

****Updates for 2016 are written in red.****

Note: These kart rules are shared by LOORRS as well as all LORORS series. In addition to the kart 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.

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PREFACE

This rule book is designed to provide for the orderly conduct of Lucas Oil Off Road Racing Series competitive motor sport racing events. No pretense is made of having designed a foolproof set of rules and regulations. The spirit and intent of the rules is going to be the standard by which Lucas Oil Off Road Racing Series is guided. **If this rule book does not specifically say that you can do something, then you must consider that the change 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 Lucas Oil Off Road Racing Series 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.

TERMINOLOGY

LOORRS – Lucas Oil Off Road Racing Series

LOORRS Headquarters – 302 North Sheridan Street, Corona, CA 92880

LOORRS Rules – The rules in this rule book, along with any amendments issued by LOORRS Headquarters

LOORRS Officials – Any person appointed by LOORRS to officiate at a LOORRS event either as an employee or independent contractor

LOORRS Event – A LOORRS sanctioned motor sports event to include the designated race as well as all periods for track move-in, registration, pre and post-race inspections, time trials, qualifying races, practice, and track move-out

Participant – A driver, crew member, team owner, mechanic, or any other team member or person who participates competitively in an LOORRS event

OEM – Original Equipment Manufacturer

Race Vehicle – Any vehicle, prototype, or model that fits the specifications in this rule book

DOT Tires – Department of Transportation approved, street legal tires

Rookie – Any driver who has not competed in at least 7 races (in the class he/she plans to run this season) in a professional short course off road racing series. Drivers must apply for rookie status when registering with LOORRS Headquarters.

LUCAS OIL OFF ROAD RACING SERIES GENERAL RULES

SECTION 1- RULE BOOK

- 1-1 Effective Date** – The LOORRS rules are effective upon the date of publication regardless of when a competitor receives actual notice.
- 1-2 Amendment** – LOORRS rules may be amended or changed by written notice from LOORRS 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 LOORRS rules, the interpretation and application by the LOORRS 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 LOORRS 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 LOORRS or anyone acting on its behalf with respect to such determinations, unless it is determined that the LOORRS 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 initiates litigation, it is agreed that the participant will reimburse LOORRS for all litigation costs and that the right to a trial by jury will be waived. LOORRS 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, LOORRS cannot be held responsible for the safety of participants.
- A. LOORRS 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. LOORRS is not and does not claim to be an expert in safety standards, designs, practices, or procedures, nor is LOORRS 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 LOORRS 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 LOORRS 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 LOORRS official before leaving the premises if able to do so, or as soon as the participant is physically able.

SECTION 3- LICENSES

3-1 License Required – Any person who desires to participate in a LOORRS sanctioned event as a driver, crew member, or spotter must apply for, purchase, and receive a valid, current LOORRS license. No person will be allowed in the hot pit or spotter area without the proper license.

3-2 Eligibility/Requirements – To secure a LOORRS license, a person must:

- A. Be at least 16 years of age for the Pro 4, and Pro 2 classes.
- B. Be at least 14 years of age and have approval from LOORRS for the Pro Lite and Pro Buggy classes.
- C. Be at least 8 years of age for the Kart classes **or receive Race Director approval to compete at a younger age.**
- D. Be approved by LOORRS officials prior to competing. Drivers may be removed from competition, qualifying or testing any time at the sole discretion of LOORRS.
- E. If required by LOORRS officials, submit a list of prior racing experience, pass driving ability tests and/or compete in a specified

number of regional events conducted by and at the discretion of LOORRS officials.

- F. Be physically fit in the sole discretion of LOORRS. LOORRS reserves the right to require an applicant to pass a physical examination by a qualified physician at the applicant's expense.
- G. Must execute and deliver all authorizations, releases, applications, consents, waivers, and other documents as may be required by LOORRS.
- H. Any driver who has competed in 6 races in a pro class at any professional short course racing series may not compete in the kart classes.

3-3 Application Process – Application forms must be fully executed, signed, and submitted to LOORRS Headquarters accompanied by the requisite fee. Receipt of an application does not guarantee a license will be issued. Applicants will receive a license following LOORRS approval of their application. LOORRS 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 LOORRS license is non-transferable. Any attempt to transfer, lend, or permit any other person to use a license shall result in a penalty imposed on the licensee and/or the driver that licensee is affiliated with. LOORRS will not be responsible for any damages arising in connection with such unauthorized use of a license.

3-6 Suspension/Termination – LOORRS may suspend or terminate a license in the interest of off road racing or LOORRS. 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 LOORRS 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** – LOORRS 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 LOORRS deems appropriate to determine whether the licensee continues to qualify for a license.

LUCAS OIL OFF ROAD RACING SERIES 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 LOORRS event, a participant agrees to the following:
- A. All rules set forth in the LOORRS rule book and its amendments are applicable and will be followed.
 - B. All decisions of LOORRS officials are final, non-appealable, and non-litigable with the exception of those instances described in the protest procedure.
 - 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 LOORRS, track owners, officials, agents, or employees of LOORRS.
 - 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 LOORRS 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 an LOORRS sanctioned event, grants to LOORRS 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 LOORRS sanctioned event or related telecast or

programming. Each participant hereby relinquishes to LOORRS in perpetuity all rights thereto for such purposes.

- 1-3 Telecast and Other Rights** – Each participant, by entering a LOORRS sanctioned event, acknowledges that LOORRS, 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 LOORRS sanctioned event or the participant’s performance in the event, and that, except for works created pursuant to the fair use doctrine or the LOORRS Media Access Policy, LOORRS 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 LOORRS event or the participant’s performance in the event. Each participant agrees to take all steps reasonably necessary and all steps requested by LOORRS, to protect, perfect or effectuate LOORRS’ 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 LOORRS rights.
- 1-4 Substance Abuse** – No LOORRS 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. LOORRS reserves the right to require drug and/or alcohol testing of any participant.
- 1-5 General Conduct** – No LOORRS participant or team member is permitted to come into race control for any reason during the race event time. Any discussion or communication during race weekend with the Competition Director may be done at the end of the race day at the Tech trailer.

