

# ATWATER KARTING SPEEDWAY 2021 Rules & Regulations

## Welcome to Atwater Karting Speedway!

These rules and regulations are intended as a guide for safe and enjoyable racing. Racers, crew members, volunteers and officials participate at their own risk and should exercise their best judgement in all situations to reduce risk of injury and to promote safety in the sport.

Participation in events at AKS implies that each racer and crew member has reviewed and understands all rules and regulations. This applies to track members and non-members alike. No express or implied warranty of safety shall result from the publication of, or compliance with these rules and regulations. They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death of a participant, spectator or official. Rule compliance will be enforced to the best of the Board's ability. Deviations and updates to rules will be applied as deemed necessary by the AKS Board. All decisions are final.

Atwater Karting Staff places great emphasis on good sportsmanship and safe racing for all competitors, Junior and Senior alike. The AKS staff is dedicated to providing a racing program which promotes positive community involvement and good character development for our youth. Please remember to say thank you to the AKS staff who generously volunteer their time throughout the year.

Thank you to all who participate and support the Atwater Karting Speedway!

—The AKS Board

Atwater Karting Speedway 1100 Kandi Meeker Rd SE Atwater, MN 56209





Class	Age	Weight (lbs)	Motor	Specs	Tires	
Rookie Caged	ie Caged		IKF Flathead	Horstman .425 Purple Plate Alcohol	Slicks: Any Brand	
Non-Points Class 5-7		265	IKF Clone	ARC or Speed Karts .375 Red Plate, Pump Gas		
will run together)			IKF Animal	APS .225 Purple Plate, Alcohol		
Sportsman	Sportsman 5-9		NKA Clone	ARC or Speed Karts .375 Red Plate *	Slicks: Any	
(3 yr Max)	0-9	235	NKA Animal	APS .225 Purple Plate, Alcohol	Brand	
Powderpuff	8-12	275	NKA Clone	ARC or Speed Karts .425 Green Plate *	Slicks: Any Brand	
			NKA Animal	APS .250 Black Plate 3 Hole, Alcohol		
JR 1	8-11	275	NKA Clone	ARC or Speed Karts .425 Green Plate *	Slicks: Any Brand	
			NKA Animal	APS .250 Black Plate 3 Hole, Alcohol (declare spec at check-in)		
JR 2/3	12-15	320	NKA Clone	ARC or Speed Karts .550 Blue Plate *	Slicks: Any Brand	
			NKA Animal	APS .312 Gold Plate 3 Hole, Alcohol (declare spec at check-in)		
Adult Clone	15 & Up	375	NKA Clone	Pump Gas 87 or 91 Octane Only; Long Pipe Allowed	Slicks: Any Brand	
Adult Open	15 & Up	375	Unrestricted	4 Cycle Only, NO Shifters	Slicks: Any Brand	
R-Box Wing	6-9	285	See Rulebook for full specs	Cione: ARC or Speed Karts .425 Green Plate; 6.5 OHV 196cc No Kohlar, No Honda, No Predators Pump gas ONLY	Hoosier Treaded (NO Prep)	
Junior Wing	9-13	315	See Rulebook for full specs	Clone: 6.5 OHV 196cc - No Kohlar, No Honda, No Predators; Any 168-f Clone Block; Pump Gas ONLY Animal: NKA, Pump Gas Only	Hoosier Treaded (NO Prep)	
Intermediate Wing	13-16	350	See Rulebook for full specs	<i>Open Clone</i> : 6.5 OHV 196cc No Kohlar, No Honda, No Predators	Hoosier Treaded (NO Prep)	
Class Age deter	mination	date is Ma	y 1st, 2021	•		
Flat Kart Clone	Classes:	Pump Gas	s 87 or 91 Octan	e Only, Max 3/4" OD Pipe, Mini B-91 Muffler		
NOTE: If driver of	competed	at AKS in	Junior Wing in 2	2020 season and is age 9 as of May 1st, 2021, they mu	ust enter	

3/18/2021



# 2021 SCHEDULE

Feb 13.....Swap Meet, 9:00AM–1:00PM Atwater Community Center

May 15.....Test N Tune Day 3:00 - 6:00 PM

May 22.....Season Opener – Points Race

June 5.....Points Race

June 19.....Double Header Event – 2 Points Races

July 10.....Points Race

July 24.....Double Header Event – 2 Points Races

- August 7.....Points Race
- August 14.....Points Race
- August 28.....Harvest Fest Race Sponsor Event, Points Race
- August 29......Harvest Fest Race Sponsor Event, Points Race
- Sept 18.....Points Race
- Dec 11.....Season Awards Banquet

2021 Classes:

Rookie Caged \* Sportsman Clone & Animal \* Powderpuff JR1 Clone & Animal \* JR 2/3 Clone & Animal \* Adult Clone Adult Open \* R-Box Wing \* JR Wing \* Intermediate Wing

## **Points Race Schedule:**

Pits Open 2:00 PM Registration cut-off 4:30 PM Pit Meeting 5:15 PM Race Starts 5:30 PM



## **Double Header Schedule:**

Pits Open 11:00 AM Registration cut-off 1:30 PM Pit Meeting 2:15 PM Race Starts 2:30 PM

atwaterkartingspeedway.com



## A: RACE INFORMATION & FEES

- <u>REGISTRATION</u> is held in the AKS Tech Shed. All drivers, crew members & pit area spectators must sign a waiver of liability form and purchase a pit pass at the registration booth. All minors (under age 18) must have a parent or legal guardian sign the liability waivers. Anyone observed in the pits without a pit pass must purchase a pass immediately or leave the pit area and go to the spectator area. Pre-season registration will be available online, including season memberships, parking spot reservations and individual race entries.
- 2. <u>PIT PASS FEE</u>: \$10.00 (Pit Pass covers all events held on a single day) **Pit Pass fees are non**refundable once issued.
- 3. <u>GENERAL ADMISSION</u>: Grandstand and Spectator Areas are FREE Admission: Free Will contributions are appreciated.
- <u>KART ENTRY FEES</u>: Drivers Pit Pass is included in entry fee. Once a race event has commenced entry fees are non-refundable, subject to rain out policy. Members \$25.00 first class, Additional Classes \$20.00 per class Non-Members \$35.00 first class, Additional Classes \$30.00 per class
- 5. <u>YEARLY MEMBERSHIP FEE (Optional)</u>: Membership will remain open until the last week of races.
  First Driver \$60.00
  Additional Driver (Same Family) \$20.00
  Maximum of \$100 per family
- 6. <u>SEASON PARKING SPACES (Optional)</u>: Reserved parking spots are available for \$50 each spot. Returning race teams will be given first chance to reserve their spot. Select Reserved Parking option on the Season Registration form and submit payment. Any spots not marked with reserved sign are open to all race teams.
- 7. <u>RACECEIVERS</u> are mandatory for all karts racing at AKS. Receivers are available at the track for daily rental fee of \$10. Request rental at registration and fill out rental agreement.
- 8. <u>EVENT SCHEDULES</u>: Draw cut-off is one hour prior to race start time. Late entrants will have to tag the field in both heat races. If the 1st heat is missed, the driver will start the feature in the back.

Single Race: Pits Open 2:00 PM Draw cut-off 4:30 PM Pit Meeting 5:15 PM Race Starts 5:30 PM **Double Header:** Pits Open 11:00 AM Draw cut-off 1:30 PM Pit Meeting 2:15 PM Race Starts 2:30 PM 9. <u>INCLEMENT WEATHER</u>: AKS Board may utilize time saving measures including reduced laps, combining similar classes or additional measures to aid in race event completion. In the event of a rainout, a make-up day will be considered and announced.

<u>Rain Out Policy</u>: If races have not started, participants may apply paid entry fees to the next regular race or request a refund of entry fees. **Pit Pass fees are non-refundable once issued.** <u>Rain out scoring structure</u>: If 1st heat race has been completed, finishing positions will be scored as a feature. If 2 heat races are completed, the resulting feature lineup will determine final positions.

