
- All block ballast weight must be identified with vehicle number and painted bright fluorescent color.
- Two holes must be drilled in the ballast block and attachment point for the attachment of a seal if necessary.
- Weight may be sealed at the discretion of the CHAMP OFF-ROAD Technical Director.

VEHICLE BODIES

- Standard production or after-market approved bodies may compete.



- All bodies must be of volume production models as selected and approved by CHAMP OFF-ROAD.
- Vehicles must be neat appearing.
- All vehicles must have complete bodies, cabs, hoods, doors, fenders, grills and roof, in top quality condition, in standard location, maintaining make and model body lines.
- All body parts and box covers must be attached, preventing loss of body panels and covers during competition.
- Original dimensions of all bodies must remain as manufactured, except changes that may be necessary for tire clearance.
- CHAMP OFF-ROAD must approve any changes for tire clearance.
- All stock production glass must be removed from race vehicles.
- All operational doors must be fastened in a manner acceptable to CHAMP OFF-ROAD Officials.
- All body components must be installed in their standard location $\pm 1"$, as referenced by a production model vehicle.
- Complete bodies must be attached at the start of competition, pre-run or any other on track activities. If conditions warrant, the Race Director may allow trucks to practice without bedsides.
- Bodies must be attached in such a fashion as not to create a pointed or sharp extrusion when panels are removed.
- CHAMP OFF-ROAD mandates a loop body mounting bracket construction.
- For fan and sponsor recognition, all vehicles must display the driver's name across the roof at the windshield or door line. The series sponsor must be displayed on the hood, cowl or roof at the windshield line.

HOODS AND ROOFS

- All vehicles will have a roof.
- Aluminum or steel sheeting must be firmly attached to the top of the roll cage above driver's head.
- Minimum thicknesses of attached sheeting are 0.075" aluminum or 16ga. steel.
- The hood must be locked down with six positive pin fasteners equipped with clip cables, of which, four must be evenly spaced across the front of the hood and two placed in the rear corners of the hood.
- Roofs must be properly attached to the cage of the vehicle.
- Roof latches must be metal on metal. No bungee latches will be allowed.

BED AND TAILGATE

- Standard production or after-market box panels may be used.
- The panels must be attached as not to come off during competition.
- Vehicle production lines must be maintained.
- Tonneau covers may be used.

BUMPERS AND NERF BARS

- All vehicles must have safe bumpers front and rear.
- Bumpers must have looped corners.
- Front bumper cannot be extended more than 12" beyond grille and no wider than 2" inside the inner sidewall of the front tire when straight.



- Nerf bars and rear bumpers may not extend more than 2" beyond the outside front to rear tire line.
- Nerf bars are required in all buggy classes.
- Rookie drivers must display a yellow painted rear bumper.
- Use of angle iron on any bumper, nerf bar or other outside protection is illegal.
- Use of angle iron on rear bumpers of buggies is allowed.

FLAPS

- Rear mud flaps are required.
- Buggy classes are exempt from using mud flaps.
- Kart classes are not exempt from using mud flaps.
- Mud flaps must be at least the width of the tire and touch the ground when the vehicle is stationary.
- Mud flaps must be installed directly behind the tire.
- Mud flaps must be made of a semi-rigid, non-brittle material such as 0.25" TIVAR 88, available from Quadrant Engineering Plastic Products (quadrantplastics.com), or equivalent.
- Rear mud flaps must be attached to the rear bumper or a non-pivoting body brace.

ROCK SCREENS

- All vehicles are required to have an acceptable rock screen securely attached to the vehicle in front of the driver.
- Short Course Karts are exempt from using a rock screen. Mod Karts are not.

ENGINES

- Engine blocks and cylinder heads must adhere to the same basic design parameters as produced by the manufacturer of the vehicle being used (except in PRO classes).
- Cubic inch of race vehicle motor must be declared at time of event registration.
- CHAMP OFF-ROAD Technical Director's primary method of cubic inch measurement is the "P&G Cubic Inch Tester".
- At the discretion of CHAMP OFF-ROAD Technical Director, engine displacement can be measured conventionally by the removal of one or both cylinder heads.

ENGINE SEALS

- All competitor race vehicle engines must be capable of being sealed via some permanent method such as a drilled cap on one head bolt, one intake manifold bolt, and two adjacent oil pan bolts for use in sealing engine.
- CHAMP OFF-ROAD Technical Director is the only individual authorized to seal any competitor's engine.
- If seal is broken, CHAMP OFF-ROAD Technical Director will require engine cubic inch verification by the approved CHAMP OFF-ROAD measurement method.
- If requested, engines must be pumped and sealed by CHAMP OFF-ROAD Officials before entering into competition.
- Sealed engines may be pumped at the discretion of the CHAMP OFF-ROAD Technical Director.

DIPSTICKS

- All dipsticks must be secured in dipstick tube with a positive locking or securing method.



OIL COOLERS

- Oil coolers are allowed.
- Engine and transmission oil-to-air and oil-to-water heat exchangers are permitted.
- Cooling fans are permitted.

ENGINE COOLING SYSTEMS

- No icing or refrigerant chemicals may be used.
- Impellers of the water pump may be altered.
- Electrical engine cooling fans are allowed.

CARBURETOR RESTRICTOR PLATES

- Carburetor restrictor plate may be required.
- All restrictor plates must be purchased from CHAMP OFF-ROAD and cannot be modified in any way.
- Restrictor plate gaskets may be no more than 1/16" in thickness.
- Devices designed to increase or re-direct airflow between the carburetor and the intake manifold are not allowed.
- Vehicles must use open plenum or straight bore design spacer with standard gaskets only.
- Carburetor chokes are not considered to be restrictor plates.

AIR INTAKE AND FILTERS

- Only naturally aspirated engines are allowed.

ENGINE EXHAUST SYSTEMS

- All vehicles cannot exceed a maximum of one hundred (100) dB as measured 50' from trackside with or without mufflers.
- Collector pipes must be attached to headers in a secure manner.
- Exhaust pipes must extend past driver compartment to the outer edge of the vehicle or to the rear of the vehicle.
- All exhaust must discharge downward or outward.
- Exhaust heat shields are permitted.
- Exhaust pipes that enter the cab of the vehicle must have a protective heat shield.

ENGINE AND VEHICLE ELECTRICAL SYSTEM

- No computerized systems are permitted, unless CHAMP OFF-ROAD Tech approved.
- Any make or brand of spark plug may be used.
- All vehicles must have a working alternator/generator system.
- All vehicles must have a self-starter in working condition.
- Vehicles must be capable of starting on their own power. After race is underway, vehicles may be started by hand pushing on pit road only.
- All electrical switches must be located on the dash panel.

MASTER ELECTRICAL CUT-OFF SWITCH

- A master switch that will shut-off all electrical power, and the engine, must be so labeled and located on the left dash panel, accessible by rescue personnel.
- The master on/off switch must have a red circle around the switch, making the switch easily identifiable.



ELECTRICAL ACCESSORIES

- No communication/telemetry will be allowed between the vehicle and/or data acquisition system with any other item and system during any sanctioned Sportsman event (practice, qualifying, or racing) with the exception for the request of television; certain vehicles may compete with telemetry systems, as so installed by the CHAMP OFF-ROAD television production network requesting such information.
- Vehicles cannot carry on board computers, micro-controllers, processors, recording devices, electronic memory chips, or traction control devices. However, data acquisition systems (digital dash logger) are allowed in all classes.

TRACTION CONTROL

- Traction Control of any type is not allowed.
- Entrants whom commit a traction control offense, as determined by Sportsman, will lose all season points and be subject to suspension and fines.

DATA ACQUISITION

- Data acquisition systems are allowed.
- Only type of sensors allowed are: Temperature, Pressure, Voltage, RPM, Oxygen, and Exhaust Temperature.
- No other Sensors allowed.
- All sensor data must be recorded on the data acquisition system.
- Any sensor not sending data to the data acquisition system must be removed from the vehicle.
- Data acquisition systems used during any sanctioned Sportsman event (practice, qualifying, or racing) will be limited to only the collection, display, and storage of data.
- Any system that is capable of modifying/activating, ignition timing, air or fuel ratio mixtures, traction control, throttle position, or any other setting on the vehicle is expressly forbidden.
- CHAMP OFF-ROAD Officials may require that any or all data acquisition devices or sensors be removed or disabled during any sanctioned Sportsman event.
- Downloading of the data stored on the data acquisition system to a computer for data analysis after an event is permitted.
- All teams shall provide any and all, of the data to CHAMP OFF-ROAD Officials upon request during any sanctioned Sportsman event.
- No communication will be allowed between a data acquisition system and any other item or system during any sanctioned Sportsman event.

FUEL SPECIFICATIONS

- Race gas is required.
- Gasoline shall not be blended with alcohols, ethers, or other oxygenates, and it shall not be blended with aniline or its derivatives, nitrous compounds or their nitrogen/oxygen containing compounds.
- Pump gas is not allowed as it may contain additives or contaminants that could fail the Sportsman fuel tests.
- Cooling of the fuel by any means is not permitted during competition.
- In the event an "Official Fuel" is named, CHAMP OFF-ROAD will sample the actual fuel provided at the track by the fuel supplier and that sample will become the benchmark from which all competitors' samples will be judged.



- CHAMP OFF-ROAD Official has the right to sample a competitor's fuel at any time the vehicle is entered in a CHAMP OFF-ROAD event. All samples will be impounded for observation and/or testing by CHAMP OFF-ROAD or outside laboratories at CHAMP OFF-ROAD discretion.
- The use of nitrous oxide is prohibited.
- Any chemical testing will be conducted at the expense to the competitor.

FUEL CELL AND SYSTEMS

- The use of a commercially manufactured fuel cell is mandatory.
- No material other than standard foam as provided by the fuel cell manufacturer is permitted.
- Rear mounted fuel cell must have a chassis or body cross member of substance between the fuel cell and driver and be protected from ground obstacles.
- Fuel cell must not be defective or damaged.
- No pressure systems will be allowed. Any concealed or non-concealed pressure type containers, feed lines or actuating mechanisms will not be permitted, even if inoperable.
- Electric fuel pumps must have oil pressure shut-off. Loss of oil pressure must automatically shut off fuel pump.
- A momentary-on bypass may be installed. The momentary on by pass may be a push button, 2-pole starter button, which can be mounted in a position best suited to the driver.
- The oil pressure-sending units are: Part# CARQUEST #53-33582 and Delco# 25036938.
- All fuel cell fillers must have check valves installed.
- A splash shield must be in place to direct any spill away from the driver, motor and motor exhaust. A body panel is considered sufficient splash shield.
- The fuel cell cannot be vented into the driver or engine compartment of any vehicle.
- The fuel cell, in all trucks, must be located behind the vehicle cab.
- Fuel cells must be enclosed in a metal outer shell.

BELL HOUSINGS

- A scatter shield of not less than 0.25" thick must be installed over flywheel, clutch, or torque converter and transfer case area.

TRANSMISSIONS

- The CHAMP OFF-ROAD Technical Director must approve all transmissions.
- All forward gears and reverse gears must be in working order.
- Installed in stock order, engine to transmission to differential via a drive shaft; the engine must be located in front of vehicle.
- Engine crankshafts must be connected to the transmission input shaft via conventional clutch assembly or vane type torque converter.
- Clutch assemblies are limited to a maximum of three clutch discs.
- All transmissions must manually change gears by a lever or shifter from a manufacturer. Electronic shifters and push button shifters are not allowed.

DRIVE SHAFT LOOP

- One 360 degree solid steel drive shaft loop, no less than 2" wide and 0.25" thick, must be placed around each drive shaft.
- A round steel tube no less than 1" OD with a wall thickness of at least 0.095" may also be used .
- The loop must be designed to prevent the shaft from contacting the ground or entering the driver compartment in the event of a shaft or joint failure.



REAR AXLE/DIFFERENTIAL

- Rear axle ring and pinion may be of any gear ratio.
- Quick-change rear ends are not allowed.
- Only steel axles are permitted.
- Independent rear suspension is not allowed.
- The rear end assembly must be in stock location.
- Rear differential must be spool type only.
- The differential/spool/axle assembly must not allow one wheel to turn independently of the other, either in a forward or backwards rotation.
- Rear differential must have a minimum of 1-1/2" inspection bung or plate placed in such a manner that CHAMP OFF-ROAD Tech can see and identify the spool.

TIRES

- Only one tire per axle wheel position is permitted.
- Inner liners are only allowed in specific classes. Check the Technical requirements of each class.
- D.O.T. tires are required. Sizes are mandated in each class's general rules.
- CHAMP OFF-ROAD definition of the term D.O.T. is as follows:
 - Must meet all D.O.T. guidelines, and tests, and be stamped accordingly.
 - Must be part of a full line of like tires available through retail dealers.
 - Must be readily available to the general public in quantity if requested.
 - Model of tire must be offered in multiple sizes and conform in size with industry standards.
 - Retail pricing must be competitive with other manufacturers of like tires.
- Manufacturers wishing to compete in a D.O.T. Class must submit, no later than 60 days in advance of the first competition:
 - Size or sizes of tires intended to use.
 - Design measurements and weight of tire.
 - Target design durometer measurement of tire, using an ASTM D2240 Type A Durometer.
 - Digital picture of tread area as molded.
 - Sample catalog, listing intended tire.
 - List of retail distributors where tire is available.
- "One-off" or limited run tires will not be allowed.
- All tire measurements will be taken at 20.0 PSI unless otherwise noted.

WHEELS/LUG NUTS/BEAD LOCKS

- All wheels must be in good condition.
- Lug nut must be open ended and of proper size.
- All competition vehicles must have recessed bead lock bolts.
- Studs must extend a minimum of two full threads past the end of the lug nut.
- If bead lock opening is more than 8" diameter, wheel studs may be no closer than 1-1/2" from the outer most face of bead lock.
- Stud ends must be rounded.
- Any cutout for a valve stem opening must be radiused and capped.
- Snap clips or dzus fasteners on wheels are not allowed.