SECTION 2- ENTRIES

- 2-1 Entry Requirements** – In order to compete in a LOORRS event, a participant must complete and submit an official entry blank for each event by the deadline specified. LOORRS is not responsible for forms not received or filled out incorrectly.

- 2-2 Entry Approval** – Acceptance of any entry is at the discretion of LOORRS. A participant is not eligible to compete until entry blank is received and approved by LOORRS headquarters regardless of fees submitted.
- 2-3 Late Entries** – In the event an entry is submitted after the specified deadline, LOORRS may accept the late entry with a late registration fee.
- 2-4 Refund Policy** – All refunds must be requested through LOORRS Headquarters within 14 days of the scheduled event. Once a vehicle enters the race course, 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 LOORRS officials to meet the specifications set forth in the stated rules are eligible to compete in a LOORRS 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 LOORRS 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.
- 4-2 Inspection Area** – Only those persons permitted by LOORRS officials are allowed in the inspection area.
- 4-3 Competitor Obligations** – A participant must take whatever steps requested by LOORRS 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. In passing a vehicle through technical inspection, LOORRS does not warrant that vehicle's adherence to all rules. The participant is responsible for ensuring his/her vehicle is in compliance with all LOORRS rules at every event.
- 4-4 Pre-Race Inspection** – All vehicles must pass a technical inspection before entering the race track.

- A. If a vehicle does not pass this inspection it will not be allowed to compete unless, in the opinion of the LOORRS 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.
- 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.

4-5 Post-Qualifying/Race Inspection – All vehicles must either be inspected or released from inspection by a LOORRS official at the conclusion of each race. If a vehicle leaves the inspection area without being cleared by a LOORRS official a penalty may be imposed.

4-6 Technical Penalties - Penalties imposed for technical infractions are final, non-appealable, and non-reviewable. Penalties may include position change and/or disqualification from one/multiple events.

4-7 Equipment/Parts Failing Inspection – LOORRS can confiscate any illegal parts and/or equipment found during any inspection.

4-8 Sealing/Impounding – LOORRS has the right to seal or impound race vehicles or parts for inspection purposes. LOORRS assumes no responsibility for those parts or vehicles.

SECTION 5- RACE PROCEDURES

5-1 Finality – All decisions made by LOORRS 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, or award or subtract points.

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.

- B. 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 LOORRS officials.
- C. 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.
- D. A driver may not attempt to qualify more than one vehicle per race division.
- E. Nobody under 16 may drive a motorized vehicle in the pit area.

5-3

Race Start

- A. Starting grid position will be established by LOORRS prior to each event.
- B. Race vehicles must be in the staging area twenty 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, with permission from a LOORRS official, but will not be released until the leader has made one complete lap.
- E. The penalty for making contact with the official pace vehicle is disqualification. This is not appealable. Passing the pace vehicle 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 LOORRS officials at their discretion.

5-4

Race Halt – LOORRS 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.

- 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. In the event of a complete restart, all vehicles that took the first green flag will be awarded the appropriate finishing position based on position on the field.
- C. 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.

- D. When an event is halted due to rain or adverse circumstances prize money shall only be paid for the races completed. LOORRS 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.

5-5 Race Start/Finish Line – The official race start/finish line will be indicated at each event during pre-race driver’s meetings. The start line may be different from the finish line.

5-6 Race Course Procedure

- A. A vehicle may be pulled from competition at any time if a LOORRS 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 race track, speed must be reduced significantly and the vehicle must merge back into the line safely without gaining time or position.

5-7 Official Competition – All races will run until the leader has completed the required distance.

5-8 Pit Procedures

- A. Long pants and closed toe shoes must be worn in the hot pits and race track area at all times.
- B. Crew member or driver license is required for access to the hot pits and tech area.
- C. No competitor may operate a kart in the pit area. All karts must be towed into and from the pit and staging areas. Only a registered competitor wearing all required safety gear may be in the kart while being towed.
- D. 1 UTV and 1 pit bike will be allowed per entry. These pit vehicles must be registered with LOORRS headquarters, must be driven in a safe manner, and may not be driven by anyone under 16 at any time.

5-9 Fire Protection

- A. It is mandatory that all teams have 2 fully charged 10 pound dry chemical ABC fire extinguisher per kart 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. LOORRS highly recommends that modified karts have a remote, on board, 5 pound minimum fire suppression system.

5-10

Team Spotters – All teams in all divisions are required to have one spotter per race vehicle, in the LOORRS designated area any time the race vehicle is on the race track.

- A. Spotter must check in with the LOORRS 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. Spotter must have two working radios consisting of a working “listen only” radio and headset with the ability to hear the competition director, as well as a 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 LOORRS 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 racecar number.

SECTION 6- FLAG RULES

6-1

Green Flag (Start/Restart) – All race vehicles must remain in appropriate positions until the starter displays the green flag signifying the start or restart of the race.

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 LOORRS officials. No passing is allowed under a yellow flag.

- A. Waiving yellow flag indicates a caution affecting only area where flag is being displayed.

- B. Stationary yellow flag indicates a full course caution situation. Lap counting may or may not cease during a full course caution at the discretion of LOORRS.
- C. 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 will result in disqualification of the vehicle. This is not an appealable disqualification.
- D. Only LOORRS safety personnel will attend to race vehicles and drivers involved in caution incidents. LOORRS officials may request assistance from trained crew members as needed, but other than that crew members may not enter the race track to assist their vehicles.

