



### **Spirit and Intent**

*Karting is a sport designed for the fun and enjoyment of everyone involved whether it is a racer, family, friends, or the spectators. As a competitor at Black Hills Speedway Kart Track, you are responsible for conducting yourself in a fair and sportsmanlike manner, both on and off the track. Through your efforts, the competitive spirit of karting will always persist.*

### **Competitor and Participant Responsibilities**

Entrants are required to be fully acquainted with the regulations, supplementary rules or instructions governing an event and are due to their entry therein definitely bound by such regulations, supplementary rules, or instructions. Officials of any event shall have and will exercise their powers during the entirety of any event.

Prime responsibility for safe conditions and operation of a kart in competition rests with the driver. The course operator's main responsibility is that of providing a safe place to conduct events. Safety is every person's responsibility and must be shared in total by every person and every associate of the sport of karting. For this reason, adherence of the rules at Black Hills Speedway Kart Track is fundamental to the welfare of everyone involved in the sport. In the interest of safety, PARENTS MUST TAKE RESPONSIBILITY FOR THE ACTIONS AND WELL BEING OF THEIR MINOR CHILDREN, RACERS AND NON-RACERS ALIKE.

Any updates or amendments to the Black Hills Speedway Kart Track rules will be posted on Facebook and BlackHillsKartRacing.com. Any rule changes will be announced at the drivers meeting the first week that the change takes place. Amendments may be made to the Manual and members are responsible to obtain these updates.

### **Sportsmanship**

Please be courteous and respectful to all drivers on and off the track. **If you, or any member of your crew, verbally or physically attack anyone at the track you will be asked to leave, Additionally, your driver will be suspended for a minimum of 30 days. This behavior will not be tolerated, and action may be taken as deemed necessary. This may include permanent suspension.**

### **Registration**

All drivers must register their kart number and fill out the required paperwork. This entitles drivers to compete at the Black Hills Speedway Kart Track races and receive points and awards where applicable. If you do not register your kart number, you will **not** race. Kart number registration fee is \$15.00 per kart and must be received with **all** required paperwork by April 1, 2022. **Birth certificates may be required of anyone under the age of 18.**

### **Parental Consent Form for Minors**

The parent or guardian of any minor that is entering the pits, either as a driver or non-driver, must sign a Parental Consent Release and Waiver of Liability Assumption of Risk, and Indemnity Agreement form. If a minor wants to attend the track with an adult other than their parent/guardian and requires a pit pass, as a driver or non-driver,

the Parental Consent form must be printed and signed by the parent/guardian. The minor must then bring the signed form with their attending adult and present it at registration. A minor will not be allowed in the pits without this form being signed.

### **Competition Age**

All drivers must abide by the ages listed in each class structure section. A driver's actual age as of June 1st of each year shall establish their "competition age". Ex: If a driver is 9 years old in April but s/he turns 10 in May, then that driver's "competition age" for that year is 10. Option Year: A driver in good standing can add one year to their competition age to be able to compete in a class that fits their skill level and ability that is normal and acceptable. Rookie class is age 5-8. Any 8-year-old that has previously raced will move up to the Junior 1 class. Junior 1 class is age 8-10. Any 10-year-old that has previously raced will move to the Junior 2 class. Junior 2 class is age 10-12. Any 12-year-old that has previously raced will move to the Junior 3 class. Junior 3 class is age 12-16. Any 16-year-old that has previously raced will move to an adult class. Any 16-year-old rookie that has never raced will have the option to stay in Junior 3 or move to an adult class. The adult classes are age 16 and up.

### **Registration for Race/Practice Days**

Registration: All drivers must have their paperwork and kart number turned in and registered by April 1, 2022. Race Day Registration includes \$15 per kart and drawing their number for the lineup. Black Hills Speedway Kart track registration times will be posted on the Black Hills Speedway Kart Track Facebook page, as times may change throughout the season. Please check each event for times, delays, or cancelations.