NUMBERING/ MARKING/IDENTIFICATION



- All vehicle numbering is subject to approval of and assignment by CHAMP OFF-ROAD
- Vehicle number must be placed on the upper left-hand corner of the windshield area. Number must be a minimum of 3" in height and easily visible by track crew, announcing tower, timing staff.
- All vehicle numbers must be solid black on a white background and must allow prompt identification by CHAMP OFF-ROAD Officials at all times.
- Numbers must have 1" of space between them
- All numbers must have a minimum height of 8", and be a minimum of 1-1/2" wide.
- Minimum number plate size is 10" high by 14" long
- One number must be on the rear of the vehicle facing rearward.
- One number must be on each side high and close to the back of the roof.
- All numbers must be mounted in such a way to stay clean and unobstructed.
- Foil or reflective numbers are not permitted.
- CHAMP OFF-ROAD Officials may require a competitor to use a different number to avoid confusion or duplication at a race.
- In the event that a vehicle number is not visible from timing and scoring, the competitor will not be scored. It is the competitor's responsibility to make sure their vehicle number is visible during all race conditions.
- Advertising on race vehicles must be in good taste.
- Competitor will have the option to use special award or contingency decals. Non-participation will disqualify competitor from sharing awards or prizes from special award or contingency sponsor.
- CHAMP OFF-ROAD may require the use of specific CHAMP OFF-ROAD sponsor decals.
- Team vehicles with the same paint and colors must have distinguishing markings of some kind.
- Any race vehicle being sold during a race season is required to change to an unused number.
- Any race vehicle being rented to multiple parties during a race season is required to change to an unused number each time the vehicle is rented out to a new party.

TIMING & SCORING

- All Sportsman classes are required to carry a functioning transponder.
- MYLAPS transponders will be used in Sportsman divisions until further notice.
- The transponder must be mounted vertically, at a maximum of 120 cm (4') above the track and no further forward than the vertical plane created by the leading edge of the front tire.
- The transponder must have clear view to the track with no obstructions, metal, or carbon fiber underneath.
- Maximum operating temperature of the transponder should not exceed 122F/50°C.
- It is the entrants' sole responsibility to insure the transponders are installed and functioning properly.
- CHAMP OFF-ROAD will not be responsible for qualifying times and/or race finishing positions of vehicles with inoperative or malfunctioning transponders.

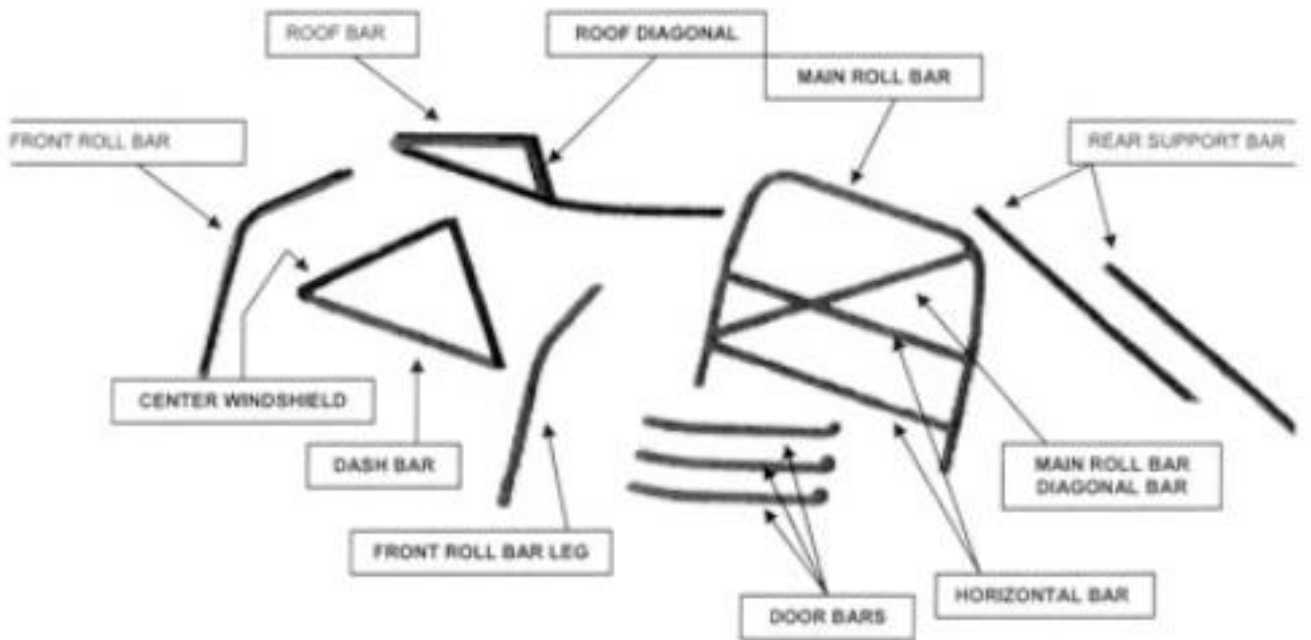
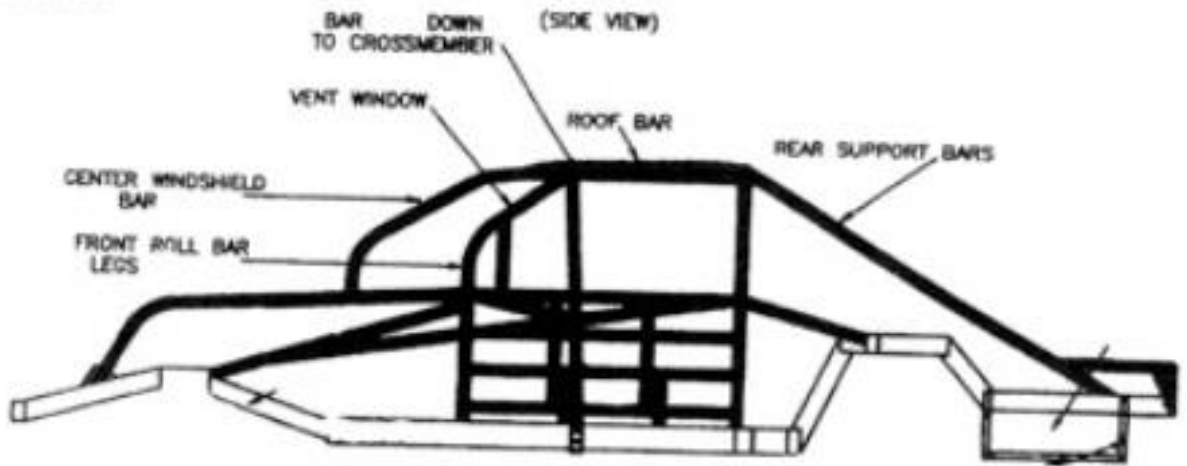
RADIOS

- A spotter with radio communication is mandatory.
- Radios must be of two-way voice communication type only.
- Each race team is responsible for meeting FCC requirements and regulations.
- Radios must operate independently of vehicles electrical system.

- Radio communication between team drivers is not permitted.
- All radio frequencies must be approved and reported to CHAMP OFF-ROAD prior to their use.
- No scanning type radios that can transmit voice or other communicative noise will be allowed. Such devices when detected will be confiscated by CHAMP OFF-ROAD.
- Either the driver or spotter is required to have a Nitro-Bee and/or radio setup to receive communication from Race Control.

ILLUSTRATIONS

DIAGRAM

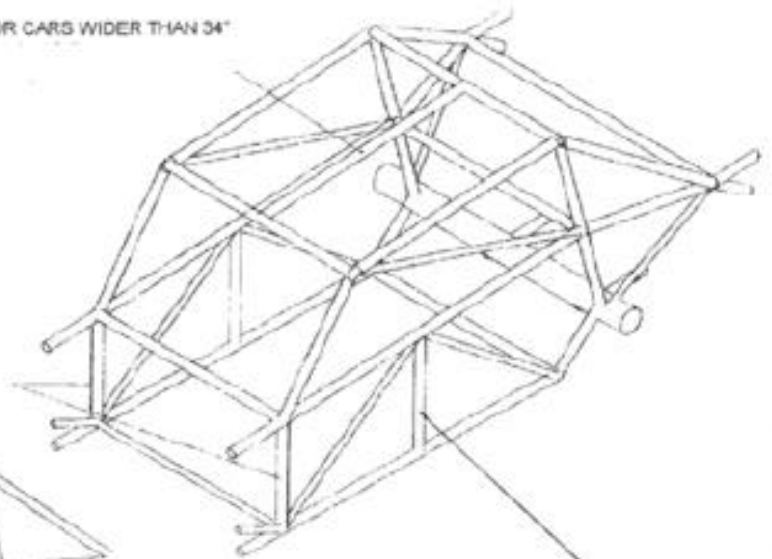
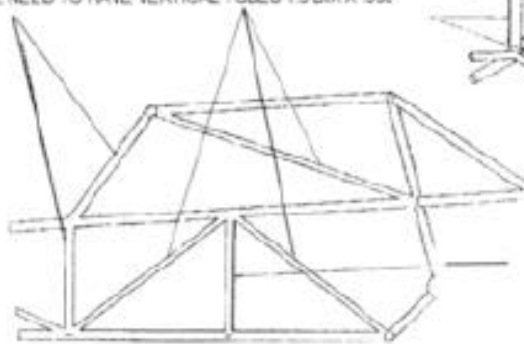


ROLL CAGE CONSTRUCTION DIAGRAM

BUGGY DIAGRAM

ROOF TUBE FOR CARS WIDER THAN 34"

ALL NEED TO HAVE VERTICAL TUBES 1.5 DIA X .090



DRIVER PROTECTION TUBE 1.5 DIA X .090



#300 to #399 MORR 1600 Buggy Technical Specifications

DEFINITION

- A limited four-wheeled vehicle, using a Volkswagen Type 1, 1600cc air-cooled engine.
- **Note:** In an effort to unify the rules in this class, either single or dual port heads may be used. Dual port engines will be using a 21.5mm restrictor plate and an EMPI 981293B adapter plate. Single port engines will use the following rules but will not use a restrictor plate. Testing will be on-going and if a significant performance advantage is found, rule adjustments will be made.
- **Technical specifications for this class supersedes CCR.**

CHASSIS

- Minimum wheelbase is 95".
- Maximum front track width from wheel mounting surface to wheel mounting surface at ride height will be 56".

FRONT SUSPENSION

- Type 1 Volkswagen suspensions only are allowed.
- Stock beam width of 34-3/16" only.
- Custom manufactured parts are allowed as long as stock dimensions and measurements are maintained.
- Reinforcement of stock components is allowed.
- Front axle torsion tubes may be cut, rotated, and re-welded.
- Torsion adjusters may be installed.
- Any ball joints or kingpins are allowed.
- Any manufacturer tie rods and tie rod ends are allowed.
- Shock towers may be strengthened, replaced, or extended.
- Trailing arms can be reinforced or replaced with aftermarket arms. Stock dimensions must be maintained.
- Lower shock mounting studs may be relocated and/or enlarged.
- Spindles may be reinforced or replaced.
- Any manufacturer torsion bars allowed.
- Sway bars may be removed.
- A lay-down front shock configuration is allowed.
- Secondary suspension of any type is not allowed.
- Aluminum front axle beams are not allowed.

REAR SUSPENSION

- Volkswagen Type 1 IRS or swing axle only.
- The rear track width with drum brakes must not exceed 51" from backing plate flange to backing plate flange, while at ride height. If disk brakes are used, track width will not exceed 58.75" measured between the wheel mounting surfaces, while at ride height.
- Strengthening or replacement of the IRS swing arms is allowed as long as stock dimensions are retained $\pm 1"$. The stock dimensions from the centerline of the rear torsion housing to the center of the rear stub axle are 16.25", $\pm 1"$. The maximum measurement will be 17.25".
- Torsion adjusters are allowed.
- Out board Bus/Type 2 reduction gears are allowed.



- Any manufacturer rear torsion bars, axles, spring plates, and additional retainer straps are allowed as long as original type suspension is retained.
- The rear torsion tube may be strengthened or replaced but must retain the stock maximum width of 40.5”.
- Trailing arm brackets must be 13.50” ±1”, measured from the inside of the spring/flex plate to the inner most flange of the trailing arm pivot point.
- Secondary suspensions of any type are not allowed.

SHOCKS & SPRINGS

- Any size or number of shocks are allowed.
- Cooling fins are allowed.
- Air or coil over shocks are not allowed.

BRAKES

- Any manufacturer drum or disk brakes are allowed.
- Inboard brakes are not allowed.

WEIGHT

- Minimum weight with driver is 1,580 pounds.
- Ballast is allowed with 3/8” minimum bolts to secure ballast to the frame.

BODY

- A roof is required. Roof must be made of .075” Aluminum or 16 gauge (.063”) steel sheeting.
- Opening in the roof must have a heavy-duty hinge with a secure latching system.
- Positive latching system must be CHAMP OFF-ROAD approved.

ENGINE

- Stock Volkswagen Type 1, 1600cc only (US specifications, as received from the factory).
- Maximum engine displacement will be 1600cc.
- Maximum bore allowed is 85.5mm.
- Maximum stroke allowed is 2.7465” (69mm stroke, ± .015).
- Polishing, knifing, and/or lighting counterweights is not allowed.
- Titanium, composite, or exotic parts or materials inside the engine are not allowed.

CASE

- Any Type 1, 2, 3, or universal case is allowed.
- Align boaring is allowed.
- Drilling and/or tapping for oil pressure and/or temperature sending unit is allowed.
- Machining for push-in crank pulley seal is allowed.
- Case savers are allowed.
- Seating surfaces for cylinders may be machined.
- Oil galleries on the early cases may be enlarged to 10mm, the same as a universal case.
- All oil gallery plugs may be removed and treaded.
- Any oil bypass pistons and springs may be used.
- Oil sump windage trays are allowed.
- Internal deburring is allowed.



FLYWHEEL/CLUTCH/PRESSURE PLATE

- Only a stock diameter Volkswagen Type 1 design flywheel with four or eight dowels may be used.
- Lightening and balancing of flywheel is allowed.
- Any gland nut and washer may be used on the flywheel.
- Any stock diameter clutch and pressure plate may be used.
- Clutches may be balanced.
- An aluminum flywheel is not allowed.

CRANKSHAFT

- Stock Volkswagen Type 1, 1600cc only.
- Any gears are allowed.
- Any size power pulley is allowed.
- Sand seals are allowed.
- May be undersized up to 0.030".
- Balancing is allowed.
- Any brand bearings are allowed as long as stock dimensions are maintained.

CONNECTING RODS

- Connecting rods must be Volkswagen #311 "B" rods only.
- 5.395" length plus or minus .010" measured C/L to C/L.
- Balancing of rods is allowed. When balancing rods, one small end and one large end must be left untouched.
- Bolts rather than the pressed studs and nuts will identify Volkswagen "A" rods.
- Polishing and profiling is not allowed.