\*\*Weather related announcements will be posted on the AKS website or Facebook page.\*\* \*\*Individual text messages or phone calls may not be answered.\*\*

## 10. DRIVING EXPERIENCE:

- a. Driver's age as of May 1, 2021 determines which class(es) may be entered.
- b. For the promotion of safety and gaining experience, new kart drivers may be assigned a starting position at the rear of the field.
- c. If a driver would like to change classes other than their age group, the driver or parent may appeal to the AKS board for permission to do so. In order to move to an advanced racing class early (ex: Rookie to Sportsman), you must be within 1 year of the assigned class age. The AKS Board will consider all requests based on the driver's age, driving experience and track history.

If approved to move up to a higher class, the driver must give up the lower class. A oneweek trial will be allowed if desired. If a driver does move to a higher class, they will not take their points with them. Once a driver has moved up to the higher class they may not move back down after the one-week trial.

#### d. Drivers in Rookie or Powderpuff Classes are not permitted to also run in a Wing Class.

#### 11. ALTERNATE KART/MOTOR:

- a. A driver may use an alternate kart in the feature, but must start in the rear.
- b. A driver may use an alternate motor in the feature, but must start in the rear.
- c. Kart and/or motor changes must be reported to scoring staff or a Board member prior to start of feature race. If change is not reported, points will not be awarded to that driver for that feature. Alternate kart and motor must receive Tech approval prior to taking track in any event and must have AKS Tech Decal affixed to kart.

## 12. TECH INSPECTION:

a. Pre-Race Tech Inspection: All karts/drivers must go through a tech inspection the first time they race at AKS, and at the beginning of each subsequent season. Any issues must be corrected and re-teched before the kart or driver will be allowed on the track. Driver must present their helmet, jacket/suit, gloves and chest protector (if required) during tech inspection. The Tech official will affix an AKS Tech sticker to kart body after tech is passed.

- b. Post-Race Tech Inspection: The top three finishing position karts must report to the Tech area immediately after their Feature race finishes for scale and tech. *Failure to report immediately to the Tech area after race ends will result in disqualification.*
- c. You will be given two tries to weigh in. Failure to weigh will disqualify you from the race. Top two finishing position karts will be teched at Tech staff discretion. If either of the top two position karts are disqualified for tech or track official imposed infractions, the third kart will be teched also.
- d. Fuel and oil samples may and will be taken at any time during the race to determine legality.
- e. AKS Rookie Caged Classes engine specs will be teched as per the IKF rule book.
- f. AKRA/AKS Classes will be teched as per the AKRA/AKS rule book.
- g. AKS will be following NKA rules on clone motors.
- h. FAILURE TO PASS POST RACE TECHNICAL INSPECTION:
  - a. First Infraction warning. Karter must attempt to correct failed items if possible. New racers may have 1 week to rectify minor problems.
  - b. Second infraction Not allowed to race or practice until failed items are rectified.
- i. ILLEGAL MOTOR AND/OR FUEL
  - a. First infraction will result in the loss of points and trophy for that event.
  - b. Second infraction will result in loss of points, trophy for that event and a one event suspension.
  - c. Third infraction loss of points to date, trophy and balance of year suspension.
- j. ILLEGAL WEIGHT
  - a. Will result in the loss of points and trophies for that event. Each racer is responsible to check their weight and to be within legal limits. The track scale will be the official scale.

Although kart and driver pass pre-race tech, that does not guarantee passing post-race tech. Once a kart has passed a tech inspection the driver/owner is responsible for maintaining the kart in the same manner as it was inspected. Failure to pass post-race tech will result in disqualification. The track may tech a kart at any time and in any manner at the Tech personnel's discretion. Kart must have official AKS Tech sticker affixed for all races. Please see tech official if you make changes that require re-tech (ex: new body, motor, etc.).

The Technical Director's judgment as to the safety of the kart and its driver's protective equipment is final and cannot be protested.

**NOTE:** Tech inspections cannot guarantee safety. AKS assumes no responsibility for the safety of an entrant's kart. Each entrant is fully responsible for the complete and comprehensive safety of their kart and driver's protective equipment. AKS is not responsible for any mechanical failure or loss, injury or death resulting from it.

- 13. <u>HOT LAPS</u>: Anyone driving a kart on the track at any time MUST BE wearing all required safety gear (see section C: SAFETY GEAR).
- 14. <u>DRIVERS MEETING</u>: The flagman or track officials will conduct a Drivers Meeting at the tech shed to provide instructions regarding race procedures and rules. Additional announcements or discussion of general track interest may also take place at this time. All drivers must attend. The drivers' meeting will conclude with the playing of the National Anthem, followed immediately by the first heat race.

#### 15. <u>HEAT RACES</u>:

- a. Maximum of 8 karts per heat. Entries will be divided into heat lineups by chip draw. For races exceeding 8 kart entries, lineups will be assigned by alternating draw numbers (ex: 1, 3, 5, 7--A Heat; 2, 4, 6, 8--B Heat, etc.) The second heat race lineup will be inverted from first heat positions.
- b. Rookies, Sportsman, R-Box Wing will have 6 laps OR 8 minutes to complete heat race. (time will start with the completion of the first lap and will stop for all red flags)\*
- c. All other classes will have 10 laps OR 12 minutes to complete heat race. (time will start with the completion of the first lap and will stop for all red flags)\*
- d. The AKS Board has discretionary authority to divide heat races to less than 8 karts.

#### 16. FEATURE RACES:

- a. Maximum of 12 karts per feature.
- b. All A main features will be lined up from the results of the heat races.
- c. If there are multiple heat races, the winner of Heat 1 will go to the pole of the feature race, winner of Heat 2 will go to the outside of the front row, winner of Heat 3 will go to the inside of the second row, winner of Heat 4 will go to the outside of the second row, etc. The rest of the field will be filled based on heat race results.
- d. All B Main race lineups will be based on heat finishing position.
- e. Rookies, Sportsman, R-Box Wing will have 8 laps OR 10 minutes to complete feature race. (time will start with the completion of the first lap and will stop for all red flags)\*
- f. All other classes will have 12 laps OR 15 minutes to complete feature race. (time will start with the completion of the first lap and will stop for all red flags)\*
- g. The AKS Board has discretionary authority to alter feature races to more than 12 karts.

\*In the event of a yellow flag displayed as allotted time expires for a race, the flagman will show the green and white flags together to indicate to drivers that there will only be three laps left in the race (i.e., a green, white, checkered finish).

#### 17. DOUBLE HEADER RACES:

- a. Race 1 structure is two Heats & Feature. Heat 1 is chip draw lineup, Heat 2 inverted lineup, and Feature lineup will be determined by combined heat finish positions.
- b. Race 2 structure is two Heats & Feature. Heat 1 is chip draw lineup, Heat 2 inverted lineup, and Feature lineup will be determined by combined heat finish positions.
- c. Race 1 and Race 2 are scored independent of each other and count as two races for season points.

#### 18. SCORING / SEASON POINTS

- a. Rookie Class is non points. This class in intended as a beginner class to learn basic driving skills, track & race procedures and be a fun experience.
- b. Must have 4 or more karts to score a class.
- c. Heat races do not receive points and are primarily used to determine the lineup for feature races.
- d. If you take the Green Flag in the feature and drop out, you will receive last place points.
- e. DNS and DNF karts will receive last place points if you have taken the green flag in same event's heat race (must be under own power).
- f. Any driver who is disqualified will not receive points or a trophy for that race, unless the disqualification was for safety reasons.
- g. \*NEW FOR 2021 NO Throw Out Races
  End of season points will be awarded based on highest point total from all qualified races.
  Double Header events are scored and counted as two races. Each race must have 4 or more karts entered to qualify as a scored race.
- h. Season points go with the driver. The official scorer must be notified if someone other than the driver at check-in is driving the kart. This must be done prior to the start of the feature race. Failure to do so will result in loss of points for the night.
- i. AKS reserves the right to drop classes from the race schedule if the class does not average minimum of 4 entries after a two-week probationary period.
- j. Drivers and crew members may not enter the scorer's booth without permission of the head scorer. Questions related to scoring may be addressed post-race with AKS Board.