### **Social Media**

Social media is a part of our daily lives, and when used correctly it is an important place for the sport to discuss and promote our activities. This policy is not intended to restrict the good rather, it is to assist in curbing the more dangerous and damaging activities that have become or may become an issue. The Black Hills Speedway Kart Track social media policy covers all those involved within Black Hills Speedway Kart Track events whether they are a driver, participant, official, family/crew, general third parties, media members, or associated industry as it relates to the Black Hills Speedway Kart Track event. Any content submitted online through by those participating or officiating at Black Hills Speedway Kart Track events should not be material that could be deemed to be threatening, harassing, bullying, illegal, obscene, defamatory, slanderous, or hostile towards any individual, team or entity participating or officiating at Black Hills Speedway Kart Track events. Black Hills Speedway Kart Track defines content as text, images, audio, video, and any user generated content knowingly uploaded to the internet. Any persons violating these policies will be permanently suspended from all Black Hills Speedway Kart Track events. The Black Hills Speedway Kart Track will be sharing names, results, photos, videos etc. via social media and news. If you wish to be excluded, please provide a written request with the required paperwork by April 1, 2022.

### **Volunteers**

We have volunteers to help put on every race. Our race director, officials and flaggers will work together to provide a safe fun race for everyone. Please remember these people are donating their time for us to be able to put on these events.

### **Race Format – Line-up, Starting, Heats**

- **Line-up:** Drivers will push their karts to the grid when their class is scheduled. **No driving karts in the pits! Push only!** Each driver will then line up on the grid according to the line-up sheet. They will remain in the same position on the track as they were on the grid for the starting flag. It is the responsibility of the driver to be aware of the race order and ensure its accuracy so that racing is not interrupted.

- **Pole position:** The drivers on the front row, in conjunction with the starter will set the pace during the parade laps and for the start of the race. If the front row does not successfully start the race in (2) consecutive attempts, the Head Flagger has the right to invert the 1st and 2nd rows.
- **Parade lap:** Karts will leave the starting grid and take one full lap around the track. Drivers will line up according to the line-up posted in the pits.
- **Starting:** Drivers may not pass or change grid position until they have passed the starting line. Jumping the start will cause a restart. If it happens again the Flagger may send the driver to the back.
- **First heat:** The line-up is determined by the number drawn at registration (low number gets pole, second lowest getting outside pole, etc).
- **Feature:** The line-up is determined by the top 6 redrawing for their position or top 6 will race in a dash. The remaining half of the field will start based on the heat race finish.

### Scratched Entries

In the event of a scratched entry with a rolling start that space shall be filled: (1) if on the track, by moving forward directly, (2) if in the pits, by crossing over to make the starting order exactly correct.

### Safety Inspection

Prior to the driver's first race, karts and racing equipment will be checked for safety compliance. It is the driver's responsibility to maintain equipment in proper racing condition. **Karts must pass inspection before being allowed on the track surface.** Black Hills Speedway Kart Track tech pass stickers indicating compliance must be displayed on your kart. **It is the driver's responsibility to bring a signed safety checklist, along with kart and safety equipment, to the Race Director for this inspection prior to practicing or racing. Karts will be periodically inspected throughout the race event. If any items are not in compliance, the driver will be disqualified from the race.**

### Protective Clothing – Practice and Race Days

- **Chest Protectors:** ***Chest Protectors are Mandatory for Rookie, Jr 1, Jr 2, and Jr 3 divisions and are recommended to be worn in all divisions.***
- **Helmets:** Full faced helmets of approved design, which are specifically manufactured for racing use, are mandatory. The helmet must provide full ear protection. A face shield is mandatory. In addition, the face shield must be rigidly attached to the helmet. Helmets must meet one of these standards:
  - CMR 2026 (legal through 2026)
  - 24.1/2015 (legal through 2026)
  - 31.1/2015 (legal through 2026)
  - 41.1/2015 (legal through 2026)
  - BSI A-type and A/FR types are legal for 10 years after date of manufacture.
- **Neck Brace:** Unaltered neck braces are mandatory in all races and practices. Drivers will be disqualified for the day if you are found to have raced without one.
- **Driving Suits/Jackets:** One- or two-piece driving suits are recommended. All drivers are required to wear jackets of heavy weight leather, Cardura nylon, Naugahyde or vinyl. Carhartt jackets are also allowed. No army fatigue jackets, windbreakers, denim jackets, etc.
- **Pants:** Full length pants without holes or thin spots, denim, or heavy grade cotton fiber. No polyester or sweatpants are allowed.
- **Shoes:** Racing shoes recommended. High top shoes, sneakers, or boots with a firm sole are all fine if they provide complete coverage of the foot. No sandals or bare feet allowed while racing. Shoes must be properly tied, and laces tucked away.