OILING SYSTEMS

- Any manufacturer wet sump oil pump is allowed.
- Oil coolers may be used and must be mounted in a safe location.
- Deep and/or dry sumps are not allowed.
- Any sump alterations or modifications are not allowed.

PISTONS

- Any manufacturer flat top pistons are allowed, but stock dimensions must be retained. 85.5mm three ring pistons only.
- Wrist pin retainer may be of any style.
- Balancing of rods and pistons allowed.
- Minimum piston weight is 310 grams.
- Cylinders may be machined for proper deck height.
- Piston skirts may be drilled. (3) 0.125" diameter holes allowed per side, for a total of 6 holes.
- Slipper skirts, dished, or domed pistons are not allowed.
- Machined notching for valves is not allowed.
- Cutting of the piston top at an angle other than 90 degrees is not allowed.

CAMSHAFT AND CAMSHAFT GEAR



- Any manufacturer is allowed.

CYLINDER HEADS

- Must be U.S. sedan stock single port design.
- Fly cutting for compression is allowed.
- Combustion chamber volume is open.
- Only three angle valve seats (15-45-75 degrees).
- Cylinder heads may not be welded 360 degrees in the cylinder seating surfaces.
- Welding for repairs only is allowed.
- Grinding, polishing, or porting in any area of the head is not allowed.
- Back cutting of the valves is not allowed.
- Angle cutting of the head is not allowed.
- Machining cylinder head for valve spring clearance is not allowed.

VALVES

- One-piece valve of any manufacturer are allowed. Stock sizes must be maintained. Intake: 35.5mm. Exhaust 32.0mm.
- Swirl polished stainless steel valves are allowed.
- Only one 45 degree angle is allowed.
- Valve guides may be bronze, cast iron or steel, of any manufacturer and length.
- Valve guide seals are allowed.
- Any manufacturer of valve springs, spring retainers and lifters are allowed.
- Stock valve spring seat diameter in the head, inner and outer, must be maintained.
- Grinding, polishing, blending, or porting of any kind is not allowed.
- Back cutting of the valves is not allowed.
- Titanium (or other exotic material) valves are not allowed.

ROCKER SHAFTS & ARMS

- Any shaft that permits the use of stock Volkswagen Type 1, 1600cc 1.1:1 rocker arms is allowed.
- Stock Volkswagen Type 1, 1600cc rocker arms only.
- Resurfacing of rocker arms to accept swivel adjusters is allowed.
- Any manufacturer push rods and tubes are allowed.
- Any manufacturer valve covers and gaskets are allowed.
- Any other modifications are not allowed.
- Needle or roller bearings are not allowed.

INTAKE MANIFOLD

- Stock single port only.
- Spacer (carburetor to intake) no more than 3/8" thick with a straight bore the same diameter as the carburetor.
- Heater tubes may be removed.
- Manifold may be shortened but not welded back together. Hose and clamps must be used to secured the manifold back together and allow inspection.
- Any other modification is not allowed.
- Chemical milling is not allowed.



CARBURETOR

- Stock Volkswagen 30 PIC 1, 2, or 3 only.
- Maximum venturi size is 24.10mm.
- Removing of automatic choke housing, choke plate, and shaft is allowed.
- Stock float bowl vent may be removed and plugged. An external float bowl vent is allowed.
- Any fuel pump, stock or electrical, is allowed.
- Any fuel pressure regulator may be used.
- Any manufacturer air/fuel filter in any location is allowed.
- Velocity stacks are allowed.
- Brosol PIC carburetor is allowed. No modifications to throttle shaft, throttle plate, or venturi.
- Carburetor listed as PIC 30 is not allowed.
- Bonding or welding of velocity stack to the carburetor is not allowed.
- Internal modifications, including polishing, filing, or chemical milling are not allowed.
- Removal of any parts from the throat area is not allowed.

FAN SHROUD

- Any manufacturer stock style fan shroud is allowed.

EXHAUST HEADERS

- Unrestricted.

MUFFLERS

- Unrestricted.

IGNITION SYSTEMS

- A distributor must be used to send current to the spark plugs.
- Only one distributor is allowed.
- Battery ignition of 6 or 12 volts is allowed.
- Stock or direct replacement coil only.
- Any manufacturer distributor is allowed.
- Magnetic pickups that directly replace the points are allowed.
- Any Volkswagen alternator or generator is allowed and must be mounted in the stock location.
- Alternator and cooling fan must use the Type 1 design and the charging system must be operational.
- Magneto, multiple coil, and direct fire ignition systems are not allowed.

TRANSMISSION

- Stock Volkswagen Type 1 or 2 transaxle housing with only four forward gears.
- Any gear combinations are allowed using only Volkswagen style gears.
- Internal modifications are allowed.
- Gears other than Volkswagen style are not allowed.

WHEELS AND TIRES

- Tires must be D.O.T. approved as stated in the Combined Class Rules.
- Wheels that mount directly to Volkswagen drum allowed.

MUD FLAPS

- All buggy classes are exempt from using mud flaps.



#100 to #199 MORR 1600 Light Buggy Technical Specifications

DEFINITION

- A limited four-wheeled vehicle, using Volkswagen Type 1 stock components, with a 1585cc air-cooled engine.
- No parts may be replaced or modified unless stated in this document.
- Technical specifications for this class supersedes CCR.

CHASSIS

- Minimum wheelbase is 92".

FRONT SUSPENSION

- Must be Type 1 Volkswagen suspension only.
- Stock beam width must be 34-3/16".
- Front axle tubes may be cut, rotated, and re-welded to change the ground clearance, and may be reinforced by adding material.
- Link pin or ball joint front ends are allowed.
- The front spindles may be reinforced, but the diameter on the outside bearing must remain stock. The inside bearings may be enlarged. The speedometer hole may be welded and/or filled.
- Stock torsion bars must be used.
- Front bump stop snubber removal is allowed.
- Limiters or limit straps are allowed.
- Stock arms must be used but may be reinforced using additional material.
- Torsion adjusters are not allowed.

REAR SUSPENSION

- Type 1 IRS or swing axle only.
- The torsion tubes, bars, and drive axles must be stock.
- Track width is 51" maximum, measured from backing plate to backing plate at ride height.
- IRS swing arms may be strengthened, as long as the stock measurements are kept. The stock dimensions are measured from the center of the rear torsion tube to the center of the rear stub axle and must measure 16.25".
- Rear torsion tubes may be strengthened but must maintain the stock width of 40.5".
- A support member of the roll cage may additionally support rear torsion bar tubes.
- The trailing arm bumper may be removed. Rear spring plates must be stock. Rear torsion snubbers may be of any manufacture but must be of stock dimensions.
- No type of secondary suspension is allowed.
- Rear torsion adjusters are not allowed.

SHOCKS

- Only one shock per wheel is allowed.
- Front shock towers may be re-welded and reinforced but cannot be replaced with other material. Stock appearance and dimensions must be maintained.
- Rear shock length and location is open.
- Air and/or coil over shocks are not allowed.
- Any type of reservoir shock, external by-pass tubes, or shocks larger than 3" is not allowed.



- Internal floating piston shocks are not considered reservoir shocks and are allowed.

STEERING

- Rack and pinion steering only is allowed.
- Chromoly or any other metal material tie rods are allowed.
- Tie rods must be one piece only.
- Tie rod ends may be any ball and socket type.
- Stock tie rods may not be modified in any way.

BRAKES

- Any combination of pedal assembly, master cylinder, and clutch slave cylinder is allowed.
- Volkswagen Type 1 drum brake systems only.
- Brake drums must be OEM or OEM reproduction of one-piece steel design.
- Mechanical steering brakes are allowed.
- Hydraulic steering brakes are not allowed.
- Brake bias adjusters are allowed.

WEIGHT

- Minimum weight is 1,550 pounds at race end with driver. Cleaning of the vehicle may be required.
- Ballasts are allowed, with 3/8" minimum bolt to secure ballast to the frame.

ROOF

- Must be of 0.075" aluminum or 16 gauge (.063") steel sheeting only.
- Opening in roof must have a heavy-duty hinge with a secure latching system.
- Positive latch system must be CHAMP OFF-ROAD approved.

BODY

- Unrestricted.

ENGINE CASE

- Any Type 1, 2, 3 or universal case.
- Align boring is allowed.
- Drilling and/or tapping for oil pressure and/or temperature sending units is allowed.
- Machined or push-in crank pulley seals are allowed.
- Case savers are allowed.
- Seating surfaces for the piston cylinders may be machined, but the cylinders must be shimmed back to original stock deck height of .039" or 1 mm minimum.
- Oil galleries on the early cases may be enlarged to 10mm to match the universal case.
- All oil gallery plugs may be removed and threaded.
- Oil by-pass piston and springs are unrestricted.
- Oil sump wind age trays are allowed.
- No other modifications are allowed.

CRANKSHAFT

- Must be stock Volkswagen Type 1, 1600cc (69mm stroke only).
- Power pulleys are allowed.



- Sand seals are allowed.
- May be undersized up to 0.030”.
- Balancing is allowed.
- Any brand bearings may be used as long as the stock dimensions are maintained.
- Crank lightening or the removal of any material other than for balancing is not allowed.
- Polishing, knifing and/or lighting of the counterweights is not allowed.

CONNECTING RODS

- Connecting rods must be Volkswagen #311 "B" rods only.
- 5.395” length plus or minus .010” measured C/L to C/L.
- Minimum weight must be 570 grams.
- Balancing of rods is allowed. When balancing, one small end and one large end must be left untouched.
- Bolts rather than the pressed studs and nuts will identify Volkswagen “A” rods.
- Polishing and profiling is not allowed.

OIL PUMPS

- Any manufacturer wet sump oil pump is allowed.
- Deep and/or dry sumps are not allowed.
- Any sump alterations or modifications are not allowed.

PISTONS & CYLINDER ASSEMBLY

- Any manufacturer, stock specification cylinders are allowed (85.5mm diameter maximum).
- Three ring pistons only. Ring groove sizes are to be 2mm, and 5mm wide, above the piston pin.
- Wrist pin retainers may be of any type.
- Wrist pin size must be 22mm/0.687”.
- Pin height must be 1.5495” \pm 0.002” from the top of the piston to the center of the hole.
- Pistons may be balanced to a minimum weight of 356 grams each (piston only).
- Machining the top of the piston is not allowed.
- Slipper skirts are not allowed.
- Notched and/or domed pistons were not allowed.

CAMSHAFT & CAM GEAR

- Cam gear may be bolt-on type, and must use stock design gear.
- Cams must be to these specifications: (Lift is measured off push rod)
 - Intake:
 - Opens 16.5° BTDC, Closes 52.5° ABDC, Duration @.020 249°, Lobe Center 108°
 - Opens 1.5° ATDC, Closes 34.5° ABDC, Duration @.050 213°, Lobe Center 108°
 - Opens 17° ATDC, Closes 19° ABDC, Duration @.100 182°, Lobe Center 108°
 - CAM LIFT .303
 - Exhaust:
 - Opens 51.5° BBDC, Closes 15.5° ATDC, Duration @.020 247°, Lobe Center 108°
 - Opens 37° BBDC, Closes 1° ATDC, Duration @.050 218°, Lobe Center 108°
 - Opens 21.5° BBDC, Closes 14° BTDC, Duration @.100 187°, Lobe Center 108°
 - CAM LIFT .287
- (These cam specs have been updated for to fix prior clerical errors, but are still stock VW specs)



- New production cams that meet these specifications are available from Web Cam Inc. under the following part numbers:
 - P/N 00-782: New billet, Requires bolt-on gear, No core required
 - P/N 00-780: Reground stock cam, Core required

Intake:

OPEN	CLOSE	LIFT
15 degrees BTDC	52 degrees ABDC	0.020"
2 degrees BTDC	32 degrees ABDC	0.050"
15 degrees BTDC	52 degrees ABDC	0.100"
		Max Lift 0.304"

Exhaust:

OPEN	CLOSE	LIFT
55 degrees BBDC	16 degrees ATDC	0.020"
55 degrees BBDC	16 degrees ATDC	0.050"
55 degrees BBDC	16 degrees BTDC	0.100"
		Max Lift 0.289"

CYLINDER HEADS

- Must be U.S. sedan stock single port design.
- Fly cutting is allowed to clean seating surfaces, but must retain a 44cc combustion chamber.
- Only three angle valve seats (15-45-75 degrees).
- Grinding, polishing, or porting in any area of the head is not allowed.
- Back cutting of the valves is not allowed.
- Combustion chamber shape must not be altered or modified.

VALVES

- Valve sizes must be:
 - Intake: 35.5mm.
 - Exhaust: 32.0mm.
- Must be stock one or two-piece valve with stock profile.
- Only one 45 degree angle is allowed.
- Valve guide may be bronze, cast iron, or steel of any manufacturer and length.
- Any manufacturer of valve springs, spring retainers, and lifters is allowed. Stock dimensions inside and out must be retained.
- Grinding, polishing, and porting in any area of the head is not allowed.
- Back cutting of the valves is not allowed.



- Titanium (or other exotic material) valves are not allowed.
- Swirl polished valves are not allowed.

ROCKER ARMS & SHAFTS

- Any shaft that permits the use of stock Volkswagen Type 1, 1600cc 1.1:1 rocker arms is allowed.
- Stock Volkswagen Type 1, 1600cc rocker arms only.
- Resurfacing of rocker arms to accept swivel adjusters is allowed.
- Any manufacturer valve covers and gaskets are allowed.
- Any other grinding, resurfacing, or other modification is not allowed.
- Needle or roller bearings are not allowed.

INTAKE MANIFOLD

- Must be stock single port only.
- Heater tubes may be removed.
- No other modifications are allowed.
- Chemical milling is not allowed.

RESTRICTOR PLATES

- Restrictor plates are available at CHAMP OFF-ROAD tech trailer.
- Must use the 21.0mm CHAMP OFF-ROAD plate only.
- Must be the only piece between the carburetor and the intake manifold.
- No modifications to plate are allowed.
- Polishing, filing, or chemical milling is not allowed.