6-4 Red Flag (Race Stop) – Race vehicle must stop in a safe manner immediately, regardless of 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 flag is withdrawn and 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 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 LOORRS officials.

6-5 Black Flag (Penalty) – Race vehicle must report to penalty area and remain until released by a LOORRS 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 LOORRS rules or directives, and other offenses at the discretion of LOORRS 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, LOORRS officials may drop the finishing position of the vehicle, deduct championship points, or both.

- 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.
- 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 LOORRS 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 traveled in the allocated amount of time, whether the vehicle is still running or not.

SECTION 7- TIMING AND SCORING

- 7-1 Official Scoring** – All decisions of the designated LOORRS official scorer for an event are final unless a recheck has been requested by a driver or a LOORRS 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 LOORRS officials. Results are not considered official until any requested re-checks have been concluded. Any re-check 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 LOORRS officials that a participant has violated a LOORRS rule or has acted in a manner that is detrimental to off road racing or to LOORRS, and the act warrants a penalty, the member will be notified by LOORRS officials of the violation, the circumstances involved, and the penalty imposed.
- 8-2 Emergency Action** – LOORRS 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 LOORRS official are examples of conduct that would warrant emergency action.

- 8-3 Payment of Fines** - Fines shall be paid to LOORRS headquarters promptly after receipt of penalty notice. 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 LOORRS license for the next year.
- 8-4 General Scope of Penalties** – Penalties for violation of LOORRS 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 LOORRS. 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 LOORRS 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 LOORRS will receive a penalty. This includes any aggressive action toward a LOORRS official by participant including arguing, yelling or raising your voice when talking to an official or touching the official in any physical way.
- 8-6 Repeat Offenses** –Any participant found by LOORRS officials to be engaged in any repeat offense of any technical violation or any other action that causes the LOORRS 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 LOORRS competition director.
- 8-7 Protests** - There is no formal protest process for the Kart classes.

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 pay out schedule.
- A. Prize money shall be distributed by LOORRS Headquarters.

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 starts the race under his/her registered vehicle number. Any driver changes must be reported to LOORRS 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 take the green flag and start the race.
- D. To participate in year end points fund awards, the driver must compete in 50% 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 a death in the family, injury, or other special non-racing circumstance, another eligible LOORRS licensed driver may act as a substitute driver. This driver substitution can only be done one time in a season and must be approved by the LOORRS competition director. Drivers who have competed in a pro class at any professional series are not eligible to act as substitute drivers in the kart classes.
- F. 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.
- G. Point fund money will be awarded at the annual LOORRS Awards Banquet with the date and location to be announced.
- H. Eligibility to participate in the points fund may be forfeited by any member violating LOORRS rules or regulations prior to the presentation of the awards.
- I. The points championship is not official until after the last race.

10-2

Driver Points – Points will be awarded according to the following point scale:

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

LUCAS OIL OFF ROAD RACING SERIES KART RULES

The aforementioned rules will apply to the Junior 1, Junior 2, and Modified Kart classes.

Junior 1 Karts: Custom built single seat mini race trucks with Subaru spec engine driven by children ranging in age from 8-15 years.

Junior 2 Karts: Custom built single seat mini race trucks with Honda spec engine driven by children ranging in age from 8-15 years.

Modified Karts: Custom built single seat mini race truck with 250 or 450 cc motor cycle/quad engines driven by children ranging in age from 10-15 years.

All new karts must be of same basic design as current vehicles and must be approved by LOORRS prior to competition.

KR-1 MARKING AND IDENTIFICATION

- A. All vehicle numbering is subject to approval and is assigned by LOORRS.
- B. LOORRS officials may require a competitor to use a different number to avoid confusion or duplication at an event.

- C. 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
- D. Advertising on race vehicles must be in good taste.
- E. Foil or reflective numbers are not permitted.
- F. All LOORRS vehicles are required to have LOORRS stickers on each side of the front of the door area, below the window opening.
- G. LOORRS may require the use of specific sponsor decals.
- H. Team vehicles with the same paint and colors must have distinguishing markings of some kind.

KR-2 NUMBERS

- A. Kart numbers are designated by class:
 1. **Junior 1** – Ages 8-15 – Numbers 200-299
 2. **Junior 2** – Ages 8-15 – Numbers 400-499
 3. **Modified** – Ages 10-15 – Numbers 500-599
- 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 of 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, high and close to the back of the cab
 - a. Number plates must be white and measure at least 8 inches high and 10 inches wide.
 - b. Numbers on plate must be solid black and measure at least 7 inches high.
 2. Roof -12 inch minimum height
 3. Driver's side visor – 4 inch minimum height
 4. (1) number plate on back of vehicle facing rear.
 - a. Number plate must be white and measure at least 7 inches high and 10 inches wide.
 - b. Number on plate must be solid black and measure at least 6 inches high.

KR-3 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 anytime during an event, the driver cannot compete for at least 7 days or must be cleared by doctor before returning to competition.

KR-4 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 race track without safety and emergency equipment on the premises.
- C. No race vehicle is permitted on the track without approval from a LOORRS official.
- D. No driver will compete in any event with his/her head or arm extended outside of the vehicle.
- E. Additions to the body of the race vehicle, such as fins, scoops, wings, and other extruding additions will not be permitted.

KR-5 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/1 or higher.
- B. Drivers must wear gloves and driving shoes that meet SFI Spec 3.3/1 or higher and have the SFI label attached.
- C. All driver apparel must be clean, in good condition, and free from rips or worn areas.
- D. The designated LOORRS patch will be sewn 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.