- **Gloves:** Gloves are required. Gloves with fingers cut off are not allowed.
- **Long Hair:** Must be contained within the helmet or driving suit before drivers enter the track. Drivers will receive a technical black flag for violations. Balaclavas are good for long hair.

### Racing Flags

The following signals must be understood and obeyed.

- **Green:** Displayed at the start of the race, or practice session, and kept visible if the track is clear for racing.
- **Yellow:** Used if the track is partially blocked by an accident, emergency vehicle, or object that has fallen off competing karts. It means to slow down, use caution, hold your position, no passing, or be prepared to stop until the track is clear and the green flag appears again. A local yellow flag in a corner means no passing may occur in that corner. If the Head Flagger displays the yellow flag, there is no passing anywhere on the track and proceed with caution. Any positions that are advanced under a caution flag will result in equal reduction of the respective finishing position.
- **Red:** Slow down and **STOP** as quickly and safely as possible. Raise your hand to indicate you are slowing down and stopping. The track is hazardous and unsafe to race on. Any driver found disobeying the red flag will be disqualified from the race and subject to suspension. If the race has completed one half of the scheduled laps, then the race is over, and scoring will be computed by the last completed lap. Any competitor that is involved in the accident that caused the red flag condition will be placed at the rear of the grid for restart or placed at the last place finishing position if the race is declared final. All restarts are single file order of the last completed lap. Adjustments of any kind on equipment are allowed only at the Race Director's discretion.
- **Blue:** The leaders of the race are going to pass you. Maintain your line and speed, but do not attempt to interfere with his/her pass in any way.
- **Rolled Black:** You are being warned that your driving technique is close to being disqualified and any further displays will result in disqualification.
- **Black:** You are disqualified. Continue one more lap at reduced speed and stop in the pits. This may be due to equipment failure or due to a racing incident. **DO NOT KEEP RACING.** If you are unsure that you were the driver receiving the black flag, continue another lap and the race officials will endeavor to ensure that the driver of the black flag is properly notified. Upon entering the pits drivers must go across the scales regardless of the black flag.
- **Checkered:** You have finished the race or practice session. After finishing, reduce speed and exit to the pit area. Turn off kart and push to your pit area. Top three karts will be scaled and teched.
- **Checkered + Black:** During the running of any event or heat, the Race Director may use both the checkered and black flags at the same time to finish an event, or heat, if suspicions or reports of foul, rough, illegal driving, or unsportsmanlike conduct were present. It shall be considered that the Race Director finishes the event, or heat, under official protest. After checking with corner workers, the Race Director will state findings, or rules, to the entrants involved if an infraction of the rules had occurred.

### Race Completion

- A race will be considered complete at the moment the checkered flag is waived on course and each kart that is capable of operating on its own power has had reasonable time and opportunity to cross the finish line as determined by the Race Director and/or Head Flagman.
- Every effort will be made to complete an event under green flag conditions, with scoring based on the order that the karts pass the start finish line from the lead kart and down the order with any lapped karts accounted for.
- In the event an incident occurs after the white flag has been displayed, the yellow or red flag may be displayed depending on the incident and its location with safety of all drivers being the priority. The race line up will revert to the last fully completed lap with any karts involved in the yellow or red put to the rear of the field. A single attempt will be made to finish the race under green flag conditions, with single green, white checker. Should

there be a yellow or red flag during that green white checkered the race is considered final and will be scored to the last fully completed lap with karts involved in the red flag moved to the rear and placed in position according to their order of their last fully completed lap.