CARBURETOR

- Must be Stock Volkswagen 30 PIC 1, 2, or 3 only.
- Maximum venturi size is 24.10mm.
- Removing of automatic choke housing, choke plate, and shaft is allowed.
- Stock float bowl vent may be removed and plugged. An external float bowl vent is allowed.
- Stock fuel pump must be used.
- Any manufacturer air/fuel filter in any location is allowed.
- Any fuel pressure regulator may be used.
- Brosol PIC carburetor is allowed. No modifications to throttle shaft, throttle plate, or venture.
- Carburetor listed as PIC 30 is not allowed.
- Bonding or welding of velocity stacks to the carburetor is not allowed.
- Internal modifications, including polishing, filing, or chemical milling are not allowed.
- Removal of any parts from the throat area is not allowed.

EXHAUST HEADERS

- Unrestricted.

MUFFLERS

- Unrestricted.

IGNITION SYSTEMS

- A distributor must be used to send current to the spark plugs.



- Only one distributor is allowed.
- Battery ignition of 6 or 12 volts is allowed.
- Stock or direct replacement coil only.
- Any manufacturer distributor is allowed.
- Magnetic pickups that directly replace the points may be used.
- Any Volkswagen alternator or generator is allowed and must be mounted in the stock location.
- Alternator and cooling fan must use the Type 1 design and the charging system must be operational.
- Magneto, multiple coil, and direct fire ignition systems are not allowed.

ENGINE COOLING

- Fan shroud must be stock.

DRIVE TRAIN

- Only a stock diameter Volkswagen Type 1 design flywheel with four or eight dowels may be used.
- Lightening and balancing of the flywheel is allowed.
- Any gland nut and washer may be used on the flywheel.
- Any stock diameter clutch and pressure plate may be used.
- Clutches may be balanced
- Hydraulic clutch slave cylinders are allowed.
- An aluminum flywheel is not allowed.

TRANSMISSION

- Stock Volkswagen Type 1 Beetle only.
- AH, AT, AA, or AB designation is allowed.
- AH-8:33 ring and pinion-4.125 ratio. Stock gears must be retained.
- AT-8:31 ring and pinion-3.875 ratio. Stock gears must be retained.
- AA or AB swing axle-8:35 ring and pinion-4.375 ratio. Stock gears must be retained.

Ratios:

	AT	AH	AA/AB
First Gear	3.780	3.780	3.800
Second gear	2.059	2.059	2.060
Third gear	1.260	1.260	1.320
Fourth gear	0.930	0.890	0.890

- Gear ratios must be used with their original ring and pinion ratio, as shown in columns of the gearing chart above. For example: A 1.32 third gear is only allowed in an AA/AB transmission and may not be used in an AH or AT transmission.
- Rear transaxle mounts may be additionally supported.
- Any manufacturer shifter is allowed.
- Beef-A-Diff is allowed.



- Differentials must meet the definition of an open differential, allowing 100% of power distribution between the rear wheels to be transferred to either rear wheel independently.
- Welding of 3rd gear is allowed.
- Any modifications except as listed above are not allowed.
- Heavy-duty side plates are not allowed.
- Axle over-tubes are not allowed.
- Close ratio gears are not allowed.

OIL COOLERS

- Any full-flow system is allowed.
- Coolers must be mounted in a safe location.

TIRES

- Tires must be D.O.T. approved as stated in the Combined Class Rules.

WHEELS

- Any stock Type 1 wheel or any manufactured 15" steel wheel may be used.
- Wheels may be reinforced by adding material.
- Studs may be used.
- Wheel adapters are not allowed.
- Bead locks are not allowed.

MUD FLAPS

- All buggy classes are exempt from using mud flaps.

#600 to #699 MORR Classix Technical Specifications

DEFINITION

- Passenger cars and sport utility vehicles (SUVs), using only two wheel drive, produced in quantities of at least 5,000 vehicles per year and available for sale in the United States within a few years of their production. If a vehicle is questionable, the driver must provide a title or owner's manual.
- **Technical specifications for this class supersedes CCR.**
- The Classix class is further divided into three subgroups for the purpose of competitive equality:
 - Traditional Cars
 - Vehicles such as an El Camino will be considered a traditional car.
 - Full Size Sport Utilities
 - Lightweight Sport Utilities

CHASSIS

- Strengthening the chassis and frame by adding material is acceptable. However, no original frame member or any other piece of the frame may be removed.
- Minor cutting and grinding on the chassis to allow for the addition of heavier and stronger supports or suspension travel clearance is allowed.
- Stock wheel base measurement must be retained ± 2 ".
- SUV Maximum wheelbase is 110".

SUSPENSION - GENERAL

- Original concept of suspension and springs such as A-arm, leaf springs, and I-beam, etc. must be used.
- Vehicle must maintain set ride height with shocks and/or secondary suspension removed.
- Torsion bar front suspensions are allowed.
- Non-functional solid front axles are allowed.

SUSPENSION – CARS/SUV

- Spindles may be modified or aftermarket but must be at least as heavy as the original equipment.



- Travel limits may be modified up to a maximum of 12" front and 15" rear.
- Strengthening by plating and/or gusseting stock components is allowed.
- Spring rate and/or capacity changes are allowed.
- Shock combinations and configurations are unlimited.
- Suspension parts may be moved up to a maximum of ± 1 " from their original location on the frame.
- Cars with trailing arm rear end may fabricate trailing arms up to a maximum length of 22" from pivot point to pivot point.
- Coil-over shocks may be used in place of factory struts.
- Custom fabricated components to lighten the un-sprung weight of the vehicle are not allowed.
- Longer springs are allowed only if they attach to stock frame location.
- Lower front arms must be stock size and design, using the stock mounts for the frame being used. Reinforcing is allowed. Truck lower arms on car frames are not allowed.
- Any upper control arm is allowed. Mount location is open. Heim ends may be used.
- I-beam vehicles must use stock length arms and mounts must be in stock location. Radius arms must be 1/2 ton only.
- For SUV and Large SUV, Changing the front suspension to that of another vehicle of same manufacturer/make and in same model year is allowed. Example: Ford truck front frame and I-beam may be put on a Bronco.

STEERING

- The steering must have stock location of all parts and components ± 3 ".
- If aftermarket or custom components are used, such as steering quickeners, they must be stronger and safer than the stock steering system.

BRAKES

- Any manufactured or re-manufactured brakes are allowed so long as all four wheels lock up.
- Steering brakes are not allowed.

WEIGHT

- All cars must weigh a minimum of 3800 lbs.
- All SUVs must weigh 4000 lbs.

BODY

- The original shape, size and appearance (with minimum damage) of the body are required.
- Stock mounting and original body location in respect to the wheelbase must be maintained within ± 1 ".
- Bodies may be updated, but must remain the same manufacturer as the engine.
- Bodies may be steel, aluminum, or fiberglass, but must retain the original design.
- Full & Light SUVs: If a truck is built to mimic another vehicle such as a Bronco or Blazer, the body must represent the SUV it is portraying i.e. the box will be shorter and will attach seamlessly to the cab and the wheelbase must match the SUV's.
- SUVs do not have to keep removable fiberglass or canvas tops.
- Outer fenders, hood, deck lid, and door skins may be replaced with fiberglass provided the original shape is maintained.
- Up to 4" of fender well opening may be removed, and the fenders may be flared out an additional 3" to allow for tire clearance.



ENGINE

- Motor must be in stock location for the motor and frame being used. A V8 cannot be mounted using the V6 mounts if different from the V8 mounts.
- The engine may be a maximum of 460 CID.
- The engine must be produced by the same manufacturer as the vehicle.
- Internal engine modifications are permitted.
- Bore, stroke, and piston changes are allowed.
- Camshaft and valve train modifications are allowed.
- Balancing, strengthening, and blueprinting is allowed.
- Moving the engine back, down, or in any direction from stock is not allowed.
- Dry sump oil systems are not allowed.

CARBURETOR

- Carburetor and fuel pump upgrades are allowed.
- Air intake filters are unrestricted.
- Intake systems are unrestricted.
- Water and vapor injection systems are not allowed.
- Fuel injection systems, except stock systems as provided on that specific model and year are not allowed.

HEADERS

- Exhaust systems are unrestricted.

MUFFLERS

- As specified in Combined Class Rules (CCR).

IGNITION SYSTEMS

- Distributor-less ignitions are allowed but must be completely stock.

ENGINE COOLING

- Oil and water cooling system upgrades are allowed.

DRIVE TRAIN

- Rear axle assembly: gear ratios, carriers, axles and floating hubs may be used/modified.
- Any axle, including aftermarket floating axle assembly is allowed.
- No quick change gears.
- Ford 9" rear end and disc brakes are allowed.

TRANSMISSION

- Transmission must be a unit offered by the vehicle manufacturer.
- Gear sets and clutch may be modified.

TIRES

- The tires must be D.O.T. approved.
- Wheels and tires must not extend beyond body lines as viewed from above.

WHEELS

- Wheels must be 16" rim size or smaller.
- Beadlocks are allowed.

#400 to #499 MORR Formula 4X4 Technical Specifications

DEFINITION

- Four-wheel drive sport utility class. "Stock" as used here, for "stock frame" is defined as a frame sold as a sport utility passenger vehicle and produced in volume of at least 5,000 units by the original manufacturer.
- Technical specifications for this class supersedes CCR.

CHASSIS

- Wheelbase may be no longer than 120.5".
- The maximum overall width, at stationary ride height, is 84" measured from the outside most part of the tires or wheels, regardless if that part of tire touches the ground or not.
- Stock frame must be retained and used from the most forward attachment of any front suspension component to the center of rear axle. For example, front horns may be removed but the stock frame must be in place where front of "an arm" or "leaf spring" bolts on.
- A-arm pivot points must remain in stock locations for the chassis chosen.
- Boxing, gusseting, and plating are allowed.
- Reworking a frame to reduce weight, lower the center of gravity or increase wheel travel such as channeling, kicking or replacing large sections with non-OEM metal is not allowed.

SUSPENSION

- Anti-wrap devices are allowed.
- Hydraulic bump stops are allowed with 4" maximum travel.
- Sway bars are allowed.
- Maximum wheel travel front and rear is 14".

SHOCKS & SPRINGS

- Shocks are 2" maximum diameter, 14" maximum travel, with no limit to quantity per wheel.
- 2-1/2" or 3" diameter shocks may be used but, only one shock per wheel is permitted.
- Remote reservoir canister shocks are allowed.
- External valves are not allowed.
- Bypass shocks are not allowed.
- 3 or 4 link rear suspensions are allowed. Any spring is allowed.



- All front suspensions can use coil springs, coil carriers, and coil over shocks.

BRAKES

- Any stock or aftermarket combination of brake components is allowed. The vehicle will be required to demonstrate that all four wheels lock, prior to racing.

RIDE HEIGHT

- All vehicles must clear 10" below the lowest point to level ground.

WEIGHT

- Vehicles under 95" in wheelbase must weigh at least 3,500 lbs at pre-race with the driver.
- Vehicles from 95" to 110" in wheelbase must weigh at least 3,800 lbs at pre-race with driver.
- Vehicles with a wheel base longer than 110" must weigh a minimum of 4300 lbs or 10.5 lbs per cubic inch, whichever is greater.
- Any vehicle using aluminum cylinder heads must weigh a minimum of 4,100 pounds.
- All 2 valve engines must be 10 pounds per cubic inch and all multi valve engines must be 12 pounds per cubic inch.

BODY

- The body must match the silhouette of a vehicle produced in quantities of at least 5,000 per year.

ENGINE

- Maximum engine size is 430 cubic inch displacement.
- Head porting or polishing is allowed.
- Roller cams are allowed.
- Piston changes are allowed.
- Bore and stroke changes are allowed.
- Aluminum heads are allowed, but total vehicle weight must be over 4,100 pounds.
- Rod and crankshaft changes are allowed.
- Cooling and oiling modifications are allowed.
- Accu-sumps are allowed.
- Dry sumps are allowed.
- Titanium connecting rods or crankshafts are not allowed.
- Crank fire ignitions are not allowed.
- Aluminum engine blocks are not allowed unless OEM for that chassis.
- Heads having intake and exhaust chambers in different than stock configurations are not allowed.

CARBURETOR

- Only (1) four-barrel carburetor is allowed.
- One Predator one-barrel carburetor is allowed.
- No aftermarket fuel injectors or fuel injection parts are allowed.
- Blowers, superchargers, or turbochargers are not allowed.
- Water vapor injection is not allowed.

HEADERS



- As specified in Combined Class Rules (CCR).

MUFFLERS

- As specified in Combined Class Rules (CCR).

IGNITION SYSTEMS

- A 6600 RPM limiting chip must be used and must be mounted outside the driver's reach.

ENGINE COOLING

- As specified in Combined Class Rules (CCR).

DRIVE TRAIN

- The transfer case must be bolted to the back of the transmission as manufactured (i.e., same bolt holes).

TRANSMISSION

- Any combination of manufactured and/or aftermarket components are allowed.
- A conventional drive system must be used.
- No aftermarket under/over drive, or viscous drive units are allowed.
- All parts must be available at normal retail outlets.

TIRES

- 33x12.5 D.O.T. legal tires or smaller, only.

WHEELS

16" rims or smaller, only.



#200 to #299 MORR Mod Kart Technical Specifications

DEFINITION

- This class is represented by a four-wheeled race vehicle, powered by a 400cc Honda Quad engine. It is designated for drivers ages 11-16 .
- Please refer to the MORR General Rules for driver "Age In" and "Age Out" requirements.

TRUCK NUMBERS & MARKINGS

- All Mod Karts will carry a 3-digit number starting with the #2.
Examples: 218/262.
- Numbers must be 6" or larger, presented on both sides of vehicle, 4" or larger on the front & rear of the vehicle & 12" or larger on roof.

CHASSIS/ROLL CAGE

- Mod Kart chassis are a spec chassis build by "EHRENS".
- No modifications to the original design of the main frame/roll cage are allowed except to add additional bracing if desired. No removal of original frame material is allowed.
- All repairs to frame or roll cage must be declared to TECH for inspection.

DRIVER COMPARTMENT

- The driver compartment must accommodate the drivers ease to exit the vehicle.
- The cockpit must be enclosed with a minimum thickness of 0.060" aluminum sheeting.
- Firewalls or bulkheads should be installed to separate driver from fuel or engine fluids.

MEASUREMENTS & WEIGHTS

- WHEELBASE: Wheelbase length is 73" \pm 1" and is measured from the center of the front wheel to the center of the rear wheel.