KR-6 HELMETS

- A. Full face helmets with a Lexan shield are required.
- B. Helmets must be certified to one or more of the following standards:
 - 1. Snell Memorial Foundation SA 2005 or better with a legible Snell sticker attached.
 - 2. SFI Spec 31.1/2005 or Youth helmet SFI Spec 24.1 with a legible SFI sticker attached.
 - 3. FIA 8868 with a legible FIA sticker attached.

KR-7 EYE PROTECTION

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

KR-8 SEATS

- A. Only manufactured race seats are permitted. Full containment seats are highly recommended. Plastic seats are not allowed.
- B. Seats must be sized appropriately for driver's height and weight (ie. Child sized seats).
- C. All seats must be securely mounted to frame of vehicle and be properly reinforced in such a manner as to keep seat from moving in relationship to frame.
- D. Headrests designed and installed to prevent whiplash are mandatory on all vehicles. Headrest must be constructed of at least 2 inch thick resilient padding and be approximately 36 square inches in area.
- E. Seat must be centered in vehicle +/- 2 inches.
- F. If a footrest is used, it must support the whole shoe and have rounded edges. Short or single tubes are not permitted.

KR-9 SEAT BELTS AND SHOULDER HARNESSSES

- A. All vehicles must have a heavy-duty type five-point fast release latch 2 inch minimum width seat belt, anti-submarine strap, and 2 inch minimum width shoulder straps with metal-to metal buckles and connectors for each occupant. The five-point harness system shall consist of 1 anti-submarine strap, 1 seat belt, and 2 shoulder straps. Harness material shall be made of nylon or Dacron polyester.

- B. Shoulder straps must be mounted behind the driver's seat and be located a minimum of 4 inches below the top of the driver's shoulders. Seat belt should be mounted a minimum of 2.5 inches forward of the intersection of the back of the seat and the sitting portion of the seat. All adjustment buckles must be a minimum of 1.5 inches from the seat to prevent loosening or chafing. Mounting hardware must be a minimum of 3/8 inch grade 8 steel bolts.
- C. When bolting through the body or frame, flat washers, lock nuts, and cotter keys must be used. All harness hardware must be safety tied. If wrap around shoulder harnesses are used, care must be taken to prevent them from slipping and chafing on sharp frame components.
- D. Lap belts must be bolted or clipped in and cannot be looped around lower frame tube.
- E. No push button type harnesses permitted.
- F. Sternum straps are not allowed.
- G. No "Y" type shoulder belts permitted.
- H. Seat belts must be certified to SFI specs 16.1, 16.2 youth or 16.5 and dated by the manufacturer. Belts must not be used beyond two years after stated date.
- I. Seat belts may be rejected by LOORRS officials if dirty, frayed, oily, greasy, or otherwise considered unsafe by officials.

KR-10 HEAD AND NECK RESTRAINTS

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

KR-11 ROLL BAR PADDING

- A. Any roll bar that may come in contact with the driver must be covered with roll bar padding.
- B. LOORRS highly recommends that all roll bar padding be certified to SFI spec 45.1 or better.

KR-12

SAFETY NETS

- A. LOORRS approved window nets are mandatory on all karts and must cover the complete open area of the cockpit on both sides of the vehicle.
- B. Nets must be installed on the inside of the roll cage to prevent them from being damaged or coming off in the event of a roll over or slide. If nets are installed so that occupants can release the net from the inside, the latch must be located at the front top of the window opening.
- C. The net border and attachment must be made of materials that are as strong as or stronger than the net itself.
- D. Net attachments must be placed no more than every 5 inches apart. Acceptable attachments may include but are not limited to: hose clamps, **snaps**, heavy-duty nylon ties, **metal hooks**, and steel rods. Steel rods are acceptable methods of bottom fastening.
- E. Triangle style roll cage (helmet) nets are required on both sides of the driver's seat.
- F. If a full containment seat is used with side helmet supports, the triangle helmet nets are not required.

KR-13

ARM RESTRAINTS

- A. All karts must be equipped with LOORRS approved arm restraints. Restraints must meet SFI spec 3.3 or better and be utilized anytime the driver is in the kart.
- B. **Modified Karts:** If karts are equipped with A pillar nets, arm restraints are optional for this class. If A pillar nets are not used, arm restraints are required as stated above.

KR-14

CHASSIS/ROLL CAGE

- A. **All new designs must be approved by LOORRS.**
- B. Chassis must be of a safe design and constructed with high quality welds.
- C. Roll-cages must be designed and constructed with 1 front vertical hoop, 1 rear vertical hoop, 2 interconnecting top bars, 2 rear down braces, 1 diagonal brace and all necessary gussets. The 2 top interconnecting bars must be placed as far to the outside of the top part of the front and rear hoops as possible.

- D. Optional: Top cage may use 2 vertical hoops on either side, 2 interconnecting top bars across the front and rear, and diagonal bracing.
- E. 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.
- F. All roll-cage components (hoops, braces, gussets, etc.) must have a minimum of 3-inch clearance from the component to the driver's helmet when seated in the normal riding position.
- G. All intersecting points must be gusseted and braced. Rollcage terminal ends must be attached to a frame or body member that will support maximum impact and not shear or allow more than 1½ inches of movement in the cage terminal end.
- H. Gussets must be installed at all major intersections, including diagonal and rear down braces, where single weld fractures can affect occupant's safety.
- I. 1.250" x .083" ROLL BAR TUBES ARE REQUIRED IN THE MODIFIED CLASS AND ARE HIGHLY RECOMMENDED IN JUNIOR CLASSES.
- J. No aluminum or other nonferrous materials are permitted.
- K. Roll cage construction material may be crew, dom, whr, wcr, mild carbon steel or 4130 chromoly.
- L. LOORRS HIGHLY RECOMMENDS THE USE OF 4130 CHROMOLY or 1018/1012/ASTM/DOM.
- M. All welds must be of high quality craftsmanship with good penetration and with no undercutting of parent material.
- N. Oxy-acetylene brazing on roll-cage is strictly forbidden
- O. The roof must be covered with sheet metal or .125" minimum aluminum. LOORRS recommends the use of T-6 aluminum.
- P. The roof sheet metal must be installed with a minimum of 6 evenly spaced 5/16 inch bolts, not protruding toward the driver.
- Q. Clamped on roofs are not allowed.
- R. All karts must be constructed with either an X roof or 2 bars extending from the A pillars to the center of the rear roll bar.
- S. **Modified Karts (also recommended for Jr 2 Karts):**
 1. 1.250" by .083" roll bar tubes are required on all new karts and on all karts that run a 450 cc engine.
 2. Roll cage construction material must be 4130 chromoly on all new karts and on all karts that run a 450 cc engine.