## **AKS Scoring Chart – UPDATED POINT STRUCTURE FOR 2021**

Feature Position	Points	Feature Position	Points
1st	100	7th	93
2nd	98	8th	92
3rd	97	9th	91
4th	96	10th	90
5th	95	11th	89
6th	94	12 <sup>th</sup> +	88

### **B: GENERAL TRACK RULES**

1. Alcoholic Beverages/Controlled Substances

No alcoholic beverages are allowed on the premises at any time. Anyone who has been determined to be under the influence of drugs or alcohol will not be allowed to participate in any of the competitions. Anyone who has been found or is suspected of being under the influence of drugs or alcohol will be denied entrance to the pit area or asked to leave if found after admittance. If a member of your pit crew is observed drinking alcohol you will be disqualified.

## 2. Personal Conduct

- a. Drivers are responsible for their own actions and the actions of their crews at all times. Any offenses committed will be accessed directly to the driver.
- b. All Parents/Legal Guardians are required to read, sign and observe the AKS Parent Code of Conduct.
- c. PROFANITY, FIGHTING, MAKING OBSCENE GESTURES OR THREATS DIRECTED OR INSTIGATED TOWARD RACE OFFICIALS, BOARD MEMBERS, DRIVERS OR SPECTATORS, IN PERSON OR VIA SOCIAL MEDIA, WILL NOT BE TOLERATED.
- d. Approaching or harassing the flagman during the races is considered unsportsmanlike conduct.
- e. Penalties: ANY display of unsportsmanlike conduct (on or off the track) will result in a FINE, SUSPENSION, IMMEDIATE REMOVAL FROM RACE AREA, POINT PENALTIES OR ALL OF THE ABOVE at the discretion of the AKS board.
- f. If disqualified for unsportsmanlike conduct, you must leave the pit area immediately.
- g. Rough driving is considered unsportsmanlike conduct and will result in penalties, including verbal warning, docked position(s), black flag disqualification, suspension, point penalties, fine, immediate removal from race area, or all of the above at the discretion of the AKS board.
- h. AKS Reserves the Right to Refuse Service to Anyone, at Any time, and to Remove Persons from the Premises for Misconduct.
- 3. No Bicycles, Scooters or other motorized toys are permitted in Pit, Staging or Scale Areas during racing events. It is recommended that children stay out of the staging and scale areas at all times for safety.
- 4. No one may drive on the track outside of race events. Violations of this rule will result in immediate ban from the current racing season.
- 5. Medical/Accident Occurrences

Emergency Medical Technician (EMT or First Responder) will be on site while karts are running on the track. The EMT will have charge of any medical emergencies and direct staff accordingly for assistance. Anyone getting hurt that will need medical attention, must notify the Board to fill out an accident report to be turned into the insurance company. DO NOT THROW OUT OR LOSE YOUR PORTION OF THE PIT PASS FOR FUTURE REFERENCES. Medical insurance for prior incident ceases when the driver returns to race. A medical release form stating driver has clearance to resume racing may be requested.

- 6. Pets are allowed in the pits but must be leashed at all times and kept in your pit area only. If pets are not on a leash or running around you will be asked to leave the pit area.
- 7. Fuel, grease, or oil may not be emptied in the pits. We provide barrels for your disposal on race days. You are responsible for your own TRASH and must take it with you.
- 8. All personnel on the track and flagmen must be 18 years of age or older with a PIT PASS. Parents/Pit Crew are not permitted to enter the track unless under the direction of the Flagman/Track Officials.
- 9. All pits *must be equipped* with a fire extinguisher.
- 10. No smoking in the staging area at any time.
- 11. Coaching of the drivers will not be permitted from anywhere on the track or in the pit area.
- 12. No Drones or Aerial Videos or Pictures Allowed Without Licensed Certificate AND Prior Approval from the AKS Board.
- 13. <u>SOCIAL MEDIA USAGE</u>: It is acceptable for a participant to do a personal posting, blog or tweet on the various social media platforms. However, any such postings, blogs or tweets should at all times conform to the highest standards of behavior and sportsmanship, be dignified and in good taste, and not contain vulgar or obscene words or images.

Persons making or contributing to derogatory comments posted on social media which are directed to, or at anyone representing or attending Atwater Karting Speedway, will immediately be suspended from racing and banned from the pit area. Please use your efforts on social media to support your track, staff & fellow racers and grow the sport for future generations!

14. <u>PHOTO and VIDEO USAGE</u>: Permission to use images created by AKS on the AKS website or social media sites, for <u>personal use</u> is hereby granted. For permissions to use images created by other sources, please contact the owner of the images. Photo and Video Release Policy: Drivers, Crew and event attendees will be provided AKS Photo Release Form prior to racing to authorize use of photos and videos for track promotion purposes.

## **C: SAFETY GEAR**

- 1. FLAT KARTS:
  - a) <u>REQUIRED: HELMET:</u> All drivers must wear a SNELL K2010/SA2010 OR K2010/SA2015 or SFI 24.1/2010 12/2020 or ECE 22.05 approved full-face helmet with a visor.
    - **NOTE:** For 2022 Racing Season, all helmets will need to be a 2015 or newer date stamp.
  - b) <u>REQUIRED: NECK BRACE:</u> are mandatory for all drivers and must be intact throughout the race or driver may be disqualified.
  - c) <u>REQUIRED: CHEST PROTECTOR:</u> All racers up to and including the age of 15 are required to wear a SFI approved chest protector. Chest protector is recommended for ages 16+ but not required.
  - d) <u>REQUIRED: Abrasion resistant jacket</u> (ex: Fire Suit/Jacket, leather or heavy vinyl jacket, heavy jean jacket)
  - e) <u>REQUIRED: Full Length Pants</u>
  - f) <u>REQUIRED: Racing shoes</u> (Racing shoes, good condition boots or sneakers)
  - g) <u>REQUIRED: GLOVES</u>
- 2. CAGED and WING CLASSES REQUIRED:
  - a) A full fire suit must be worn.
  - b) Arm restraints are mandatory and must be attached to lap belt and secured below the elbow.
  - c) Driving Gloves
  - d) Racing shoes, good conditioned boots or sneakers.
- 3. <u>ON KART CAMERAS</u>: Cameras may not be mounted on the helmet or any part of a driver's body. All cameras/recorders must be securely mounted on the top of the body or frame, and within the confines of the bodywork.
- 4. <u>REQUIRED: RACECEIVER</u>: All classes must have functioning Raceceiver to enter race. AKS maintains several Raceceiver units for daily rentals and helmet speakers or earbuds available for purchase. See registration staff for assistance with Raceceiver items.



AKS Raceceiver settings: CH 000 Frequency 454.0000

5. All drivers and crew are responsible for maintaining and safeguarding their equipment and safety gear. Raceceivers and holders should be attached securely to helmet or driver to prevent accidental dislodgement and potential damage. AKS is not liable for damages incurred to private parties' equipment or safety gear.



**GREEN:** Means GO. Race or practice has started.

<u>YELLOW</u>: Means slow down and do not pass during the race or practice (the entire track is under Caution). When you see the YELLOW flag, raise your hand to signal to the other drivers that you will be slowing. Racers are to slow to a parade lap speed and hold your position.

<u>**RED**</u>: Means stop immediately, shut down engine motors, there has been a serious accident. Slow down immediately, come to a safe and controlled stop as soon as possible, stay in your kart, and wait for directions from the track officials. There will be no working on karts during the red flag period.

**BLACK:** Means slow down immediately and exit the track at the legal exit. You are experiencing Mechanical or Driving issues and you were just disqualified. Proceed to the Tech Shed area for consultation with Race Officials.

**ROLLED BLACK FLAG** pointed at you indicates you are driving dangerously, blocking, weaving, or suspected of team driving. If you persist, the flag man will give you the full BLACK FLAG.

<u>**BLUE-YELLOW CROSS:</u>** Means move over to the outside of the track. Faster drivers are about to lap you. If your kart is off the lead lap, you may be directed to exit the track.</u>

<u>WHITE & CHECKERED</u>: Together rolled up indicates two laps to go. Rolled and crossed indicates half way through the race.

WHITE: Means one more lap to complete the race.

BLACK & WHITE CHECKERED: Means race is over; slow down and exit with caution.