- **TRACK WIDTH:** Track width will be measured from the outside of the tire to the outside tire on the opposite side. Front track width is 58-1/2" ±1" and rear track width is 57" ± 1".
- **OVERALL LENGTH:** Overall length will be measured from the front point of front bumper to the rear point of rear bumper. Overall length is 121-1/2" ±1".
- **KART WEIGHT:** Minimum Kart weight is measured with driver included and for the Pro Mod Class minimum weight is 850 lbs.
- **ADDITIONAL WEIGHT/ADDED WEIGHT:**
All added weight must be painted white and marked with the Kart number. All weights must be mounted securely with a minimum 3/8" grade 8 bolt, with a locknut or cotter key locked regular nut. No added weight can be carried loose by the driver. All weights measured as raced.

BODY AND FENDERS

- A "Five Star Short Course Kart" body is required.
- Body mounts must be sufficient to hold all panels in place during normal race conditions.
- The body must be complete and in good condition at the start of the competition.
- An aluminum hinged roof must be attached to vehicle and secured down with rubber latches that are accessible to driver.
- Additional body mounts are allowed as long as they are loops with no protruding ends.

MUD FLAPS

- All Mod Karts must be equipped with mud flaps behind the rear tires.
- Mud flaps must be at least 1" wider than the widest part of the rear tires.
- Mud flaps must be securely fastened to the frame or mud flap loop with bolts or screws with washers and locknuts.
- Mud flaps cannot be attached to the body.

ENGINE

- Engine must be a 400cc Honda Quad Motor from 1999-2011. If engine is so equipped, reverse may be used.
- Stock engine may be modified as follows:
 - Engine may be built up to a 440cc.
 - No stroker motors allowed.
 - No titanium or exotic materials allowed.
 - No porting of the head or intake is allowed.
 - Head can use aftermarket valves & spring but must be stock size.
 - Flywheel must be stock, no lightening.
 - Must use stock stator & pickup coil.
 - Can use aftermarket CDI Box.
 - Normally aspirated engine only. No fuel injection, turbos, or nitrous.
 - Carburetor must remain stock. No porting or polishing. You can use carburetor from the Honda TRX 450R (Either 39 or 40mm).



- Engines may be rebuilt by anyone you choose. However, MORR has approved the engine builder listed below:
 Al @ Advanced Machining in Pennsylvania (570) 339-5898
- Exhaust may be modified. Exhaust systems must have a muffler that has less than a 100 db noise limit, measured at more than a distance of 100'.
- Any engine found to have been modified internally in anyway other than specified will be disqualified from the competition.

BUMPERS & NERF BARS

- Bumpers should follow basic design as supplied from manufacturer (EHRENS).
- All vehicles must run a front and rear bumper that is attached to the Kart.
- Additional hoops, metal, gussets, etc. can be added but no material can be removed from the original design.
- Bumpers must be at least 36" wide and measure a minimum of 18" from the ground to bottom of bumpers and 26" from the ground to top of bumpers.
- All vehicles must run a left and right nerf bar or rub rail that is of loop design and attached to the frame. These should be at a height measured from the ground to bar of 18" ±2".

FRONT SUSPENSION

- All front suspension mount points have to remain in same position as manufactured.
- Front suspension must be of an A-arm design.
- Limit of (1) one shock per wheel or corner.

REAR SUSPENSION

- All rear suspension mount points have to remain in the same position as manufactured.
- Rear suspension needs to be of a trailing arm design as manufactured.
- Limit of (1) one shock per wheel or corner.
- Sway bars are allowed.
- Limiting straps are allowed.

STEERING

- Steering rack has to remain in location and position as delivered from manufacturer.
- Power steering is allowed.
- Steering quickeners are allowed.

SHOCKS & SPRINGS

- One (1) shock allowed per wheel or corner.
- Air shocks are NOT allowed.
- Oil reservoir shocks are allowed.
- Springs may be dual rate with a third tension spring if desired.



- Shock lengths are limited to:
8" Front shock travel
8" Rear shock travel

BRAKES

- Brakes are required on all (4) four wheels.
- Brake system should be a dual (front/rear) system to provide brakes in the event that one end or the other loses brake function. A proportioning valve is allowed to adjust front and rear brake amounts.
- Brakes must be in safe working order and must remain in working condition for the entire event. If brake failure is encountered, repairs must be made before continuing in the competition.

ELECTONICS, IGNITION

- All vehicles must be equipped with an ON/OFF switch and a push button or master disconnect kill switch on the rear of vehicles, to be located in an open position for safety crew ease to shut down engine if necessary.
- Aftermarket ignition modules are allowed.
- Data logging electronic equipment is allowed. This equipment cannot control any functions of the vehicle.
- Any brand or type of spark plug is allowed.

CLUTCH / GEARING

- Clutch is open, can be factory or aftermarket.
- Engine and transmission must be configured as manufactured.
- The EHREN Mod Kart is equipped with a secondary gear box. The gear ratio of this secondary gear box is limited to gear ratios/gear sets as produced by EHREN only.
- All other gearing and gear ratio's including the rear axle are open.
- Chain drive is required. No shaft driven rear differentials.

WHEELS / TIRES

- Front Wheel size: 10" x 5"
Rear Wheel size: 10" x 8"
- Front Tire size: AT 21 x 7-10
Rear Tire size: AT 20 x 11-10
- Wheels and tires can be any brand as long as sizes remain as stated above.
- Bead lock rims are recommended but not required.
- Plastic or foam rear wheel covers/plugs are allowed.
- Cutting and siping of tires are allowed.

EXOTIC MATERIALS

- No titanium or magnesium materials may be used anywhere in vehicle.

RADIOS / SPOTTERS

- All drivers must have radios to allow for two-way communication with their spotter.
- Driver's radio must also be equipped with a race receiver set to the track frequency to allow driver to hear any transmissions from track officials.
- Each team is limited to one spotter per truck in the designated spotter stand.
- Good sportsmanship is required of all race teams including their spotter. Any spotter displaying unsportsmanlike actions will be removed from the spotter stand and the driver will be docked 2 positions of race finish position.

TRANSPONDERS

- All race vehicles must have a functioning transponder attached to vehicle.
- Transponders must be of a frequency compatible with the class being raced. It is the race team's responsibility to register the number of the transponder with series officials before any race event.
- Transponders must be mounted on the outside of the right-side inner panel even or behind the driver's seat.



MORR Short Course Kart Technical Specifications

DEFINITION

- Spec mini race trucks, with Briggs & Stratton spec engine, driven by children ranging in age from 7-15 years. All Short Course Karts raced, must be 100% spec to ensure quality racing between drivers with no mechanical advantage. All kids should have a chance to win based on ability.
- ALL PARTS MUST REMAIN STOCK AS DELIVERED FROM MANUFACTURE UNLESS OTHERWISE NOTED IN THIS RULEBOOK.
- Please refer to the MORR General Rules for driver “Age In” and “Age Out” requirements.

CHASSIS/ROLLCAGE

- Kart chassis are spec. No material may be removed. The following are examples that cannot be changed or removed:
 - All pivot points.
 - All chassis and roll cage tubing.
 - Engine mounts.
 - Axle housing.
 - All control arms.
 - All Shock mounts.
 - Front spindles and tie rod mounts.
 - Steering rack location.
 - Body mounts.
- The only modification allowed to the original chassis is by making the down tube that is directly in front of the clutch assembly removable. An interlocking tube connector must be used for the lower connection and a two-bolt flange for the upper assembly.
- Additional tubing, plate, gussets, weld washers etc. may be added to strengthen Spec Chassis design.
- The removal of any original material is not allowed.
- In the event a Kart is damaged and spec areas need to be rebuilt, series officials may require Kart to return to an authorized chassis builder for repair.
- All repairs to chassis mounts/control arms must be approved by series officials.
- Must use factory replacement parts when replacing damaged components.
- Roof latches may be of a bungee style if they were supplied that way from the manufacturer.



MEASUREMENTS & WEIGHT

- All measurements will be taken with driver in kart at both pre and post-race technical inspection.
- Wheelbase will be measured from center of the front wheel to the center of the rear wheel.
- Track width will be measured from outside of tire to outside of tire at widest point.
- Overall length is measured from front point of front bumper to rear point of rear bumper.
 - Wheelbase length is 73" ± 1 ".
 - Front Track width is 58" ± 1 ".
 - Rear Track Width is 55" $\pm 1/2$ ".
 - Overall length is 121-1/2" ± 1 ".
- Minimum Kart weight is 780 lbs, measured pre and post-race.
- Minimum weight includes driver.
- Additional weight may be added to meet minimum weight requirement.
- Any weights added must be mounted within the centerline (front to back) of the Kart seat.
- Any added weight must be painted white, and marked with kart number.
- All weights must be mounted securely using 3/8" Grade 8 Bolts.
- All mounting methods must meet approval of series officials.
- Weight may not be carried on driver's person.
- All measurements will be taken as raced (i.e. tire pressures & ride height).

ENGINE & CLUTCH ASSEMBLY

- Engine, clutch, and mounts are spec.
- The entire engine package must remain as delivered by Briggs & Stratton and must remain sealed, including start & ring gear.
- Engine will be sealed by approved engine sealer. Karts will not be allowed to race with a broken engine seal.
- Approved engine:
 - Briggs and Stratton World Formula 11.5 HP engine Briggs and Stratton World Formula.
- Engines must be rebuilt by authorized builder. Jim at Faster Motors is an approved engine rebuilder & sealer. (Faster Motors, W3201 County Road MM, Elkhart Lake, WI 53020, (920) 207-9180)
- Muffler is allowed to be gutted (only removing internal baffles), but must retain the complete factory outer case. No other modifications allowed.
- The following exhaust system is available from Faster Motors as an option, but may not be modified:
 - P/N EXF5952: World Formula Pipe and Silencer Kit
 - P/N MNT5908: RLV Silencer Mount for WF Silencer
- Only JR Race Car Clutch P/N: FI-4995-k may be used.
- Tuning of clutch is allowed. MUST USE TUNING PARTS FROM JR RACE CAR ONLY. NO MODIFYING OF STOCK PARTS OR CUSTOM-MADE PARTS.
- Only use factory supplied drive belt.
- Approved drive belt:
 - JR Racecar P/N: 34583 or 34584



- Not additional adjusting or tuning to the engine is allowed.
- No modifications to the carburetor, intake, or any engine components are allowed.
- Tech may impound any engine deemed illegal along with possible suspension.
- Must use factory replacement parts when replacing damaged components.

BODY & FENDERS

- Five Star Short Course Kart body is required.
- Mounting methods must remain stock using existing brackets.
- Body must be complete and in good condition at start of competition.
- Removal or modification of any existing body mounts is not allowed.
- Must use factory replacement parts when replacing damaged components.

BUMPERS & NERF BARS

- Must use stock nerf bars, front bumpers, and rear bumpers as provided from manufacturer.
- Must have front and rear bumper secured to frame.
- No objects protruding from karts are permitted.
- Front bumper must extend beyond front of grill so safety crews can have easy access to a tow hook.
- Additional tubing, plate, gussets, weld washers etc. may be added to strengthen the spec bumper design.
- Material may be added but not removed. Any additions must be approved by Tech and must not change the original design.
- Must use factory replacement parts when replacing damaged components.

PIVOT POINTS

- All pivot points must be the same material and grade as manufactured.
- Must use factory replacement parts when replacing damaged components.

FRONT SUSPENSION & STEERING

- All front-end parts are spec, including but not limited to:
 - Pivot points.
 - Lower A-arm.
 - Upper A-arm.
 - Spindle.
 - Steering rack and location.
 - Hubs.
 - Bearings.
 - Shock mounts.
 - One coil over shock per wheel.



- Approved front shocks:
 - Walker Evans
- Adjustments to the shocks are allowed. Must use shock manufacturer components for adjustments. No custom-made components.
- Approved front coil springs:
 - Pac Racing Springs.
- Front wheel travel is limited to 12 inches.
- Limit straps are allowed.
- No remote or piggy back reservoirs.
- No dual rate or variable rate springs.
- No secondary suspension.
- No hydraulic or pneumatic bump stops.
- No custom suspension parts.
- Must use factory replacement parts when replacing damaged components.

REAR SUSPENSION

- All rear end parts are spec, including but not limited to:
 - Pivot points.
 - Track arms and wishbone.
 - Axle housing and all mounts.
 - Hubs.
 - Bearings.
 - Axle.
 - Brake caliper.
 - Brake rotor.
 - Brake pads.
 - Sprocket holder.
- Must use and retain the factory sway bar as provided by manufacturer.
- One coil over shock per wheel.
- Approved shocks are:
 - Walker Evans
- Adjustments to the shocks are allowed. Must use shock manufacturer components for adjustments. No custom-made components.
- Approved rear coil spring:
 - Pac Racing Springs.
- Limit straps are allowed.
- Rear wheel travel is limited to 13 inches.
- No remote or piggy back reservoirs.
- No secondary suspension.
- No hydraulic or pneumatic bump stops.
- Must use factory replacement parts when replacing damaged components.

STEERING



- Must use stock steering rack as provided by Manufacturer.
 - Manufacturer P/N: FI-AC425150.
- Location and position is spec.
- Steering stops are allowed.
- No power steering.
- No steering quickeners.
- Must use factory replacement parts when replacing damaged components.

BRAKE

- Master cylinder, caliper, rotor, and brake pads are spec.
- Must retain factory mounts as provided by manufacturer.
- Location may be changed by using the adjustable settings provided by manufacturer.
 - If there is not enough adjustability, approval from series official is required.
- Brakes must be in safe working condition and be able to apply adequate force to lock up tires.
- Brakes must be in safe operating condition during the entire event. If brake system problems do occur during the event they must be repaired before continuing in competition.
- **Front brakes are optional.**
- Must use factory replacement parts when replacing damaged components.

FUEL CELLS

- Fuel cell, location, and mounts are spec.
- Vent line must be routed above cell to opposite side of vehicle, then down to a point lower than the bottom of cell.
- Fuel cell foam is permitted.
- No pressurizing of fuel tank.
- Must use factory replacement parts when replacing damaged components.

FUEL

- Spec fuel is required and must be purchased at the track. VP MS98L
- Fuel can be tested at any time during the event.
- Cooling of fuel is not permitted.
- Penalties for use of hazardous chemicals will be severe and may include a fine, and/or reduction of points, disqualification, and/or suspension.
- If series officials suspect maskers in fuel, chemical testing will be conducted at possible expense to competitor.