KR-15 DOORS

- A. All new karts must have 'X', 'A' or 'Ladder' design bracing in door area (designed to provide maximum protection to the driver).
- B. 'X' or 'A' designs must use a minimum 1.0" by .083" tube 4130 chromoly or 1018/1012CDS/DOM.
- C. 'Ladder' design must use a 1.0" by .083" tube for main rails and .750" by .083" for rungs.

KR-16 DRIVER COMPARTMENT

- A. The driver must be able to enter and exit, unassisted and with great ease, the driving compartment with the kart in any position.
- B. 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.
- C. Floorboards must have a minimum thickness of .090" and must cover entire floor of driver compartment from pedals to back of seat. T-6 aluminum is recommended.
- D. Firewalls and/or bulkheads must separate the driving compartment from any fuels, engine fluids and acids. No holes or openings allowed.
- E. Battery must be completely covered if mounted in the driving compartment.
- F. **Modified Karts:**
 - 1. It is recommended that driver compartment side panels be made of .090" T-6 aluminum.

KR-17 MEASUREMENTS & WEIGHT

- A. Karts must race at a minimum 6 inch ride height.
- B. All measurements will be taken with driver in kart at post race technical inspection.
- 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.
- D. Track width will be measured from outside of tire to outside of tire.
- E. Overall length is measured from outside of front bumper to outside of rear bumper. The maximum overall length is 120 inches.
- F. Additional weight may be added to meet minimum weight requirement.
 - 1. Any added weight must be painted white, marked with kart number, and bolted to the floorboard close to the seat.

2. Weight may not be carried on driver's person.
- G. **Junior 1 Kart Measurements:**
 1. Maximum track width: 56¾ inches
 2. Maximum wheel base: 71 inches
 3. Minimum kart weight: 585 pounds
- H. **Junior 2 Kart Measurements:**
 1. Maximum track width: 58 ½ inches
 2. Maximum wheel base: 73 inches
 3. Minimum kart weight: 670 pounds
- I. **Modified Kart Measurements:**
 1. Maximum track width: 58 ½ inches
 2. Maximum wheel base: 73 inches
 3. Minimum kart weight-250 CC Engine: 690 pounds
 4. Minimum kart weight-450 CC Engine: 815 pounds

KR-18 BODY & FENDERS

- A. A truck body is required and must be approved by LOORRS.
- B. Body can be multi piece.
- C. All fender and body mounts must have loop ends. No single tubes or long brackets may be used.
- D. The removal of fenders or body panels during competition for any reason other than damage incurred during the event will result in disqualification.

KR-19 MUD FLAPS

- A. **Modified Karts:**
 1. All Modified Karts must run approved rear mud flaps made from 3/16 rubber or HDPE material (available from McMaster-Carr using pn# 9785T521-white or pn# 9785T522-black).
 2. Mud flaps must be at least 12 inches wide and cover the full width of the rear tire as viewed from directly behind the kart.
 3. Mud flaps must extend from the top of the tire to within 3 inches of the ground at ride height.
 4. Mud flaps must be securely mounted with bolts and fender washers to resist folding back or tearing and must keep the tire covered as viewed from behind, even when the body panels are removed.
 5. Mud flaps may not be attached with zip ties or chains.
 6. All mounting methods must be approved by LOORRS.

KR-20 BUMPERS

- A. Must have front and rear bumper secured to frame. Ends must be **looped**, capped and rounded to prevent any sharp edges.
- B. Bumpers and nerf bars must be designed in a way as to reasonably inhibit two karts from becoming locked together.
- C. LOORRS recommends that bumper mount/brace tubes have a 30 degree bend located between bumper and frame.
- D. No hazardous front or rear bumpers, nerf bars, frame heads or other protruding objects from karts are permitted.
- E. Front bumpers must be at least 35 inches wide.
- F. Rear bumpers must be at least 40 inches wide.

KR-21 SKID PLATES

- A. Skid plates designed to reasonably protect the front suspension, steering, and brake components are recommended on all karts.
- B. Skid plates must be made of metal and be securely attached.

KR-22 FRONT SUSPENSION

- A. Front suspension must be an A arm type design.
- B. All four corners must have a single coil over shock.
- C. Secondary suspension is not allowed.
- ~~D. Front wheel travel is limited to 13 inches.~~
- E. **Junior Karts:**
 - 1. Suspension mounting points must be the same for all junior karts. Diagrams are available from LOORRS.

KR-23 REAR SUSPENSION

- A. A-arms are not allowed in the rear.
- B. Sway bars are allowed.
- C. Secondary suspension is not allowed.
- D. No diffs allowed.
- ~~E. Rear wheel travel is limited to 19 inches.~~
- F. **Junior Karts:**

1. Suspension mounting points must be the same for all junior karts. Diagrams are available from LOORRS.

KR-24 STEERING

- A. Steering geometry settings must be approved by LOORRS officials.
- B. System must work properly with all bolts and parts tightened.
- C. Power steering is allowed.
- D. Steering wheel pad is highly recommended.