## **E. RACING RULES**

- 1. The Flagman is in control of the race at all times. He will determine if the karts are in good formation before starting the race.
- 2. Races will start promptly when called. All racers are responsible for knowing the race order and reporting to the staging grid on time. Karts will lineup from the pole position, each row side by side per posted lineup.
- 3. A kart that is on the grid may join the race after the START and BEFORE the first lap is completed, but NOT if the lead kart has crossed the start/finish line and completed one lap. If a kart drops out prior to start of race, other karts we be moved up in that row, NO STAGGERING of lineup. If you are uncomfortable with your starting position at any time, you may specifically request to be placed at the back of the field. Let the staff know of this request as soon as possible, so that the starting lineup may be updated.
- 4. The pole kart is responsible for maintaining a pace to allow a safe and fair start. The outside pole kart is responsible for matching that speed. Failure of any kart to maintain a proper pace lap speed may result in the driver tagging the field. The speed maintained by the pole kart must remain steady. The flagman determines when the race starts.

The race starts the moment the green flag is waived. There will be no passing until the green flag is waved and your kart has reached the start line. The flagman/race director may order a restart of the race if not satisfied that the race started in a fair and orderly manner. The karts responsible for the restart may be put to the back of the field. This is the decision of the flagman/race director. If after 2 unsuccessful tries to start, a single file line up may be used.

- 5. Karts accidentally leaving the track may rejoin the race safely. Karts may not leave the track for the purpose of overtaking another kart and will be put to the back for these actions.
- 6. If a kart leaves the track and enters the pit area, while a race is in progress, neither the kart nor the driver will be permitted to rejoin that race.
- 7. CAUTIONS / RESTARTS:
  - a) Drivers who are judged to have been responsible for a yellow flag will be put to the back of the field. Drivers assessed two cautions during the same race will be disqualified from that race. Rookie and R-Box Wing class will have a three caution rule. If no fault can be determined, no penalty will be assessed. This is the decision of the flagman/race officials.
  - b) A driver who intentionally brings out the yellow flag is subject to disqualification.
  - c) Once the lead kart has completed one lap, there will be no complete restarts.
  - d) At third restart lineups will be single file.
  - e) No racing back to the flag stand under the yellow flag. The positions of the karts will be that of the last completed green flag lap. Passing is not allowed under the yellow flag. The race leader will set the pace of the field at a safe and reasonable speed. The flagman may stop the karts to reorder the lineup if necessary. Once the lineup is correct, the flagman will usually signal one lap to go before the green flag will be waved.

- f) If the yellow flag is thrown after the leader has taken the white flag, the race will finish under caution with final positions scored per last completed lap.
- g) Motors that stall under yellow or red flags will be permitted two restarts during each race segment. Parents/Pit Crew are not permitted to enter the track unless under the direction of the Flagman/Track Officials. Flagman/Track Officials will direct staff/pit crew to enter track to lend assistance as deemed appropriate.
- 8. Any flat kart, cage kart, or wing kart that tips on its side or rolls over on the race surface will be done for that race ( heat or feature). Kart may not be started on the race track until driver has been removed from the kart. This is NOT optional.
- 9. Drivers must shut down engines immediately on exit from the track. Failure to shut down engine before crossing scale line may be subject to disqualification.
- 10. The top three karts must scale immediately after the Feature race finishes and report to the Tech area. You will be given two tries to weigh in. *Failure to weigh can disqualify you from the race.*
- 11. <u>DRIVING IN PITS</u>: Under no circumstance should a driver exiting the track drive through the pit area. *Violators of this rule will be subject to disciplinary actions including a fine of \$75, disqualification, loss of points and/or suspension.*
- 12. All karts must clear the track before the next race is called. The 1st place kart may take the checkered flag around for a victory lap after the Main Event is finished.

#### 13. AGGRESSIVE DRIVING:

- a) <u>PASSING</u>: Both drivers have responsibilities in a passing situation. The driver attempting the pass has the primary responsibility to see that the pass is performed in a safe and controlled manner. The overtaken kart should not have more than incidental contact with the kart that is passing them or cause the driver to change their line.
  The driver being passed has the right to maintain their line. However, when the driver has their front wheels even with the seat of the kart they are trying to pass (1/2 kart length or 50% rule), they are considered to be alongside the driver being passed and may not change their line in an attempt to block or maneuver in a way that can cause a spin or an accident.
- b) <u>BLOCKING</u>: A driver may actively defend their position on the racetrack, but only in a safe and sportsmanlike manner. Weaving and other dangerous tactics is forbidden. Once another kart is alongside (1/2 kart length or 50% rule), changing your line to prevent the driver from completing the pass is not permitted. All drivers must leave racing room on the track while being passed. Drivers not leaving racing room will be warned or penalized.
- c) <u>CONTACT</u>: Some incidental contact will occur during close racing. This is normal. Excessive contact, or contact where there is a sharp speed differential, is not permitted. Anyone driving recklessly or intentionally blocking, drifting or cutting off a competitor may be black

flagged! If two or more karts make contact, ONE, both or more may be put to the back.

- d) <u>PENALTIES</u>: ANY display of unsportsmanlike conduct (on or off the track) will result in a verbal warning, docked position(s), black flag disqualification, suspension, point penalties, fine, immediate removal from race area, or all of the above at the discretion of the AKS board.
- e) Decisions made by the flag man, race officials and AKS Board are final. Corner marshals will notify the flagman of any driving violations. Penalties can be assessed at the conclusion of the race.

## **F: MOTOR PROTESTS**

 An engine may be protested upon the deposit of \$250 cash. The protester must be a driver of a kart in the same class and have raced that event or be the parent of the driver. From the \$250 Protest deposit, \$50 goes to AKS. If motor is determined to be legal, \$200 goes to the protested party.

If motor is determined illegal, \$200 goes to the protester and the engine will be disqualified and penalty imposed of loss of all points and trophies for that event.

- 2. In all protest disputes—AKS Board rulings are final. No written protests are accepted at any time. All verbal protests must be brought to scoring tower within 15 minutes of protested race conclusion and then will be reviewed by officials, corner men and board members. No awards will be given for protested race until tear down is complete.
- 3. Any member of the Board related to either party in a protest is prohibited from participation in the committee discussion of ruling.
- 4. Only One representative of the motor being teched is allowed with the Tech Official. Any Filming or Photographing of the engine during tech is PROHIBITED.
- 5. Any kart being protested must not leave the pit area until instructed to leave by the tech official. Any protested kart may deny a tear down, thus acting as an upheld protest and will lose all awards and points for that event.
- 6. If in checking a motor another infraction is found but was not one of the items chosen the tech official may still rule on that item. Example: Protest includes checking the carb bore, in taking off the carb the tech official discovers the restrictor plate has been drilled out. The tech official will DQ the motor.

## G: CHASSIS RULES

# All Caged/Flat Karts must have the following items: (See additional Wing Class information below)

- <u>Kart Number must be visible on all 4 sides</u>, with 6" tall numbers on Left and Right side. Numbers must be clearly visible in contrasting colors to the background. ALL WING KARTS MUST DISPLAY 10" NUMBERS ON RIGHT AND LEFT SIDE OF KART AND ON WING.
- 2. <u>Plug Wire Disconnect</u>: A vertical plug wire disconnect (tie strap) must be present.
- 3. <u>Mufflers</u> are mandatory for all classes, and must be safety wired through hole in header brace. Must have safety wire through the perforations on end of the muffler. Muffler must be clamped to the header, and header wrapped.
- 4. <u>Chain guard</u> which extends ½ inch beyond the clutch, minimum 6-inch overall length and maximum of 1 inch between edge of chain guard to seat (side shield acceptable).
- 5. <u>Nerf Bars</u> in front of the rear wheels, both sides of kart.
- <u>Tires</u>: The tire rim size is maximum *6 inches* in diameter. Slicks are mandatory for all Caged/Flat Kart classes, prep at track is permitted. All Wing Classes must run Hoosier treaded tires, with D50 or D55 on right rear.
- 7. <u>Brakes</u> must function properly with two wheels locking. Wheel Stub brakes are not allowed. Both brake and throttle must be operated by the driver's feet.
- 8. <u>Wolf Plate</u> is required (Protection plate over disk brake rotor).
- 9. <u>Belly pan</u> from the front of the seat forward.
- 10. <u>Bumpers</u> are required for **all classes**. **Hopper Stopper required on Sportsman through JR 2/3 karts.**
- 11. Fuel tank and engine components must not extend beyond the rear bumper.
- 12. Weights shall be bolted to kart seat with a minimum 5/16 inch or 8mm bolt. Maximum 7 pounds per bolt. Weight over 7 pounds will require a minimum single ¾ inch bolt or two 5/16-inch bolts. All bolts must be double nutted with ¼ inch threads visible. Minimum of 1.50-inch washer must be on the seat side of weight bolted to the seat. All weights are required to be painted white with kart number on weights in black. Weights that fall off kart during a race event will result in disqualification. Drivers are not permitted to wear weighted vests; weights must be attached to kart seat per stated specifications.
- 13. <u>Restrictor Plate</u>: All Animal Classes will run APS Plates; all Clone Classes will run ARC or Speed Karts Plates.