GEARING & DRIVE PARTS

- Gearing/sprocket sizes are spec.
 - Clutch shaft (12T) to main driveshaft (26T) = 2.17:1



- Main driveshaft (12T) to axle shaft (48T) = 4:1
- Final drive ratio 8.68:1
- Shaft locations and materials are spec. Shafts as provided from manufacturer must be used.
- Approved drive shaft bearings:
 - Two bolt flange bearing: 3/4" bore
- Sprockets must be chain driven.
- Must use stock gears and shafts as provided by manufacturer.
- No custom or different manufacturer gears and shafts.
- Any manufacturer chain is allowed as long as it works with the stock gears.
- Must use factory replacement parts when replacing damaged components.

REAR AXLE

- Axle must retain original parts, mounting points, and configuration.
- Axle shaft must be the same size and material as original axle from manufacturer.
- Must use factory replacement parts when replacing damaged components.

WHEELS & TIRES

- Tire and wheel size must remain as delivered.
 - Front Wheels PIN: FI-ASOS-02
 - Rear Wheels PIN: FI-ASOS-03
 - Front Tires PIN: FI-532040
 - Rear Tires PIN: FI-532035
- No inner liners, tire balls, foam, or other inserts allowed.
- No bead lock wheels allowed.
- One tire per corner permitted.
- No wheel covers, or caps are allowed.
- Must use factory replacement parts when replacing damaged components.

EXOTIC MATERIALS

- No titanium, magnesium, carbon fiber, or any other exotic materials may be used anywhere in the vehicle.

HOSES

- All fuel and brake line hoses, including metal lines must be securely fastened.

RADIOS

- No spotters allowed.

- Radio communication between drivers is not permitted.
- Drivers must have a Nitro Bee or equivalent.

TRANSPONDERS/TIMING

- All teams are required to purchase remote timing transponders. Transponder numbers must be recorded with series officials.
- Transponder mount location is spec.
- Transponder must be mounted to the rear fire wall outside of the driver's compartment on lower right-side corner OR on the right upper body mount.
- Teams are responsible for the installation of all transponders. Any entry without a properly installed or functioning transponder may not be scored and may be subject to further penalty.

#1 to #99 MORR Sportsman SXS Technical Specifications

DEFINITION

- Stock up to 1000cc SXS rules are outlined below. It is the intention that all modifications allowable are outlined below and all other parts/components that can affect or enhance the performance of the vehicle must remain stock. The Technical Director holds final decision-making power on any stock/non-stock component deemed legal or illegal to race.

NUMBERS AND STICKERS

- Numbers are 1-99 for the Sportsman SXS class.
- Numbers must be applied side by side. No slanted numbers.
- In the event that a number is not visible from the timing and scoring area, the competitor will not be scored. It is the competitor's responsibility to make sure that the number is visible during all race conditions.
- One number on each side of the vehicle, on a number plate mounted high and close to the back of the roof. Number plate must have **yellow** background with black numbers:
 - Minimum number plate size: 10" high by 14" long.
 - Minimum number size: 8" x 1-1/2".
- The back of the vehicle facing the rear, on a number plate:
 - Minimum number plate size: 6" high by 8" wide.
 - Minimum number size: 5" x 1-1/2".
- Roof: Minimum number size: 8" x 1-1/2".
- Upper left-hand corner of windshield area: Minimum number size: 3".

ROLL CAGE AND CHASSIS

- All vehicles must utilize the stock chassis and maintain stock appearance. The stock chassis (frame) is defined as the main lower rails running along the inner sides of the SXS and the front and rear tubes that connect them. The chassis may be modified for durability and strength but must retain the stock width, length, and configuration. Any modifications must be pre-approved by series officials.
- No carbon fiber or titanium materials allowed in chassis or body construction. CF and Ti allowed in engine configuration, only if produced OEM. Carbon fiber may be used in exhaust mufflers, cans, and resonators.
- An aftermarket roll cage is required.
- Only weld-on aftermarket roll cages will be permitted.
- Cage connection points must be seam welded at minimum, welded sleeving is preferred.
- Yamaha YXZ needs to have additional support added to the B pillars by either:



- Adding diagonal tubes from the stock cage termination on B pillars, to the lower rear control arm mounts at the center of chassis, on each side.
- Adding tubes in a “W” configuration from the top center of the rear hoop, down to the uprights coming up from the rear control arm mounts, and then back up the top outer corners of the rear hoop.
- Cages must be constructed with one front vertical hoop, one rear vertical hoop, two Inter-connecting top bars, two rear down braces, one diagonal brace, and all necessary gussets. Welded “B-pillar” connection points are permissible.
- Two top interconnecting bars must be placed as far to the outside of the top part of the front and rear hoops as possible.
- Rear down braces and diagonal brace must angle a minimum of 30 degrees from vertical. At the bottom of the diagonal brace there must be a cross member of the same tubing material and dimensions as the hoop.
- There must be a minimum of 3” clearance between driver’s helmet and roll cage.
- Roll cage window opening may not exceed 30” wide and 24” tall.
- Gussets must be installed at all major intersections, including diagonal and rear down braces, where single weld fractures can affect occupant’s safety.
- Gussets may be constructed of minimum 0.090” x 3” x 3” flat plate or tubing gussets made of same material and thickness as roll cage.
- Roll cage terminal ends must be attached to a frame or body member that will support maximum impact and not shear or allow more than 1-1/2” of movement in the cage terminal end.
- Minimum tubing diameter and thickness is 1-1/2” diameter by 0.095”.
- Roll cage material must be DOM or 4130 chromoly.
- All tubing, welds, gussets, and roll cage construction must be approved by series officials.
- Entire roof must be covered with sheet metal or 0.063” minimum aluminum.
- Top left half of the roll cage above driver’s head must have one 1-1/2” x 0.095” diagonal bracing bar.
- It is recommended that stock cage and seat belt mounting plates be reinforced, especially on Pre-2012 vehicles.
- Rear firewall must be as high/tall as harness bar. Stock plastic is allowed, but competitors are encouraged to use 0.063” aluminum minimum.

DOORS

- Door area must be covered with sheet metal or a minimum of 0.063” thick aluminum. Panel must be attached with bolts or dzus buttons.
- Door top tube must be a minimum of 1-1/2” diameter x 0.095” wall thickness DOM, or 4130 chromoly.
- Doors must have an A, V or X design to protect drivers’ area.
- Lower U shape tube and all A, V or X designs must use a minimum 1-1/4” diameter by 0.095”, 4130 chromoly or DOM.

DRIVER COMPARTMENT

- Driver must be able to enter and exit, unassisted and with great ease, the driving compartment with the vehicle in any position. Firewalls and/or bulkheads must separate the driving compartment from any fuels, engine fluids, and acids.



- Driver's seat must be in stock location and be bolted in. Seat may be lowered. Race seat is required. Must meet SFI Requirements. If it does not meet SFI 39.2 standard, it is subject to approval by series officials. If no passenger seat is used, gas tank area must be completely covered with aluminum firewall.
- A reinforced floor pan is recommended.

MEASUREMENTS AND WEIGHTS

- All measurements will be performed with series technical instruments and gauges. Series officials determine all measurements and center points.
- Minimum vehicle weight:
 - RZR & RS1: 1650 lbs. including driver.
 - Can Am: 1650 lbs. including driver.
 - Yamaha: 1750 lbs. including driver.
 - Textron XX: 1850 lbs. including driver.
 - Any other approved vehicles will have their initial minimum weight set to be equal with the highest minimum weight of the other brands until which time we have enough data to apply a specific minimum weight to provide a level playing field among the competing brands.
 - Minimum weight requirements are subject to change at any time.
- All ballast must be securely mounted with at least two 5/16" bolts with locknuts that are wired or pinned.

BODY & FENDERS

- Fenders must be securely attached to vehicle. The removal of fenders during competition during any reason other than damage incurred during the race will result in disqualification.
- Fenders must be attached in such a fashion as not to create a pointed or sharp extrusion when removed. Looped body mounting bracket construction is mandatory.
- Additions to the body of the race vehicle, such as fins, scoops, wings, and other extruding additions will not be permitted.
- Vehicles must maintain an appearance similar to the stock SXS.
- Bed plastics may be removed.
- Hoods must remain stock and mounted exactly in the stock location.
- All body panels must be stock or aftermarket stock replacement.

BUMPERS

- Vehicles must have front and rear bumpers. Series officials must approve all bumpers.
 - Bumpers must be designed in such a way as to inhibit two vehicles from becoming locked together.
 - Ends must be capped and rounded with no sharp edges.
- All vehicles are to have side nerf bars.
 - Nerf bar to be a minimum 1" diameter mild steel.
 - Must be as wide as centerline of tire or wider from front of vehicle to back.
 - Must be capped and rounded, no sharp edges exposed.
 - Distance of protection must be no greater than 12" from rear tire.

SKIDPLATES AND FLOORBOARDS



- Skid plates designed to reasonably protect the front suspension, steering, and brake components are recommended on all vehicles. Plates must be made of metal and be securely attached.
- Stock SXS floorboards are acceptable but extra protection made of metal or aluminum is highly recommended.

SUSPENSION

- All A-arm mounting points must remain in the stock location and position as delivered from the manufacturer. However, they may be reinforced for strength.
- Must maintain factory "stock" track width
- Must maintain factory "stock" wheel base
- Control arms must remain stock length.
- Wheel spacers are not allowed.
- Minimum ride height of 8" as determined by technical inspector.
- Aftermarket sway bars are permitted.

STEERING

- All steering components must be in good condition and proper working order. Drag link and tie rod ends must be secured with a cotter pin in each one.
- Power steering is permitted.
- Steering quickeners are permitted.
- Series officials must consider steering reasonably safe before vehicle is permitted to compete.

SHOCKS

- There must be at least one and only one shock absorber per wheel in working condition at the start of the race.
- Shock absorber mounting points may not be moved.
- Upper shock mounts must remain in stock location. No bolt on extensions. No bypass shocks.
- Suspension bump stops must be of the solid type.
- The only torsion system that is acceptable is a coil-over shock.

BRAKES

- Brakes must be in safe working condition and be able to apply adequate force to lock up all four tires.
- Brakes must remain in safe working condition during entire event.
- Turning or cutting brakes are not permitted.

ENGINE

- All vehicles must use stock engine cases and cylinder head. The series reserves the right to mark engine blocks prior to event.
- All vehicles must use same fuel delivery system as stock and designed by factory.
- Engine displacement not to exceed 1000 cc.
- Engines must remain completely stock. No internal modifications. Stock throttle body must be used.
- Yamaha flywheels must remain stock and unmodified.
- Stock ECU is open to tuning. No aftermarket or add-on ECUs are allowed.



SUPERCHARGERS & TURBOCHARGERS

- Superchargers or turbochargers are not permitted in the Sportsman SXS class.

AUXILIARY EQUIPMENT

- All vehicles must start race with a functional generator or alternator, fan, water pump (water-cooled vehicles), and a complete functional electrical system.
- GPS is allowed.

IGNITION

- All vehicles must use a stock ignition switch or have a positive action on/off switch in good working order. Switch must be labeled "Ignition on/off", have a red circle around it, be located on the left-hand side of the dash panel, and must be accessible from the outside of the race vehicle. Red locator decal/circle must be at least 1" wide around switch.
- All electric fuel pumps with independent switches must be labeled "Fuel on/off" and be within easy reach of the driver and accessible from the outside of the vehicle.
- Aftermarket CDI boxes/ECUs are NOT permitted.

BATTERIES

- Batteries must be securely mounted with metal-to-metal tie downs.
- Wetted fiber or gel cell batteries only. Liquid lead acid batteries are not permitted.
- Batteries may be located in the driver's compartment with an adequate firewall or factory engine cover.

COOLING

- Oil coolers, transmission coolers, and radiators located ahead of the driver, behind the cockpit, or in the passenger compartment must have a shroud that will prevent liquids from blowing back or leaking onto the driver in the event of a rupture or leakage. All radiator caps must be shielded from driver.
- All hoses running through the driver compartment must be shielded. Steel braided hose does not constitute a shield.

EXHAUST

- Aftermarket exhaust is not allowed. Stock exhaust must be used.
- Exhaust header must remain stock with no modifications, internal or external.
- An external exhaust can is required. Internal modification is allowed. No material may be added.
- Removal of spark arrestor is allowed.

STARTER

- All vehicles must be self-starting by use of an onboard electric starter.

FUEL

- Competitors must use one of the following fuels:
 - VP UTV96
 - Sunoco SS100
 - Sunoco 260GT
- No mixing of fuels at any time.



- Each competitor must designate which fuel they will be running on for the entire event weekend when they come through tech.
- No switching fuel types during an event.
- If a competitor is found with fuel that doesn't match either of these fuels at any time during the event the competitor will receive a disqualification.
- No adding any chemicals or compounds to the required fuels. Fuels must be run exactly how they come from the manufacturer.

FUEL CELLS

- All fuel cell mountings must be approved by series officials. Fuel cell must be mounted to chassis and cannot be mounted on skid plate.
- Any fuel cell mounted in the passenger compartment area must be fully enclosed with sheet metal or aluminum.
- A fuel cell must be vented outside the passenger compartment.
- An 8" x 8" fire access door is required on top of the fuel cell cover. This door must be painted red and labeled FIRE DOOR.
- Any battery or electrical components mounted in the passenger compartment with the fuel cell must be separated by sheet metal or aluminum.
- Stock fuel tank is allowed in stock location. Tank, lines and fuel filler may not be modified in any way. An aluminum plate must be added on right outer side of body to protect stock tank.

TRANSMISSION

- Every vehicle must use the stock transmission and clutch design.
 - CVT transmissions: OEM gears allowed. (No aftermarket or performance gear sets.)
 - Yamaha YXZ vehicles must use OEM gear ratios and flywheel.
- The stock rear differential must also be used.
- All vehicles must have a functional reverse gear.

CLUTCH

- Must use stock clutch design as delivered from manufacturer.
 - Yamaha: Coil spring conversion is allowed.
- No billet clutches or aftermarket clutches. Clutches may not be modified in any way.
- After market springs, weights and helix are allowed.
- Factory paddle shifters as delivered from factory are allowed. No retrofitting to other years, makes, or models.

WHEELS AND TIRES

- Maximum tire size is 30" outside diameter.
- Bead locks allowed, must have recessed bolts only that do not protrude past the face of the clamp ring, or must use button head style bolts.
- Any wheel offset combination is permitted.