KR-25 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. No internal or external bypass shocks are allowed.
- C. Shock valving and fluid type are open.
- D. Air shocks are not allowed.
- E. Reservoirs are allowed with a maximum size of 2.0" x 8.0".
- F. Dual rate springs are allowed. A third tender spring is allowed.
- G. Shocks may not be adjusted while kart is in motion.
- H. Externally adjustable rebound and compression (clicker) shocks are allowed
- I. **Junior Karts**
 1. Shock must be a maximum of 2.0" x 6.0" travel.
- J. **Modified Karts:**
 1. Shock must be a maximum of 2.0" x 12.0" travel.

KR-26 BUMP STOPS

- A. Suspension bump stops must be of the solid type.
- B. Bump stops cannot be attached to any moving suspension parts.

KR-27 BRAKES AND HUBS

- A. Brakes must be in safe working condition and be able to apply adequate force to lock up tires. Turning or cutting brakes will not be permitted.
- B. 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.

- C. Front brakes are allowed.
- D. Brakes may be hydraulic or cable activated.
- E. Lug nuts must be steel.
- F. Wheel studs must be rounded and not of excessive length. Stud threads must extend past the end of the lugnut.

KR-28 ENGINE

- A. Engine must be located in the rear of the kart behind the driver.
- B. **Junior 1 Karts:**
 - 1. The mandated engine is the Subaru EX27 266 cc 4 stroke air cooled engine. The engine must remain sealed by Fleming Motorsports.
 - 2. No modifications may be made to this engine unless otherwise specified herein. This includes no modifications of any kind to the block, crankshaft, connecting rod, piston, cylinder head, valve train, cam shaft, flywheel, bearings, ignition system, governor, air cooling system, or oil system.
 - 3. Fleming Motorsports installed reground crank and QRC billet rod is approved.
 - 4. No components may be added or removed.
 - 5. LOORRS recommends the use of a flywheel guard.
- C. **Junior 2 Karts:**
 - 1. The mandated engine is the Honda GX390 with electric start. The engine must remain sealed by Fleming Motorsports.
 - 2. No modifications may be made to this engine unless otherwise specified herein. This includes modifications of any kind to the block, crankshaft, connecting rod piston, cylinder head, valve train, cam shaft, flywheel, bearings, ignition system, governor, air cooling system, or oil system.
 - 3. No components may be added or removed.
- D. **Modified Karts:**
 - 1. Engine must be a production engine 250 cc or 450 cc four stroke. Other engines may be approved by LOORRS. The approved engines for this class are as follows:
 - a. 450 cc Quad Engines
 - Kawasaki KXF450
 - Honda TRX450
 - Suzuki LTR450
 - Yamaha YFZ450 & YFZ540R

- b. 250 cc Motorcycle Engines
 - Kawasaki KX250F
 - Honda CR250F
 - Suzuki RMZ250F
 - Yamaha YFZ250
2. The following modifications are legal:
- a. Honda TRX450R (2004-2005)-must use the round slide OEM carburetor
 - b. Honda TRX450ER (2006-2014)-cases may be machined for a heavy duty crank bearing retaining plate. Transmission gears may have the dog teeth back-cut angle re-cut to aid in engagement/retention in gear
 - c. Suzuki LT-R450 (2006-2010)-a shifter pin relocater bracket may be installed inside the clutch cover to prevent the case from cracking in the event of a missed shift. On 2008-2010 engines, 3rd gear can be replaced with a billet gear available from ATP
 - d. Kawasaki KFX450 (2007-2014)-the connecting rod may be replaced with Carillo pn # KA-KFX45CA-2<-04213N. Fuel injector may be replaced with Subaru pn#16611aa510
 - e. Yamaha YFZ450R (2009-2014)-the crankshaft can be updated to the Yamaha pn#1TD-11400-00-00. 2014 engines can block off A/S with Yamaha #1TD-141B0-V0-00
 - f. Yamaha YFZ450 (2006-2012)-the stator and rectifier may be replaced with Ricky Stator pn# RSYFZ450. 2006-2008 must run the flat slide OEM carburetor. 2009-2012 must run the round slide OEM carburetor. MAY NOT upgrade to the Yamaha pn #1TD-11400-00-00 crank
 - g. Engine case welding repairs are allowed by approval only to repair external damage (ie. chain guide bosses, engine mounts).
 - h. External cylinder head welding repairs are allowed by approval only to repair external damage (ie. hold down bolt boss, exhaust stud boss).

- i. Standard rebuild valve job is allowed. Valve seat angles are open. Only steel valve seat is allowed to be machined. No aluminum in head or around valve seat may be touched, machined, removed, blended, etc. or the head will be considered illegal.
 - j. Crankshaft connecting rod pin can be welded to the crank halves for increased reliability.
 - k. Cylinder walls can be re-plated.
- 3. Below are the minimum allowable measurements for cylinders and heads (these are OEM -.005"):
 - a. Honda TRX450ER specs: cylinder 2.6630" thick, head 2.8470" thick
 - b. Suzuki LTR450 specs: cylinder 1.8780" thick, head XXX" thick (measurement TBD)
 - c. Kawasaki KFX450 specs: cylinder 2.1270" thick, head 4.1270" thick
 - d. Yamaha YZ450 (EFI) specs: cylinder 3.0320" thick, head 3.6560" thick
- 4. No modifications may be made to this engine unless otherwise specified herein. This includes no modifications of any kind to the block, connecting rod, piston, valve train, cam shaft, flywheel, bearings, governor, or oil system.
- 5.. All engine components must be OEM quad parts with the exception of OEM motorcycle cam shafts, and OEM motorcycle valves. Factory racing parts are not allowed (HRC, GYTR, KWI, Yoshimura, etc.).
- 6.. Engine gaskets and seals are open.
- 7. Cam timing can be altered by rotating the stock gears. Decompression pin to gear and cam gear to cam may be tack welded.