Hopper Stopper Prevents other karts from jumping your left rear tire. Clamps on left rear frame rail.

# **AKS ROOKIE CAGED CLASS**

Caged Karts follow IKF rule book with these items being mandatory:

- All caged karts must be equipped with at least a four-point roll cage. The main bar must be steel tubing of no less than *1-inch O.D. x 0.083" Wall thickness.* No electrical conduit allowed for cage.
- 2. Cage maybe clamped to frame or spring loaded and properly secured. Cage may not be welded to frame at any point. Cage must be mounted in four spots two ahead of the driver seat and two behind the driver seat.
- The cage must be of sufficient height and width so that the driver's head, with a helmet on, leaves a minimum of *2 inches* safety clearance from the top and to any side bar. An additional crossbar over the driver's head is required.
- 4. The width of the cage must be at least as wide as the driver's shoulders, plus *4 inches* of clearance at shoulder height.
- 5. Mandatory safety equipment on all caged karts: Seat belts (must be 2016 or newer), shoulder harness, wrist restraints and leg restraints (*leg restraints may either be a crossbar or leg straps*). No bungee cords are allowed. Seat belts must be fastened to the main frame of the kart with a minimum of a *.375-inch (3/8"*) bolt that is grade 8. The AKS Tech personnel and/or AKS board must approve these safety items.

## **AKS Rookie Caged Karts**



## **AKS Wing Classes 2021 Rules**

Adopted from: Cedar Lake Arena Karting Speedway, English Creek Speedway

## ALL WING CLASSES:

- 1. Frames must be of kart configuration. Not to exceed 90" in overall length. No EXCEPTIONS.
- 2. Cages are mandatory. Must be for protection of driver. Not for looks or wing mounts. Cage must be mounted with 4, grade 5 bolts or pins at all times.
- 3. NO CHAGE SHOCKS OR STRUTS ALLOWED.
- 4. A frame type cage support is recommended. Should be a single cross tube used, it must be a minimum of 12 inches from the top of the down tube. No cage enclosures will be allowed, Right side or Left side of cage (safety issues).
- 5. Minimum standard for roll cage (tubing thickness):
  - **a.** All classes  $\frac{3}{4}$  ".083 chrome molly or 1".06 chrome molly or 1".083 steel.
  - b. No exotic steel.
- 6. WING DIMENSIONS (ALL WING CLASSES) CENTER PANEL 36" LONG 32" WIDE...RIGHT SIDE PANEL 40"LONG X 14"WIDE...LEFT PANEL 40"LONG X 20"WIDE ALL DIMENSIONS ARE +/- 3". NO COCKPIT ADJUSTABLE WING SLIDERS.
- 7. Uppermost part of kart and wing not to exceed 76" (all wing classes).
- 8. Bodies can be any material, except wood. No sharp edges or protruding parts.
- 9. Wing, hood and tail piece must be sprint car like in appearance, attached securely to the kart and are mandatory in all wing classes. No bars, other than regular Nerf bar, may extend out past outer edge of the tire on either side of kart. Nerf bars can have side pods and be enclosed.
- 10. Fuel line location cannot be closer than 2" to any of the exhaust system at any time and shall not be above the exhaust. If closer than 2", fuel line must be insulated. Fuel line must have ample slack for cage movement. Must be petroleum grade fuel line.
- **11.** Fuel tank location: Out board mounted fuel tanks must have metal protection, particularly grade fuel line.
- 12. No axle protrusion beyond wheel rim. Max axle length 40".
- **13.** All Wing Classes must run Hoosier treaded tires, with D50 or D55 on right rear.
- 14. ALL WING KARTS MUST DISPLAY 10" NUMBERS ON RIGHT AND LEFT SIDE OF KART AND ON WING.
- **15.** Aluminum high back seats are MANDATORY. Must be mounted to the frame with no excessive holes. The top of the seat should be at the middle of the driver's head.
- **16.** All karts must have seat belts and shoulder harnesses. Shoulder harnesses must be mounted in a way to restrict forward body motion independently of the seat. Lap belts should be mounted on frame. Cut or frayed seat belts will not be allowed.
- **17.** Approved neck braces and arm restraints are mandatory. Arm restraints must be attached to lap belt and worn below the elbow.
- **18.** All karts must have a 6" nylon tie attached to spark plug wire.
- **19.** Kill switches are mandatory and within reach of the driver.

## **RBOX (BS) -** Clone Ages 6-9 285# min

## Engine rules 2021 NKA box stock rules will apply.

Restrictor Box Stock ENGINE SPECIFIC TECH SHEET FOR: BOX STOCK 6.5 OHV Description: Single cylinder, 2 valve, OHV 4 cycle engine. (Gas Only) Must run Unaltered <u>ARC or</u> <u>Speed Karts green .425 NO GO plate</u>. 6.5 OHV – Fuel Pump Gas ONLY – Approved Engine: 6.5 OHV 196cc clone engine- No Kohlar, No Honda, No Predators. <u>Aftermarket coatings of any type are</u> not permitted on any part of the engine other than the rocker cover, blower housing, and shrouds. <u>Unless noted within these rules. Figure guard, rear block tin, blower cover, recoil or blower fan cover</u> are all required.

**Combustion chamber volume:** 26.5 cubic centimeter minimum, with piston at TDC, using prescribed procedure. The Liquid CC check is the official check.

**Cylinder Head Requirements**: Must be OEM casting only. All cylinder heads must be the "JT" 4 bolt valve cover cylinder head (168-f 6.5hp GX 200 series) or the TG-1 head only. Porting and / or grinding are not permitted. <u>Valve seats are three angles 45 degrees valve face and 30 degrees top relief, 60 degrees at bottom</u>. Intake seat maximum ID .897", Exhaust seat maximum ID .862". Outside face of valve may not be below floor of combustion chamber (i.e., don't sink the valves). Stock head bolts only, must have four. Head gasket/s maybe after market, must be of stock configuration, gasket thickness is a non tech item. Depth check between

the valves, front to back and side to side may not vary by more than .005" max. No copper or aluminum gaskets allowed. Any stock configuration exhaust gasket allowed no other sealer.

**Block Requirements:** Stock cylinder bore is 2.685" max. Stroke is 2.123" + .010" or -005". No piston pop out allowed. Matting surface finish of block and cylinder head is a non-tech item, surfacing of both to correct gasket failure and meet cc check allowed however, no piston pop out is allowed. May use 2 side cover gaskets of stock configuration. Block must remain stock as produced. Stub for governor may be removed and hole plugged. No machining of block allowed. Welding to the block shall be for rod damage repair only and may not constitute a functional modification. Tillotson blocks allowed.

Side cover bolts are non tech.

**Carburetor requirements:** Huayi OR RUI\*ING, Tillotson PK-1A carbs only. Carb to intake sealer is gasket only no other sealer allowed. Choke must be as supplied from factory but may be fixed to stay in open position. Venturi .615" NO-GO. Rear carb bore .751" NO-GO. Main fuel jet .042" NO-GO. Low speed idle jet is a Non-Tech item. Stock emulsion tube must be used and unaltered, .066' max ID (no pass through). Side holes in E-Tube 4 holes max in bottom section and 20 holes max in top section.

Minimum E-Tube length 1.092". Throttle shaft - .115" minimum. Butterfly - .037" minimum. Throttle shaft screw and lock washer must be stock and unaltered Aftermarket air filter adapter allowed (max length of 1.375).