DUST LIGHT

- A minimum of one rear dust light is required. The light must be an amber LED with a round 2.5" diameter, or rectangular.



#500 to #599 MORR Stock Truck Technical Specifications

DEFINITION

- A two wheel drive pickup truck with a 3/4 ton or smaller chassis, with coil front springs, manufactured in quantities of at least 5,000 units of same model per year and available for sale in the United States. This is a stock class as defined by original equipment parts (OEM) and replacement parts made to OEM specifications only. Stock also includes options sold on the truck from the same make and model of the truck.
- Technical specifications for this class supersedes CCR.

CHASSIS

- Chassis must remain stock but may be reinforced by adding material.
- Shortening of a long wheelbase frame to match short wheelbase specs is allowed.
- The wheelbase must be stock measurement $\pm 2"$.

SUSPENSION

- Stock suspension parts and locations must be maintained as delivered.
- Overall width must be in stock.
- Pivot points must remain stock and in stock locations.
- Front and rear wheel travel limit is 12" measured to metal stop. Front wheel travel will be measured at the spindle.
- Any manufacturer upper ball joint is allowed, including a mono-ball style.
- Lower ball joints must be OEM or direct OEM replacement. No mono-ball style joints allowed.
- Lower control arms must be stock for the year of manufacture of the chassis. They may not be modified to alter the location of the lower ball joint.
- Lower control arms must be from a 2wd chassis. No 4wd versions allowed.
- Rubber/poly bump stops but must be removed to measure wheel travel.
- Reinforcement of front suspension components is allowed.

SHOCKS & SPRINGS

- Any non take-apart shock is allowed, or:
 - Fox Shox 7700 Series
 - Fox Shox 2.0 series emulsion
 - Bilstein B46 – 1300 Series
 - Rancho RS5000 and RS9000 Series
 - Doetsch Tech MY Series, M2, M2R
 - Trail Master N7, SS, SSY Series



- Any other take-apart shock may be allowed with written approval from the CHAMP OFF-ROAD tech director.
- Maximum of two shocks are allowed per corner.
- Rear suspension must utilize leaf springs as the only suspension springs.
- Aftermarket leaf springs are allowed, but must be stock length and mount in the stock locations.
- “Military wrap” leaf springs are allowed.
- Any leaf spring with a wrap designed to increase traction by reducing axlewrap, such as leaf springs with a “Rebound wrap” or “snail wrap” are not allowed.
- Quarter elliptical springs are not allowed.
- Shackles lengthened or moved from stock locations are not allowed.
- Composite or fiberglass springs are not allowed.
- Air bump shocks/stops are not allowed.
- Any shock or part of suspension protruding through the hood or fenders must be removed.
- Remote reservoirs are not allowed.
- Take a part shocks except those described above are not allowed.
- Custom made shocks are not allowed.
- Shocks must not be mounted in the driver compartment.
- Coil-over shocks are not allowed.
- Remote and/or cantilever shocks are not allowed.
- Air shocks are not allowed.
- Position sensitive shocks are not allowed.
- Shocks with shafts larger than 5/8” in diameter are not allowed.

STEERING

- Steering must be in stock location and components in safe working order.
- Only OEM or direct OEM replacement tie-rod ends are allowed.
- An aftermarket slip tube may be used.
- Steering quickeners are allowed.
- Any steering pump is allowed but must be belt driven.

BRAKES

- Disc brakes are allowed front and rear but must use steel rotors and calipers.
- Proportioning valves are allowed for front to rear bias, but all four tires must lock up when tested.

WEIGHT

- Trucks originally manufactured as less than 1/2 ton chassis style by manufacturers and using a V6 engine (mini and mid-size trucks) must weigh a minimum of 3,500 pounds.
- All full or mini/mid-sized trucks using a V8 engine must weigh a minimum of 4,000 pounds.

BODY

- Body and fenders must remain stock, absolutely no bending or flaring, especially to fenders or wheel openings.
- Body must be sourced from the same manufacturer as the chassis and engine, but may be newer or older than the chassis.



- A one-piece fiberglass or plastic truck nosecone and grille assembly may be used. The assembly must have stickers matching the stock headlights and grille.
- Rear wheel wells, firewalls and floorboards must be repaired for rust as well as all other damage.
- Outer box sides must be steel and have a stock appearance.
- OEM fiberglass step-side outer box sides may be utilized if they came stock for the body model and year. No reproductions allowed.
- Nothing is allowed above the stock bedsides besides number plates, bars, and safety light. No tinwork above the bedsides.
- Front fender wells may be removed.
- Flat hood only, no hood scoops allowed.

ENGINE

- Stock cast iron components and parts only.
- No aftermarket or GM Performance Vortec heads are allowed.
- Maximum CID:
 - Ford: 362 (0.060" over 351)
 - GM: 360 (0.060" over 350)
 - Dodge: 367 (0.040" over 360)
- Engine blocks accepted are: GM 350, Mopar 360, & Ford 351 Windsor or smaller.
- The engine must be in stock position and have stock components such as fan and alternator.
- The block may be drilled for oil or temperature sending units.
- Factory street production head with factory cast marking only.
- Any oil pan is allowed. Oil pan must have a 3/4" inspection plug providing clear view of the crank and connecting rods.
- Valves can be 2.02 intake and 1.60 exhaust maximum.
- GT-40P and GT-40 heads are allowed.
- Engine oil coolers are not allowed.
- Aluminum blocks and/or cylinder heads even if they were available as an option are not allowed.
- Compression ratio must be under 10:1. This will be checked as a static compression check.
- External or internal modifications and/or grinding to heads is not allowed. Heads and block can be cleaned up for gasket sealing but must remain under the 10:1 compression ratio.
- Interchanging heads from other similar motors (305 to 350, 289 to 351, etc.) is not allowed.

CAMSHAFT & LIFTERS

- Must be stock type cast flat tappet camshafts with a maximum valve lift as measured at the valve of 0.500".
- Must be stock lifter bore size.
- Full roller rockers are required, stud mounted only.
- Aftermarket direct replacement timing chain and gears are allowed.
- Roller mushroom type lifters are not allowed.
- Gear or belt drive cams are not allowed.
- Shaft type rockers are not allowed, unless OEM.

PISTONS AND CONNECTING RODS

- Flat top or dished, stock, or OEM replacement piston only.
- Cast or forged pistons.



- Steel rods with stock dimensions only:
 - GM: 5.791"
 - Mopar: 6.123"
 - Ford: 5.954"
- Titanium, stainless, aluminum, H beam, etc. rods are not allowed.
- No domed or notched pistons.
- Pistons must remain at or below deck height at TDC.

CARBURETOR & INTAKE

- One 2-barrel Holley model number 0-4412 is allowed. HP or BK models are not allowed.
- One combination restrictor plate with two 1.375" bores is required.
 - Must be used with standard size gaskets only.
 - This unit is available through CHAMP OFF-ROAD tech only.
 - Must have MORR stamped on it.
- Modifications to the throttle bore, plate, shaft, choke horn, booster, or Sportsman restrictor plate are not allowed.
- Breathers and air filters may be of any material or size are allowed but must be mounted under the hood with no modifications to the hood.
- No fuel injection is allowed, even if the vehicle had factory fuel injection.
- The carburetor must pass tech gauges and measurement tools.
- If an adapter is used, the maximum height of the adapter is 1".
- Any cast iron OEM intake manifold allowed or Edelbrock part numbers:
 - GM: 5001
 - Mopar: 5076
 - Ford: 5081
- GM engines are allowed to run Edelbrock intake #2716 with stock Vortec heads.
- Match porting is allowed by the removal of material only. Within the last 1/2" of the runner only.
- Use of an OEM mechanical fuel pump is required and must be mounted in the OEM location only.
- Electric fuel pumps are not allowed.

HEADERS

- Stock, as cast, production exhaust manifolds only.
- Dual exhaust only.
- No crossover, 2 into 1, H, or X tubes.

MUFFLERS

- Unrestricted.

IGNITION SYSTEMS

- Ignitions must be OEM or PRO Comp HEI – PC6001, PC6004 or PC6006.
- Ford may use Speedway 91012360.
- The MSD Blaster ignition coil may be used.
- Aftermarket plug wires are allowed.
- An RPM limiter may be used but is not required.



ENGINE COOLING

- Any radiator is allowed but must be mounted in stock location.
- Core support may be removed, and engine compartment can be caged in.

REAR AXLE

- Any automotive or light truck production housing is allowed.
- No aluminum gear carrier allowed.
- No aluminum wheel hubs allowed.
- Aftermarket floater axels are allowed.
- Anti-wrap up bars are not allowed.
- Spools are allowed.
- A rear axle truss may be added to the rear axle housing.

TRANSMISSION

- Transmission must be from the same manufacturer as the engine.
- Transmission coolers are allowed.
- Any steel conventional vane type, non-electric torque converter is allowed.
- Aluminum valve body is allowed.
- Factory gears only are allowed.
- Factory aluminum planetary is allowed.
- Trans brakes are not allowed.
- Aluminum torque converters are not allowed.
- Aluminum or lightened aftermarket internal parts are not allowed.

TIRES

- D.O.T. only and available to the general public.
- Maximum tire size of 33 x 12.5 or approximate metric equivalent. Tire must be 33" in diameter or less.

WHEELS

- Wheel maximum width is 8-1/2".
- Any steel wheel, or one piece cast aluminum wheel is allowed.
- Maximum wheel size is 16".
- Bead locks, bead liners, and inner liners are not allowed.
- Spun aluminum or magnesium wheels are not allowed.

Three-piece wheels are not allowed.



#1 to #99 MORR Super Buggy Technical Specifications

DEFINITION

- A four-wheeled vehicle, utilizing many different engine combinations, with unlimited suspension and chassis designs.
- Engines are limited to maximum displacement of 1650cc to 2400cc, depending on design and manufacturer.
- Technical specifications for this class supersede CCR.
- Rear wheel drive allowed only.

CHASSIS

- The minimum tubing diameter for all buggy divisions is 1-1/2" by .090" wall thickness.

WEIGHT/WHEELBASE

- Minimum water-cooled weight with driver: 1,900 lbs.
- Minimum air-cooled weight with driver: 1,580 lbs.
- Minimum wheelbase: 95".
- Maximum track width: 93".

TIRES/WHEELS

- Any DOT tire is permitted.
- Any wheel is permitted.

ROOF

- 0.075" Aluminum or 16 gauge (0.063") steel sheeting is required.
- Roof opening must have a heavy-duty hinge with a positive latching system.

NON-ECOTEC ENGINE

- Any automotive engine with a production of 5,000 or more, and available to the public in the US domestic market is allowed.
- A maximum of 4 cylinders and a maximum of 4 valves per cylinder are allowed.
- Air-cooled engines have a 2000cc maximum displacement.
- Water-cooled engines with 2 valves per cylinder have a 1715cc maximum displacement.
- Water-cooled engines with 3 or more valves per cylinder have a 1650cc maximum displacement.
- Rotary engines are not allowed.
- Fuel injection is not allowed.



- Variable timing or cam lift is not allowed.

CARBURETOR

- One carburetor is allowed for water-cooled engines.
- Two carburetors are allowed for air-cooled engines.
- Maximum of two venturis per carburetor.
- Two valve engines: 42 mm maximum venturi.
- Four valve engines, 1600cc and smaller: 29 mm maximum venturi.
- Four valve engines, 1601cc to 1650cc: 28 mm maximum venturi.

STOCK ECOTEC ENGINE

- Permitted engine: GM ECOTEC 2.4 liter V.V.T. LE5 coded engine. No other variant shall be permitted.
- Engine must retain all stock components, configurations and specifications as manufactured. “As manufactured” and “stock configurations and specifications” refer to as manufactured components from GM, stamped with the GM logo or associated factory part number. Alterations to any component in any manor (physical, chemical, or other) shall not be permitted unless detailed below:
 - Aftermarket fasteners shall be permitted.
 - Equivalent brand components to stock GM components may be substituted for the following components:
 - Bearings, seals, spark plugs, oil filter, timing chain, and associated components.
 - Maximum overbore is 0.020”.
 - Aftermarket pistons are permitted.
 - Maximum compression ratio is 10.75:1.
 - Modifications to the water pump and thermostat housings, for the sole purpose of coolant line plumbing, are permitted.
 - Modifications to the stock engine block to allow for external oil filters/coolers are permitted.
- All internal components must be in place and be operational at all times (i.e. stock balancer shafts and drive).
- Engine Oiling System:
 - The use of an Acu-sump style remote oil reservoir system is allowed.
 - Oil pan is unrestricted.
- Ignition/Fuel Injection System:
 - GM #17202005 manual cable driven throttle body is permitted. An adapter plate no thicker than 3/8” is allowed for mounting. Plate must be same as existing bore size.
 - GM LE5 factory drive by wire throttle body is permitted.
 - Any Brand ECU may be used, as long as it functions only with the stock GM trigger and pickup.
- Engine functions data logging in the ECU is permitted for the following sensors only:
 - Engine RPM, Water Temperature, Engine oil temperature, Engine Oil Pressure, Fuel Pressure, Voltage, Lambda O2 (Oxygen Sensors), Exhaust gas Temperature, Intake Manifold Vacuum/Pressure (the same sensor may be used in intake or crank case), Water Pressure, Power Steering Pump Pressure, Power Steering Oil Temperature.

TRANSMISSION



- Transmission must be standard production, catalogued, and available through regular dealer channels.
- All forward and reverse gears must be in working order.
- No sequential shift transmissions are allowed.
- Motor crankshaft must be connected to transmission input shaft via a conventional clutch assembly or vane type torque converter.

MUD FLAPS

- All buggy classes are exempt from using mud flaps.

#800 to #899 MORR Super Stock Truck Technical Specifications

DEFINITION

- A two-wheel drive, standard-size pickup. The truck must be of stock production that has been produced in quantities of at least 5,000 for a one-year period and available for purchase by the general public in the USA.
- This is a production class and must maintain the engine, body, and frame combination for a specified production year. All components must remain stock unless modifications are allowed by this rulebook.
- All trucks, regardless of year built, must be properly constructed and maintained in presentable condition.
- It is the driver's responsibility to carry a factory shop manual that matches the race vehicle to the track.
- Technical specifications for this class supersedes CCR.