- To be complete, a race must finish at or above 50% of its established distance. The Race Director may, in case of yellow or red flag or time limit reached, declare the race complete. Participants shall not protest the determination of race completion.

### **Driver Responsibilities**

- All drivers are required to attend the drivers meeting prior to racing. Rules of the track, daily race schedule, and a review of procedures will take place at this time. If you do not attend the drivers meeting, you will start at the rear of the grid for that race day. Subsequent infractions will exclude you from participating in the racing program for that day. Minor drivers must have an adult present with them during the meeting.
- All drivers and pit crews must sign the waiver of liability before entering the pit area or using the track surface. Any racer falsifying their age to compete in his/her respective class shall be suspended and forfeit awards.
- Drivers and Parents are responsible for their pit crew at all times. Any offensive actions committed by a crew member will be reflected upon the driver and will be subject to a penalty. **Children should not climb on the fences, gates tires or anything on the grounds.**

Note: **Any children you bring to the track are considered part of your pit crew. Their conduct can cause you to be subject to suspension or banned from competition.**

- Any driver who has consumed alcoholic beverages or illegal drugs in the Pit Area on the day of any event will be banned from all Black Hills Speedway Kart Track events. Any crew member observed consuming during practice or running of any event will cause suspension for the driver and will be permanently suspended from all Black Hills Speedway Kart Track events. **No alcohol in the pit area whatsoever.** The Race Director reserves the right (with a valid reason) to prevent any entrant and/or their kart from participating in any event.
- Driver information must be completed and turned in by April 1, 2022. **No driver substitutions! All drivers must be registered to the proper kart. If driver is not properly registered to the kart, he or she is racing the driver will be permanently suspended from all Black Hills Speedway Kart Track events.**
- **Minor Driver Responsibilities.** It is mandatory the parent or guardian of all minors complete the minor release form, and have it signed before being allowed to use the track. This must be complete prior to racing. This is in addition to the daily registration requirements. Minors must be accompanied by a parent or legal guardian to enter the pits or be a driver.

### **Driver Racing Rules**

- **Rule #1 – Code of Conduct – Anyone that displays unsportsmanlike conduct either on or off the track to fellow drivers, crew members, race officials or spectators may be permanently suspended from all Black Hills Speedway Kart Track events.** A driver must always be prepared for another kart to pass. The deliberate blocking of a faster kart is cause for disqualification. “Deliberate” is considered unusually high number of moves, swerving, or looking back at the other driver. Any over-aggressive driving, unnecessary bumping, crowding, chopping, blocking or unsportsmanlike conduct on the track will be subject to immediate disqualification from the event. Severity of punishment, if any, is at the discretion of the Race Director.
- If a kart comes to a complete stop, the driver shall not rejoin the race without the direct supervision of a Corner Marshal or Flagman. Karts involved in any accident may be required to stop for inspection by the officials. Accidents may be investigated by track officials.
- When the checkered flag has been dropped at the end of each race, the drivers are required to go directly to the scale for weigh in. If during the race your kart has a mechanical failure, proceed to the race exit, and go to the scale for weigh in. At no other time is a kart allowed to be started on the track during a race. Crews shall not enter the track for restarting purpose except with permission of the Race Official.

The Race Director can call for class teardown, either full or partial (Ex: carbs, heads, restrictor plates, etc.) and all racers must comply. Failure to do so will result in disqualification.

- **Driver Signals.** Drivers shall signal by raising their hand if they intend to stop, pull off the track, slow way down, or suddenly change their course of normal racing pattern. A driver who has spun or stalled on the track shall raise one hand to indicate their intention that no move will be made before the field has passed. Remember, restarting a motor is not permitted after a race is in progress. A kart may not re-enter the race after it has returned to the pits. Drivers signaling to go into the pits should be used in such a way so as not to confuse officials or drivers on the track.