KR-29

ENGINE SEALS

A. Junior Karts:

1. LOORRS utilizes a sealed engine program in the junior classes.
2. All engine castings must have a clearly visible stamped serial number. Any engine without a serial number will not be considered legal for LOORRS and will be confiscated if used during an event.

3. Tampering with, removing, or altering an engine seal or being in possession of an un-sealed or tampered with sealed engine will result in disqualification and confiscation of the engine.
4. Only a LOORRS official or Fleming Motorsports may remove an engine seal at an event for the purpose of repairs and the official must witness the repairs being made.
5. Following the event, engines must be sent to Fleming Motorsports for inspection and resealing as determined by LOORRS officials.
6. LOORRS at its discretion may at any time replace a competitor's sealed engine with another sealed engine from inventory.

KR-30 IGNITION

- A. Each vehicle must have a positive action on/off switch in good working order. The switch must be highlighted in red, be labeled "ignition on/off," and be located within easy reach of the driver and from the outside of vehicle.
- B. Any brand of spark plug may be used.
- C. **Junior Karts:**
 1. The ignition must remain stock as delivered by Subaru/Honda for this model of engine. No modifications of any kind may be made to the ignition system unless specified herein.
 2. No changes in timing may be made.
 3. Stock coil and spark system must be used.
 4. No modifications to the flywheel or magnets may be made.
- D. **Modified Karts:**
 1. ~~The ignition system is open; however~~ Aftermarket ignitions must be readily available to the public and pre-approved by LOORRS.
 2. The following aftermarket ignition systems are currently pre-approved:
 - a. Honda TRX450ER
 - b. Suzuki LT-450: Dynojet pn #20-019
 - c. Kawasaki KFX450: Dynojet pn #17-014 & pn #17-036
 - d. Yamaha YFZ450R: MSD pn #4247 & Vortex pn #ECU-6B
 - e. Yamaha YFZ450: Dynatek pn #DFS7-12P

KR-31 COOLING

- A. **Junior Karts:**

1. The air cooling system must remain stock as delivered by Subaru/Honda for this model of engine.
2. No modifications of any kind may be made to the air cooling system.
3. A fine metal screen may be added to deflect dirt.
4. It is recommended that teams install a scatter shield between the driver and flywheel covering the front and top sides of the flywheel to protect the driver in the event of a flywheel explosion.

B. Modified Karts:

1. ¼ inch mesh or similar screen is required on front of radiator when radiator is mounted close to or behind driver.

KR-32 LUBRICATION

A. Junior Karts:

1. The oil lubrication system must remain stock as delivered by Subaru/Honda for this model of engine.
2. No modifications of any kind may be made to the oil lubrication system.
3. Any brand and weight of oil may be used.

B. Modified Karts:

1. Fabricated or aftermarket oil tanks are allowed.

KR-33 EXHAUST SYSTEM

- A. Exhaust systems are open.
- B. Mufflers are required.
1. Muffler must meet a maximum decibel of 105 dbas measured at 100 feet from track side.

KR-34 CARBURETOR

- A. The carburetion system must remain as delivered by the manufacturer (Fleming Motorsports for Junior Karts) for this model of engine.
- B. No modifications of any kind may be made to the carburetion system. No material may be added or removed.
- C. The carburetor bore, venturi, air or fuel passages may not be enlarged.
- D. Stock fuel bowl must be used.

- E. A larger carburetor may not be installed.
- F. Jetting is open.
- G. A throttle return spring must be used on the carburetor and at the foot pedal.
- H. **Junior 1 Karts:**
 - 1. A hole no larger than .1875" may be drilled in the bottom half of the butterfly.
- I. **Modified Karts:**
 - 1. Accelerator pump may be modified.

KR-35 AIR FILTER AND INLET

- A. The air filter and inlet are open.

KR-36 STARTER

- A. **Modified & Junior 2 Karts:**
 - 1. A pull starter or electric system may be used.

KR-37 ENGINE REPLACEMENT

- A. Engines may be replaced during a LOORRS event only with prior LOORRS authorization.
- B. An engine change may result in a starting position change.
- C. Both original and replacement engine serial numbers will be provided to LOORRS officials in writing before replacing the engine.
- D. Engines must be declared to officials before each event. LOORRS will mark/seal & certify each engine. Seals/marks may not be tampered with or removed for any reason by anyone other than a LOORRS official.
- E. Upon removal of an engine for any reason during an event, the sealed engine must be brought back to the tech area for inspection to ensure compliance with rules.
- F. Failure to return engine to officials immediately upon removal will result in disqualification. The disqualification will be retroactive for the entire race weekend.

KR-38 FUEL INJECTION

- A. **Modified Karts:**

1. Fuel injection is allowed if it was a stock system included with the engine.
2. No modifications to the throttle body, manifold, injectors or sensors are allowed.
3. Aftermarket controllers are allowed but must be approved by LOORRS.

KR-39 FUEL CELLS

- A. Safety fuel cells must be utilized for all vehicles. Steel fuel tanks are not allowed.
- B. All fuel tanks must be securely mounted behind the driver's compartment. There must be a substantial cross member and firewall between the fuel tank and the occupants.
- C. 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 0.125-inch Marlex. Rotary molded polymer cells are acceptable. Magnesium is strictly prohibited.
- D. Container must be securely attached to vehicles with bolts or steel straps.
- E. All fittings must be built into the skin and bonded to the skin as an integral part of the tank or mechanically sealed by a ring and counter ring system by either flat joint or an "O" ring. Bolt in bulkhead fittings **must** be utilized when possible.
- F. Internal baffling is mandatory in all fuel cells. Bladder construction shall be of nylon or Dacron woven fabric impregnated and coated with a fuel resistant elastomer.
- G. Pressurizing of fuel tank is not allowed.
- H. Icing, Freon type chemicals, or refrigerants may not be used in or near the fuel system.
- I. A splash shield must be in place to direct any spill away from the driver, motor, and motor exhaust. If fuel cell is mounted above firewall paneling, a splash shield must extend a minimum of 2 inches beyond edges of gas tank to keep possible fuel splash away from driver.
- J. Fuel cell must be mounted in a position that is protected by the roll cage.