CHASSIS

- Factory installed chassis and body must be maintained for year specified.
- Strengthening of chassis and frame by adding material is allowed.
- Stock wheelbase must be ± 1 ".
- Shortening of long wheelbase frame to match short wheelbase specs is allowed but must have CHAMP OFF-ROAD Tech approval.
- Front frame horns may be shortened no more than 3" in front of the forwardmost steering box bolt.
- Removal of any cross members or any other materials is not allowed.
- Alterations to the frame such as "kicking" is not allowed.

SUSPENSION

- Stock suspension parts and locations must be maintained as delivered.
- All suspension mounts must be in the stock factory location. It is the driver's responsibility to prove to the Sportsman Tech Officials that the stock location is maintained.
- Track width must be stock. Measurement will be determined from the factory manual.
- Pivot points must remain stock and in stock locations.
- Travel limit in the front and rear is 12" and will be measured metal stop to metal stop without anything in between.
- Stock spindles or stock replacement spindles with 3/4 or 1-ton components are required.



- Stock lower A-arms are required.
- Any manufacturer upper A-Arm is allowed.
- Any manufactured ball joint or heim joint is allowed.
- Steel springs of any rating, and any manufacturer are allowed, but must be stock length.
- Replacing all/any rubber mounts with poly or other material is allowed.
- Two single-point anti-wrap up bars attached on the axle housing are allowed.
- Only stock sway bars are allowed. Use of larger stud or bolts is allowed.
- Rubber/poly bump stops are allowed.
- Reinforcing of parts with additional material with no modifications to the part is allowed.
- Early model Dodge and Chevrolet trucks with bolt-in cross shafts for the upper A-arm brackets may attach alternate fabricated brackets to the frame. Brackets must be on stock OEM centerline and in stock location. It is the driver's responsibility to prove to the Sportsman Tech Officials that the stock location is maintained. All other trucks must use the stock mounts in the stock location.
- Quarter elliptical springs are not allowed.
- Shackles must be OEM length and remain in the factory location.
- Composite and/or fiberglass springs are not allowed.
- Air bump shocks/stops are not allowed.
- Only factory equipped rear leaf spring models of trucks are allowed.
- Rear coil-over suspensions are not allowed.
- Factory front coil-over suspensions are allowed. Stock front coil-over may be replaced with aftermarket coil-over but must bolt into the factory location.

STEERING

- Any OEM steering box may be used, providing it is mounted in approximately the same location as stock and the pitman arm location does not change significantly.
- Internal steering box modifications are allowed.
- Tie rods, tie rod ends, and any ball and socket type ends may be used. All other steering must remain stock but can be reinforced.
- Any steering wheel is allowed but must remain within three inches of the stock location.
- Stock steering pump internal modifications are allowed.
- Steering pump and reservoir may be of any manufacturer but must be belt driven.
- Steering quickners are allowed.
- Chassis that originally have rack and pinion steering may use an aftermarket rack mounted in the approximate stock location. Must have CHAMP OFF-ROAD tech approval.

SHOCKS

- Any number of 2" shocks can be used.
- Floating pistons and remote reservoirs are allowed.
- Shocks larger than 2" may be used but are limited to a total of one shock per wheel. If a shock larger than 2" is used, no other shock is allowed on that corner.

Not Allowed:

- Custom made shocks are not allowed. All shocks must be available from normal retail sources.
- Shocks must not be larger than 3".
- External or internal bypass shocks are not allowed.
- Shocks may not protrude through the hood or fenders.



- Remote or cantilever shocks are not allowed.
- Air shocks are not allowed.

RIDE HEIGHT

- As specified in Combined Class Rules (CCR).

WEIGHT

- A minimum of 4,000 lbs. pre or post-race with driver. Cleaning may be required.

BRAKES

- Stock brake equipment only. No anti-lock systems, electrical or mechanical.
- Any brake pad or brake shoe material may be used.
- Any master cylinder or wheel cylinders may be used, as long as it bolts in place of the stock one.
- Any proportioning valve or brake bias control may be used.
- Braided lines are allowed.
- Disc brakes must use steel rotors and calipers only.
- Calipers must be of an OEM style. No aftermarket calipers allowed.
- Any aftermarket pedal assembly is allowed.
- Steering brakes are not allowed.

BODY

- Body must be sourced from the same manufacturer as the chassis and engine but may be newer or older than the chassis.
- Stock floor mounts must be in original positions.
- Body must be in original size, shape, configuration, and appearance.
- Stock grill assembly and/or aftermarket must be an exact duplicate for the body year.
- Doors, hoods, and fenders must be in the factory original stock location.
- Heater core hoses must be disconnected.
- Headlight glass must be removed and covered with flat material.
- Stock body mounts may be replaced with any material.
- Removal of the tailgate is required.
- General body bracing by adding additional material is allowed.
- OEM cab floor and firewall must match the frame and be mounted in stock location. The remainder of the OEM cab is not required.
- Windshields and any other stock glass must be removed.
- Shocks, radiators, transmission coolers, air filters, and scoops protruding through the hood are not allowed.

INTERIOR

- Removal of all upholstery, upholstery panels, headliners, carpets, and plastic interior parts is required.
- The pedal assemblies must remain in the approximate stock location.

SEATS

- Only manufactured race seats are allowed.



- Sportsman truck classes must have a 0.25" metal protective shield covering the back and bottom of the seat.
- Refer to CHAMP OFF-ROAD Safety Standards chapter of this Rule Book.

FLOOR BOARDS

- The OEM cab floor must be used, must match the frame, and must be mounted in stock location.
- Any repair of rust must be done with equal thickness metal.
- Minimum trimming will be allowed.

FIREWALL

- The OEM firewall must be used, must match the frame, and must be mounted in stock location.
- Any repair of rust must be done with equal thickness metal.
- Modifications are allowed to facilitate the installation of the roll cage.

HOOD

- The hood must be in the original stock location.
- The hood may be of any material but must be an exact duplicate of the OEM panel.
- Removal of the hood latches is allowed.
- Hood pins are required.
- Hood scoops not allowed.

DOORS

- Three horizontal bars of tubing, equal to the roll cage tubing, must be welded to the cage on each side.
- Doors must be mounted in the OEM location.
- Window glass must be removed.
- Window regulators and window hardware may be removed.
- Doors may be of any material but must be an exact duplicate of the OEM panels.
- The door bars must be plated with 0.075" aluminum or 16ga. steel.

FENDERS

- Enlargement of wheel openings for tire clearance is allowed, with 3" of cut out and 2" of flare.
- Use of hoops for mounting fenders and radiator is allowed.
- Outer box sides may be of any material but must be an exact duplicate of the OEM panels.
- The inner box material is optional.
- Front fenders may be of any material but must be an exact duplicate of the OEM panels.
- Inner front fender reinforcements may be removed.

ENGINE

- "Stock" means the part or assembly in its "as cast" configuration as delivered and used on U.S. model, without modifications. All casting and/or part numbers must be visible.
- Mounting plates are not allowed.
- Three inspection holes are required in the oil pan for inspection of a knife-edged crank etc. If the crank and rods are not clearly visible you will be required to drop the pan.



- Engine must be pre-drilled for sealing. This includes oil pan, front cover, intake, restrictor plate, and carburetor.

BLOCK AND CRANKSHAFT

- Approved standard OEM, as cast, iron production block. Blocks approved by CHAMP OFF-ROAD are:
 - GM 350
 - Mopar 360
 - Ford 351 Windsor
- Engine has a maximum of 370 cubic inch displacement.
- Crank must be stock stroke length.
- Stock cast or forged steel crankshaft or OEM aftermarket replacement only.
- Rod journal grind is unrestricted.
- A 3/4" inspection hole in the side of the oil pan, in line with crankshaft journal and crankshaft casting number, is required.
- Engines must be able to be sealed once they are pumped. One head bolt, one intake manifold bolt, and one oil pan bolt on each side of the oil pan must be drilled to allow sealing.
- Blue printing and balancing is allowed.
- Using studs rather than bolts is allowed.
- Oil pan windage trays are allowed.
- High volume or pressure oil pumps are allowed.
- Auxiliary engine oil coolers are allowed.
- A fan for the oil cooler is allowed.
- Remote oil filters are allowed.
- The harmonic balancer is unrestricted, any manufacturer and must be SFI 18.1 approved.
- Crankshafts that have been knife-edged or lightened are not allowed.
- Dry sumps or external wet sump pumps are not allowed.

CYLINDER HEADS AND VALVES

- Standard production, as cast, iron heads that match the block, with the casting numbers clearly visible are required. Approved heads are:
 - GM: Any OEM production head. No Bowtie heads allowed.
 - Mopar: Any OEM production head. Includes the Magnum head part #P5007086. W-2 heads are not allowed.
 - Ford: Any OEM production head. Also: GT40, GT40P, or World Products Roush 180 part No. 5303.
- Maximum allowed valve diameters:
 - Intake: 2.02"
 - Exhaust: 1.60"
- Aftermarket valve springs are allowed, provided the stock outside dimensions retained.
- Three angle valve jobs are allowed.
- A single 45 degree cut on the valve face is allowed.
- Valve guide material is unlimited.
- Stainless steel valves are allowed.
- Screw in studs and guide plates are allowed.
- One breather is allowed per valve cover.
- Machining of the head to accommodate the maximum valve size listed above is allowed.



- Any modifications of the cylinder head not specifically listed above are not allowed.
- Angled milling/cutting of the block or cylinder heads is not allowed.
- Bowl cutting is not allowed.
- Titanium or composite valves are not allowed.

PISTONS AND CONNECTING RODS

- Flat top or dished, stock, or OEM replacement piston only.
- Cast or forged pistons.
- Steel rods with stock dimensions only:
 - GM: 5.791"
 - Mopar: 6.123"
 - Ford: 5.954"
- Removal of casting flash from connecting rods is allowed.
- Shot peening of the connecting rods is allowed.
- Titanium, stainless, aluminum, H beam, etc. rods are not allowed.
- No domed or notched pistons.
- Pistons must remain at or below deck height at TDC.

CAM AND LIFTERS

- Must be stock type cast flat tappet camshafts with a maximum valve lift as measured at the valve of 0.500".
- Must be stock lifter bore size.
- Other cam grind specifications are unrestricted.
- Full roller rockers are allowed, stud mount only.
- Aftermarket, direct replacement, timing chain and gears are allowed.
- Roller mushroom type lifters are not allowed.
- Gear or belt drive cams are not allowed.
- Shaft type rockers are not allowed, unless OEM.

INTAKE MANIFOLD

- Must be as cast Edelbrock part numbers:
 - GM: 5001 or 2716
 - Mopar: 5076
 - Ford: 5081
- GM engines are allowed to run Edelbrock intake #2716 with stock Vortec heads.
- Match porting is allowed by the removal of material only. Within the last 1/2" of the runner only.
- Addition of a return water port in rear of intake manifold is allowed, but must be approved by CHAMP OFF-ROAD tech.
- Machining of intake to match Vortec heads is allowed.
- Standard design gaskets are required.
- Drilling of head to install the intake is allowed, but must be approved by CHAMP OFF-ROAD tech.
- No devices between the carburetor and the intake manifold, designed to increase or redirect airflow will be allowed.

CARBURETOR & INTAKE



- One 2-barrel Holley model number 0-4412 is allowed. HP or BK models are not allowed.
- One combination restrictor plate with two 1.375" bores is required.
 - Must be used with standard size gaskets only.
 - This unit is available through CHAMP OFF-ROAD tech only.
 - Must have MORR stamped on it.
- Modifications to the throttle bore, plate, shaft, choke horn, booster, or Sportsman restrictor plate are not allowed.
- Breathers and air filters may be of any material or size are allowed but must be mounted under the hood with no modifications to the hood.
- No fuel injection is allowed, even if the vehicle had factory fuel injection.
- The carburetor must pass tech gauges and measurement tools.
- If an adapter is used, the maximum height of the adapter is 1".
- Use of an OEM mechanical fuel pump is required and must be mounted in the OEM location only.
- Electric fuel pumps are not allowed.

HEADERS

- Must be stock, as cast, production exhaust manifolds or "down and under" headers with a maximum tube diameter of 1.750".
- Header collectors are required.
- Custom built headers are not allowed.
- No part of the exhaust system may run through the driver's compartment.

MUFFLERS

- Unrestricted.

IGNITION SYSTEMS

- Stock type single point or HEI ignition system only.
- Spark must be activated through the distributor.
- Only one MSD ignition box is allowed. The chip of the box must be out of reach of the driver but must be in easy access for tech inspectors to check and seal.
- MSD 6AL or 6ALN ignition module is required. Only models which accept rev chips (not programmable on the unit or via dial) are allowed.
- A 6500 rev chip is required.
- Any coil is allowed.
- OEM or direct replacement alternator only.
- Magnetos or direct fire coil ignition systems are not allowed.

ENGINE COOLING

- Multiple radiators are allowed and can be mounted in any location.
- OEM or direct replacement water pump only.
- An auxiliary water tank, used for cooling, of no more than 5 gallons is allowed.

DRIVE TRAIN

- Support mounts in the area of the front of the transmission will be allowed.
- If a plate of any kind is used between the engine and transmission, it must be a stock OEM part, both in size and design.



- Any motor mount is allowed, as long as the motor remains in the stock location.
- Any automotive or light truck production housing and third member for rear axle assembly is allowed.
- Any gear ratio is allowed in the differential.
- Any axles, including aftermarket floater axles are allowed.
- Rear differential must be spool type only.
- Knock off hubs are not allowed.
- Quick-change rear ends are not allowed.
- Aluminum housings are not allowed.
- Fabricated rear end housings are allowed. Maximum ring gear size is 9”.

TRANSMISSION

- Three speed automatic transmission only.
- Transmission must be from the same manufacturer as the engine.
- Transmission coolers are allowed and may be mounted in the box.
- Any steel conventional vane type, non-electric torque converter is allowed.
- Aluminum valve body is allowed.
- Factory gears only are allowed.
- Factory aluminum planetary is allowed.
- Trans brakes are not allowed.
- Aluminum torque converters are not allowed.
- Aluminum or lightened aftermarket internal parts are not allowed.

TIRES

- D.O.T. only and available to the general public.
- Maximum tire size of 33 x 12.5 or approximate metric equivalent. Tire must be 33” in diameter or less.

WHEELS

- Wheel maximum width is 9”.
- Any steel wheel, or one-piece cast aluminum wheel is allowed.
- Maximum wheel size is 17”.
- Bead lock wheels are allowed.
- Bead liners and inner liners are not allowed.
- Spun aluminum or magnesium wheels are not allowed.
- Three-piece wheels are not allowed.