Valve Train: Stock valve cover only with any stock configuration gasket, no sealer.

Factory stock rocker arms 1:1 ratio and push rods only. <u>Stock valves only 45-degree angle only both</u> valves, Intake valve Max OD .982" +/- .005" and Exhaust valve Max OD

.948" +/- .005", no modifications allowed. Only Box Stock valve springs. (Installed Height for valve springs .815", must be checked by using the .815" spring must go gauge with retainer seal in place on intake an exhaust valve if used.) Prescribed check procedure as follows – Remove valve spring, reinstall spring retainer, insert .815" must go gauge in spring location. Gauge must go in both locations Intake and Exhaust with any allowed retainers in place, as raced, during check procedure. Max wire diameter on spring wire is .071" with a maximum tension of 10.8 lbs. at a height of .850" and maximum of 18 lbs. at installed height of .650. Lash cap on exhaust valve only. Valve stem seal

allowed on Intake and Exhaust valve, maximum lip thickness of .027". BS lifters only, no modifications allowed.

**Ignition system**: Stock Box Stock system only and must be unaltered. Low oil sensor may be disabled and removed. <u>Kill switch within drivers reach from seat while strapped in is recommended</u> <u>but not required in 2021.</u>

**Flywheel:** Any Stock class NKA approved SFI certified billet aluminum flywheel only. No machining or alteration of any kind allowed. Minimum weight for flywheel is 3.3 lbs. Any timing key or no key at all may be used.

A flat washer or spacer may be used, and is recommended, between the flywheel and the nut. Handheld electric starter may be used, but compression release mechanism must remain on camshaft.

**Current Approved flywheels**: But limited to ARC 6619, ARC 6618, ARC 6689, Racing Flywheels RSP-13-075 Revwheel NF- S1 & RSP-13-077 Revwheel F-S1, PVL GX160/200 die cast flywheel allowed. If manufactured for use with removable fan, the fan must be unaltered, attached and functional. Timing and flywheel key is non-tech.

**Header and Muffler Requirements-** Big pipe w/ 4104 muffler required. No loop pipes, Header pipe and muffler must meet 2021 NKA rules for Adult Box Stock classes, must be inside the roll cage and must exit towards the rear of the kart or must be approved prior to event by tech inspector or race director Exhaust Pipe must be double nutted or safety wired, and silencer must be supported by clamped on brace to secure it in place. No modifications allowed. No loop type pipes are not allowed. <u>Header maybe ceramic coated but must meet all requirements for 2021 NKA big pipe</u> headers in the Box Stock adult clone rules. Muffler may not be welded to header pipe, muffler may not be painted or coated, Muffler does not need to be safety wired, muffler must be tight to header at post-race inspection. Header pipe wrap required from the mounting surface of head to silencer (safety tech item)

**Piston and Rings:** Must be unaltered Box Stock only. Must have 3 rings. No machining of piston and rings allowed.

**Connecting Rod**: Stock Box Stock cast rod or billet aluminum, no titanium rods allowed. No machining of any type allowed.

**Crankshaft Requirements:** Stock Box Stock crankshaft required. Machining, polishing, addition of material or other alteration of crankshaft is prohibited. Stock factory timing gear mandatory and must be installed in original location. Crankshaft journal diameter is 1.180" max - 1.168" min.

**Camshaft Requirements**: Stock camshaft cores only, ez-spin assy must remain as stock. Cam lobe base circle diameter .865" -.005"/+.010" Duration check for Intake and Exhaust lobes (taken off pushrod). Intake duration of 219 degrees at .050 lift/86 degrees at .200 lift. Exhaust duration of 222 degrees at .050" lift/97 degrees at .200" lift. Max Intake lift on cam .225" – Min .215" lift taken at the pushrod. Max Intake lift at the valve .238" Taken on valve spring retainer with zero lash. Max Exhaust lift on cam .232" – Min .222" lift taken at the pushrod. Max Exhaust Lift at the valve .242" Taken on valve spring retainer with zero lash.

**Blower Housing Assembly**: pull starter must be present and remain stock. Pull starter may be rotated for a better crank angle. After market coating allowed. **Electric starter nut** maybe used / we recommend recoil start in this class.

Fuel Tank Requirements: stock tank must be removed. Floor mounted only.

**Fuel Pump Requirements**: Fuel pump must be pulsed from either the crank case or the valve cover. You may install a flat metal plate in the original tank location for the purpose of mounting the throttle linkage and fuel pump.

Clutches: DISC OR DRUM CLUTCHES ONLY ALLOWED. <u>No wet clutches or No jackshafts</u> <u>allowed.</u>

Pump gas only 87-91 octane only, <u>NO Race gas or oxygenated fuel will be allowed. i.e., VP /</u> <u>Turbo Blue etc for both animal and BP clone engine packages.</u>

+/- .005 or 2 degrees on all measurements to allow for gauge variances and wear.

## ALL WING CLASSES: WING DIMENSIONS

CENTER PANEL 36" LONG 32" WIDE...RIGHT SIDE PANEL 40"LONG X 14"WIDE...LEFT PANEL 40"LONG X 20"WIDE ALL DIMENSIONS ARE +/- 3". NO COCKPIT ADJUSTABLE WING SLIDERS. No body side

enclosures will be allowed (on the cage) right side or Left side of cage (safety issues).

## Junior Wing (BP) Ages 9-13 315# min

<u>**Clone Engine Option:**</u> 6.5 OHV – Fuel Pump Gas ONLY – Approved Engine: 6.5 OHV 196cc clone engine- No Kohlar, No Honda, No Predators, – Any 168-f Clone Block SPEC SHEET FOR 6.5 OHV CLASS Description: Single cylinder, 2-valve overhead 4-cycle engine. <u>Aftermarket coatings of any type are not permitted on any part of the engine other than the rocker cover, blower housing, and shrouds. Unless noted within these rules. Figure guard, rear block tin, blower cover, recoil or blower fan cover are all required.</u>

Cylinder Head Requirements: Must be OEM casting only. All cylinder heads must be of the "JT" 4 bolt valve cover design. To include the Tillotson JT-207-cylinder head. The TG-1 Cylinder head will also be allowed. PORTING of the cylinder head is NOT permitted; this includes the valve guides in the port they may not be altered in any way. Port MUST be "as cast". Valve seats may have up to three angles, 45-degree face, 30-degree top relief, 60-degree bottom relief. Cutting of the valve seats allowed to insure proper seal. Intake seat maximum ID .897, Exhaust seat maximum ID .862, Outside face of valve may not below the floor of the combustion chamber. (cannot sink the valves). Stock type head bolts must be used (four), Head gaskets maybe aftermarket, must be of stock type configuration, NO head studs allowed! No copper or aluminum head gaskets allowed. No predator head gaskets allowed. Gasket thickness is Non-Tech. Sealer "May Be" used to insure proper seal of the head gasket. Depth between the valves front to back may not vary more than .005 max. Any stock configuration exhaust gasket maybe used; sealer permitted. Header may also be running without gasket, sealer maybe used rather than a gasket. Allen head bolts or other bolts of similar design allowed to secure header to cylinder head. *New 2021 Valve guides must be stock and in stock* location. Min valve guide length 1.055, retaining clip must be unaltered and in stock location. No grinding or any type on valve guide

**Breather hole on valve cover** may be tapped with <sup>1</sup>/<sub>4</sub>" pipe tap to accommodate breather fittings, no oversize drilling allowed.

**Bore and Stroke**: Stock bore is 2.685" and may be over bored to 2.718" Stroke is 2.123" +.010"-.005".

**Connecting Rod:** Billet aluminum rods, with or without bearing inserts required. No titanium rods allowed. Rod length is a non tech item. MUST use billet rods.

**Combustion Chamber Volume**: 25 cubic centimeter minimum, with piston at TDC, using prescribed procedure. The Liquid CC check is the official check.