KR-40 FUEL

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

KR-41 VENTS AND CAPS

- A. Positive-locking non-vented fuel filler caps must be located and secured in such a manner as to prevent being knocked off or opened during movement, rollover, or accidental impact.
- B. Design and installation must be done in such a manner to prevent fuel escaping from pickups, lines, fillers and breather vents if kart is partially or totally inverted.
- C. Fuel breather lines must have a rollover check valve incorporated in the fuel cell. The vent line must extend to the highest point of the roll-cage nearest the fuel cell, across the width of the vehicle, and down to below the belly pan of the vehicle or 3 inches below the fuel cell, whichever is lower and be routed away from exhaust.

KR-42 CLUTCH

- A. The engine clutch must be mounted in the stock location.
- B. Clutch tuning is open providing that all tuning parts used are commercially available to the general public.
- C. **Junior 1 Kart:**
 - 1. All clutch springs must be pre-approved by LOORRS officials and be available to the general public for purchase by any competitor at any time. In the event that a spring becomes discontinued by the manufacturer, they will no longer be legal for use.
 - 2. Clutch tuning is limited to springs, weights, ramps, and sliders only.
 - 3. The mandated clutch is the Comet Series 20 (six inch diameter only).
 - 4. The Comet TAV2 Torque-A-Verter may also be used.

5. The use of any other manufacturer's components is prohibited. Any non-mandated components will be confiscated.
6. No modifications may be made to either system. This includes no modifications of any kind to the drive cones, plates, and shafts, including changes in profiles, diameters, or materials.
7. No components may be added or removed.
8. Any brand of replacement belt may be used.
9. Clutch cover may be removed.

D. Junior 2 Kart:

1. All clutch springs must be pre-approved by LOORRS officials and be available to the general public for purchase by any competitor at any time. In the event that a spring becomes discontinued by the manufacturer, they will no longer be legal for use.
2. Clutch tuning is limited to springs and spring shimming only. **No spacers, stops or spring stops are allowed.**
3. The mandated clutch is the CMI Billet Clutch
4. The use of any other manufacturer's components is prohibited. Any non-mandated components will be confiscated.
5. No modifications may be made to either system. This includes no modifications of any kind to the drive cones, plates, and shafts, including changes in profiles, diameters, or materials.
6. No components may be added or removed.
7. Any brand of replacement belt may be used.
8. CMI clutch cover is mandatory.

E. Modified Karts:

1. Clutch is open.

KR-43

TRANSMISSION & GEARING

- A. Final drive gearing is open.
- B. No reverse is allowed.
- C. Four wheel drive is not allowed.
- D. Chain drive is required.
- E. **Junior Karts:**
 1. No transmission allowed.
- F. **Modified Karts:**
 1. Transmission must remain stock as delivered by manufacturer for this model of engine.
 2. Reliability changes are allowed with LOORRS approval.

KR-44 DRIVE PARTS

- A. Rear drive must be spool type only.
- B. **Modified Karts:**
 - 1. Engine to transmission must be all one piece (as a factory motorcycle or quad).
 - 2. Chain drive is required from the driver to the driven sprocket.
 - 3. 1 constant velocity joint is allowed.
 - 4. Only 1 half shaft/drive shaft with 2 universal joints is allowed.

KR-45 WHEELS & TIRES

- A. Tires will be measured from their widest and highest point, inflated to 8 PSI.
- B. No inner liners allowed.
- C. Spare tire is optional.
- D. No multiple tires per corner permitted.
- E. Tires must be in good condition.
- F. Maximum wheel diameter is 10 inches.
- G. **Plastic wheel covers** are allowed **and must be approved.**
- H. **Junior Karts:**
 - 1. Maximum tire diameter is 21 inches.
- I. **Modified Karts:**
 - 1. Maximum tire diameter is 24 inches.
 - 2. **All bead locks must have recessed bolts only that do not protrude past the face of the ring. Button head bolts may be used if bead lock bolt area cannot be recessed.**

KR-46 FASTENERS

- A. All components and parts on the kart's suspension system, chassis, and running gear will be secured with SAE grade 8 or better nuts and bolts. 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.
- B. No aluminum or titanium fasteners allowed.

KR-47 EXOTIC MATERIALS

- A. No titanium or any other exotic materials may be used anywhere in the vehicle.

KR-48 HOSES

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

KR-49 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 LOORRS prior to their use.
- D. All race vehicle radio communication systems must be approved by LOORRS.
- E. See Section 5 of LOORRS General Rules for spotter requirements.
- F. Spotters are required for all race teams.
- G. **Mod Karts:** Each competitor race vehicle at the national series 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 LOORRS and meet LOORRS standards at all times. Competitors will not be allowed on the track at any time without the race receiver installed and functional.

KR-50 TRANSPONDERS/TIMING

- A. Remote score timing devices will not be permitted by teams, owners, or anyone associated with an entry, unless approved by LOORRS.
- B. All teams are required to purchase remote timing transponders. Transponders can only be purchased through LOORRS and numbers must be recorded with LOORRS 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 mounted 55 inches back from the leading edge of the front bumper along the passenger side outer panel.