**Carburetor/Intake Requirements**: Stock Huayi, RUI\*ING, or Tillotson PK1A carb only. No Honda carburetors. Venturi .625" NO-GO. Rear carb bore .751" NO-GO. Carb bore finish, non tech. Throttle shaft - .115" minimum. Butterfly - .037" minimum. Throttle shaft .115 Minimum, Butterfly .037 Minimum, Butterfly must be stock and unaltered. Throttle shaft screw lock washer not required; throttle shaft screw length is non tech. Throttle shaft / butterfly retaining screw is required but non tech for head type. Air Filter adapter of 1.375" max length allowed. No air rams. Pulse-type fuel pump is mandatory (other fuel system must be preapproved by promotor). Fuel pump must be pulsed from either the crankcase or the valve cover. Black phenolic carb spacer must be unhalted and used. Choke assembly may be removed. Jets, air bleeds jets, and emulsion tubes are non-tech. Throttle shaft, washer, and butterfly must be stock and must be present, butterfly screw non tech. Stock intake runner gasket configuration only. One extra gasket may be used with restrictor plates. No other alterations are permitted.

**Ignition system:** Ignition timing is non-tech. Stock ignition module only. No modifications of any type allowed. Sparkplug connector must be stock as from factory. <u>Kill switch within drivers reach</u> from seat while strapped in is recommended but not required in 2021.

**Piston Requirements**: Must be stock dished piston with no modifications. Oversize Clone or Honda dished piston is allowed up to .035" oversize. Rings must appear stock and all three rings must be installed. Piston may not pop out above cylinder deck.

**Valve Train**: Stock valve-train only in stock configuration except: Any single valve springs and valve spring shims are allowed; Any 5.5mm stem steel valve (including stainless) that uses stock retainers **OR 2 PIECE RETAINER** \*\* New 2021\*\* Stock clone / Honda 196cc type valve keepers with lash cap on exhaust side only OR automotive type valve retainer and keepers (2) per valve maybe used. Lash caps maybe used on both intake and exhaust valves if using automotive type retainers and keepers only. No minimum weight checks on retainers, keepers, or lash caps. Valves may be of steel or stainless steel only, 5.5 mm only. No polished valves, no min or max length on valves. No Titanium valve train parts allowed. i.e., Valves, retainers, keepers, and lash caps. allowed. Intake valve head Max OD .982" +/- .005" and Exhaust valve head Max OD .945" +/- .005". V<u>alves must be one angle only, 45°</u>. No knife edging of valves (1mm min. margin). Valve length is non-tech. No additional support for rocker studs permitted. Champion rocker arms and valve cover are permitted but may not be modified in any way.

**Camshaft Requirements**: Stock camshaft cores only, ez-spin easy must remain as stock. Duration check for Intake and Exhaust lobes (taken off pushrod). Intake duration of 248 degrees at .050 lift/107 degrees at .200 lift. Exhaust duration of 247 degrees at .050 lift/116 degrees at .200 lift. Max lift at the valve retainers, Intake .238" and exhaust .242" taken on valve spring retainer with zero lash.

**Crankshaft Requirements**: Stock, factory crankshaft only with stock, factory timing gear in factory location. No modifications to crankshaft allowed. Aftermarket steel main bearings of non-self-aligning type, with or without seal are allowed. No ceramic bearings. Crankshaft Journal diameter is 1.180", 1.168" minimum. Crank gear may NOT be welded to crankshaft

**Block Requirements**: Stock Block, as cast and produced with no alterations or modifications other than those specifically permitted. Block head matting surface may be machined; however, no piston pop out is allowed. <u>Block maybe welded or epoxied for repairs only</u>, all bolt bosses in block may be drilled and tapped for repairs or other uses. Additional side cover gaskets as required for crankshaft

thrust are permitted. All parts associated with the governor and the low oil sensor may be removed, plugging any associated holes. Side cover bolts are non tech. Tillotson block allowed.

**Flywheel:** Approved SFI certified billet aluminum flywheel only. No machining or alteration of any kind allowed. Minimum weight for flywheel is 3.3 lbs. Any timing key or no key at all may be used. A flat washer or spacer may be used, and is recommended, between the flywheel and the nut. Handheld electric starter may be used, but compression release mechanism must remain on camshaft.

Current Approved flywheels: ARC 6619, ARC 6618, ARC 6689, Racing Flywheels RSP-13-075 Revwheel NF- S1 & RSP-13-077 Revwheel F-S1. GX 160/200 PVL die cast aluminum flywheel is allowed.

If manufactured for use with removable fan, the fan must be unaltered, attached and functional.

**Connecting Rod**: Must use Billet aluminum rods, with or without bearing inserts required. No titanium rods allowed. Rod length is a non tech item.

Clutches: Disc and Drum only allowed. no wet clutches or jackshafts allowed.

**Header and Muffler Requirements**- Silencer / muffler must be B91XL round hole or Big pipe w/ 4104 muffler required. No loop pipes, Header pipe and muffler must meet 2021 NKA rules for Adult Box Stock classes, must be inside the roll cage and must exit towards the rear of the kart or must be approved prior to event by tech inspector or race director Exhaust Pipe must be double nutted or safety wired, and silencer must be supported by clamped on brace to secure it in place. No modifications allowed. No loop type pipes are not allowed. <u>Header maybe ceramic coated but must</u> meet all requirements for 2021 NKA big pipe headers in the Box Stock adult clone rules. Muffler may not be welded to header pipe, muffler may not be painted or coated, Muffler does not need to be safety wired, muffler must be tight to header at post-race inspection. Header pipe wrap required from the mounting surface of head to silencer (safety tech item)

Pump gas only 87-91 octane only, <u>NO Race gas or oxygenated fuel will be allowed. i.e., VP /</u> <u>Turbo Blue etc. for both animal and BP clone engine packages.</u> +/- .005 or 2 degrees on all measurements to allow for gauge variances and wear.

**Animal Engine Option:** 2018 IKF / NKA rules, Gasoline only, .255 running lift maximum at retainer, No Duration checks, (Animal engines only) <u>compression release cam NOT required if using electric starter only, compression lease cam must be used if using recoil starter, factory cast cam cores only.</u> max main jet size .038, pilot jet .014 No go, no porting allowed, Electric start nut maybe used in place of recoil starter on both engine packages. Big pipe w/ 4104 muffler allowed, no loop pipes, pipes and muffler MUST meet NKA rules for Adult Box Stock classes, must be inside the roll cage and must exit towards the rear of the kart.

#### ALL WING CLASSES: WING DIMENSIONS

CENTER PANEL 36" LONG 32" WIDE...RIGHT SIDE PANEL 40"LONG X 14"WIDE...LEFT PANEL 40"LONG X 20"WIDE ALL DIMENSIONS ARE +/- 3" NO COCKPIT ADJUSTABLE WING SLIDERS. No body side enclosures will be allowed (on the cage) right side or Left side of cage (safety issues).

## Intermediate Wing Open Clone Ages 13-16 350# min

(No younger drivers without AKS Board approval prior to event)

**Clone Engine**: 6.5 OHV – Approved Engine: 6.5 OHV 196cc clone engine- No Kohlar No Honda No Predators.

#### • Fuel gasoline or Methanol ONLY no exotic fuels or additives allowed ENGINE SPEC SHEET FOR 6.5 OHV CLASS

Description: Single cylinder, 2-valve overhead 4-cycle engine. No aftermarket coatings of any type are permitted on any part of the engine (exception Blower Housing and Shrouds). Cylinder Head Requirements: Must be OME casting only. All cylinder's heads must be the "JT" 4 bolt valve cover cylinder head (168-f 6.5hp GX 200 series) or the TG-1 head only. Intake seat maximum ID .897". Exhaust seat maximum ID .862".

**Bore and Stroke**: Stock bore is 2.685" and may be over bored to 2.718" Stroke is 2.123" +.010"-.005".

**Connecting Rod**: Billet aluminum rods, with or without bearing inserts required. No titanium rods allowed. Rod length is a non tech item.

**Carburetor** Stock appearing 196cc clone carb Huayi or RUI\*ING **TYPE** carb. Internal filler not allowed.

**Ignition system**: Ignition timing is non-tech. Stock ignition module only. No modifications of any type allowed. Sparkplug connector must be stock as from factory. <u>Kill switch within drivers reach</u> from seat while strapped in is recommended but not required in 2021.

Piston Requirements: Piston is allowed up to .035" oversize.

**Valve Train**: Intake valve head Max OD .982" +/- .005" and Exhaust valve head Max OD .945" +/- .005".

**Crankshaft Requirements**: Stock, factory crankshaft only with stock, factory timing gear in factory location.

**Block Requirements**: Stock 168-F clone type block. Bracing/welding is allowed. No billet blocks, no Honda or Kohler. Tillotson blocks are allowed.

**Flywheel:** Approved SFI certified billet aluminum flywheel only. No alteration. Clutches Disc and Drum only allowed

**Header and Muffler Requirements**- Big pipe w/ 4104 muffler required. No loop pipes, Header pipe and muffler must meet 2021 NKA rules for Adult Box Stock classes, must be inside the roll cage and must exit towards the rear of the kart or must be approved prior to event by tech inspector or race director Exhaust Pipe must be double nutted or safety wired, and silencer must be supported by clamped on brace to secure it in place. No modifications allowed. No loop type pipes are not

allowed. <u>Header maybe ceramic coated but must meet all requirements for 2021 NKA big pipe</u> <u>headers in the Box Stock adult clone rules. Muffler may not be welded to header pipe, muffler may</u> <u>not be painted or coated, Muffler does not need to be safety wired, muffler must be tight to header at</u> <u>post-race inspection. Header pipe wrap required from the mounting surface of head to silencer (safety</u> <u>tech item)</u>

+/- .005 or 2 degrees on all measurements to allow for gauge variances and wear.

## ALL WING CLASSES: WING DIMENSIONS

CENTER PANEL 36" LONG 32" WIDE...RIGHT SIDE PANEL 40"LONG X 14"WIDE...LEFT PANEL 40"LONG X 20"WIDE

ALL DIMENSIONS ARE +/- 3" NO COCKPIT ADJUSTABLE WING SLIDERS. No body side enclosures will be allowed (on the cage) right side or Left side of cage (safety issues).



# ATWATER KARTING SPEEDWAY 2021 Code of Conduct

AKS has implemented this Code of Conduct to promote a positive, safe and fun environment. This Code of Conduct sets forth conditions that racers and parents are expected to follow and promote. It is our intent to have AKS represented in a positive manner with good sportsmanship and respect guiding all of our racers and teams on the track and in the pits.

- 1. As a parent, racer or crew member, I am responsible for learning, understanding and complying with all applicable safety and conduct rules as written in the 2021 AKS Rulebook. Rulebooks are available online at <u>www.atwaterkartingspeedway.com</u> on the Rules tab.
- 2. I (and my guests) will be a positive role model for my child and encourage good sportsmanship by showing respect, courtesy, and positive support for participants, officials, and spectators at every race or any related event and when using social media.
- 3. I will demand that my child treat other participants, officials, and spectators with respect regardless of race, creed, color, sex, or ability.
- 4. I will teach children that an honest effort is as important as victory. At this point in their careers, learning to compete fairly and developing driving skills are more important than winning.
- 5. I (and my guests) will not engage in any kind of unsportsmanlike conduct with any official, parent, or racer such as inappropriate comments; refusing to shake hands; or using profane language or gestures.
- 6. I will show respect to the officials and staff running the race. Concerns or complaints will be directed to the AKS Board. I understand that excessive arguing with officials or use of profane language will result in immediate disqualification.
- 7. I will respect the property of others, and neither steal, damage, destroy nor borrow another's property without permission, nor tolerate such behavior by other parents or team members.
- 8. I will not encourage any behaviors or practices that would endanger the health or wellbeing of any other person. I will approach a conflict situation calmly and seek out a track official if assistance is needed.
- 9. I will attend the Pit Meeting held prior to every race. I understand it is my responsibility to attend this mandatory meeting at which important schedule changes, safety issues or procedural changes may be announced.
- 10. I will be environmentally conscious and keep my pit area clean and treat spills appropriately.
- 11. I understand that racers, parents or crew members that cannot or will not uphold these conditions, could face suspension from AKS events by the AKS Board.

Atwater Karting Speedway would like to thank everyone for participating in our events and for continued positive actions to build the foundation for the success for our youth. AKS welcomes constructive feedback to help our organization further improve.

The AKS board reserves the right to amend any rule or regulation at any time, and in any way in the interest of promoting good sportsmanship and participant safety.

Date

AKS COC 2.27.21

Parent/Guardian Signature



## **ATWATER KARTING SPEEDWAY** 2021 Photo and Video Release Form

I, (participant), hereby grant Atwater Karting Speedway (AKS) permission and consent to take, edit, alter, copy, exhibit, publish, or distribute images and videos for lawful purposes. I agree that images and videos may be used in print publications, online publications, marketing presentations, website and social media posts. I waive any right to inspect or approve the finished product wherein my or my child's likeness appears. I also agree that no royalty, fee or other compensation shall become payable to me by reason of such use.

I release and fully discharge AKS, and its staff, agents and representatives, from all claims, damages or liabilities arising from or related to my, or my child's participation in the images or videos or AKS's future use of the images or videos.

I understand that I may revoke this authorization at any time by notifying AKS Board in writing. The revocation will not affect any actions taken before the receipt of this written notification. Images will be stored in a secure location and only authorized AKS staff will have access to them. They will be kept as long as they are relevant and after that time destroyed or archived.

I HAVE READ THIS ENTIRE CONSENT AND RELEASE FORM, I FULLY UNDERSTAND IT, AND AGREE TO BE BOUND BY IT. I CERTIFY THAT MY TRUE AGE IS AT LEAST 18 YEARS OF AGE, OR, IF I AM UNDER 18 YEARS OF AGE, I HAVE OBTAINED THE REQUIRED CONSENT OF MY PARENTS/GUARDIANS AS EVIDENCED BY THEIR SIGNATURES BELOW.

Participant's Signature	Da	Date	
Participant's Printed Name			
Address			
City	State	Zip Code	
Email Address	Phone Number		
If participant is under 18 years old, then his/her parer	nt or guardian must sign below.		
Parent/Guardian's Signature	te		
Parent/Guardian's Printed Name			
AKS PRF 2.27.21		1	

# ATWATER KARTING SPEEDWAY INFORMATION

### A: CLUB ORGANIZATION

- 1. The club is organized as a non-profit organization.
- 2. The club is organized for the purpose of racing go karts.
- 3. There are no restrictions to membership.
- 4. Membership period is from annual general meeting to the next annual general meeting.
- 5. The officers who manage the club are elected at the annual general meeting. The offices must have legally elected officers for the incorporation.
- 6. Offices include: President, Vice President, Secretary and Treasurer.

Officers must be 18 years of age or older and must be speedway members for the coming year.

- 7. Officers will cease office when:
  - A. Resignation is tendered verbally to any two directors or in writing.
  - B. At the annual general meeting when the incoming board of directors are elected.
  - C. By majority vote of the board of directors or by majority vote of a special general meeting legally called.
- 9. Each year the Board will recommend rule changes to keep the club rules current with similar clubs and national organizations.
- 10. The Vice President will assist the President in all matters and substitute in the absence of the President.
- 12. The Secretary will keep the clubs record and minutes and official documents.
- 13. The Treasurer will keep the club's financial records and each year will recommend club fees designed to keep the club solvent and progressive.
- 14. Members are expected to participate in any clean up or upkeep of the track when needed. Members are required to help Race Day as well as in Practice.
- 15. Corner Workers must be 18 years of age or older. They are NEEDED WEEKLY. Please volunteer to help on the track if you see rough riding, please inform the Head Flagman and Race Director immediately after the race event.
- 16. Public attendance to regular AKS Board meetings is welcomed and encouraged. Anyone wishing to address the Board should submit their request to any Board member for inclusion on an upcoming meeting agenda.

#### 2021 AKS Board Members

OFFICERS: PRESIDENT / Secretary – Angela Hansen VICE PRESIDENT / Treasurer - Ashley Rialson

BOARD MEMBERS: (ALL OFFICERS ARE INCLUDED ON BOARD) Matt Fester Tony Rialson Mike Christenson Mike Ball Jamie Flickinger

Email: <u>atwaterkartingspeedway@gmail.com</u> Facebook: <u>Atwater Go Karting Speedway</u> Website: www.atwaterkartingspeedway.com