Lapped drivers being overtaken by another kart shall maintain their line. The Head Flagman will try to signal the kart being overtaken with the blue flag.

### **Pit/Track Rules**

- At no time shall anyone be allowed in the pit area without a visible wrist band (must be worn on the wrist).
- **Entry to the pits from the track must be at a slow controlled rate of speed.** Driving a kart in any part of the pit area is prohibited. Anyone entering the pits aggressively will be disqualified!
- Black Hills Speedway Kart Track is empowered to determine the number of persons per entry that may be permitted into the pit area. We also have the right to revoke permission that may have been granted to an individual for misbehavior, noncompliance with competitive regulations or disobedience of race officials orders. Such revocation of privilege may lead to expulsion from the property.
- Karts can only enter the track surface from the pit grid. All karts must stop and shut off their engine before returning to the pit area.
- If two or more karts are involved in an incident, before the completion of lap one, a restart is required. After one restart the race will continue unless the same kart causes another incident then another restart will be called with the kart causing the incident in the rear or subject to penalty.
- Refueling and working on karts shall be done in the pit area only. Engines must be turned off and the driver must vacate the kart prior to fueling. All drivers **MUST** have a fire extinguisher of CO2 or dry chemical type to be kept in their pit area. It is also suggested the driver have a first aid kit in case of minor personal injury.
- No minors will be allowed out on the track as flaggers. You **Must** be at least 18 years of age.
- For safety purposes we do not want anyone walking around on the track looking for parts/transponder that might have fallen off while a race is in progress.
- Officials may conduct fuel checks at any time during the race day. If you fail the test after a heat, you will be disqualified. Penalty for future infractions is at the discretion of the Race Director.
- The use of any open flame devices in the pits or the grid area is prohibited. No open flames anywhere on the grid.
- Any entrant disposing of fuels/lubricants in the pit/course area by pouring or spilling lubricants upon the ground may be subjected to review to determine consequences.
- **Only vehicle/trailer hauling karts are allowed in the pit area. All other vehicles must park in the large parking area on top of the hill.**
- A parent or guardian will be completely responsible for any child in their pit. No children are to run around pit areas or the grid and must be watchful for karts coming off the track and entering the pits.
- **No one is to go on the track once a race has commenced or when an accident occurs unless authorized to do so.**
- Skateboards, push scooters, bicycles, ATV's, motorcycles (not signed up to go on the track), RC cars and other motorized or pedal-powered vehicles are banned from racetrack, pit area, hot pit area and grid area for all events, including practice days.

## Scale Weight

The top finishing four karts are required to scale. If you fail to go over the scales at the end of your race, you will be disqualified. Drivers and karts shall be weighed together to and must achieve the minimum weight for the class as they come off the track. Drivers shall not add any weight to themselves or their karts between the finish of the competition and weigh in of driver and kart. Drivers pockets must be empty.

## Technical Inspection and All Protests

- No one shall enter the track during a race to discuss a call made by the Race Director or Head Flagman. In addition, an adult must accompany all minors to discuss a call made.
- The Race Director may decide to make a call for a technical inspection of any or all participating classes. This will be done on a random basis. It is up to the Race Director to avoid “singling out” any one class unless a specific reason is noted. A designated tech area will be used for inspection.
- A protest to another competitor’s motor or equipment must come in writing to the Race Director. A \$150.00 fee will be charged up-front to the protestor. The engine/equipment inspection will be conducted with ONLY the Head Technical Official and one representative of the engine/equipment under protest present. The engine will be taken into possession by Black Hills Speedway Kart Track and will be placed into a box that the owner will have the only key. Once the date and time is determined to inspect the engine or equipment, only the owner and protestor, along with Black Hills Speedway Kart Track officials may be present. Protest paperwork must be turned into the Race Director before the start of the feature event.
- **If the engine or equipment under protest is found illegal, the violator will lose all points for the season, and may be suspended from all Black Hills Speedway Kart Track events and is responsible for paying the \$150.00 inspection fee.** The \$150.00 deposit will be returned to the protestor. If the engine or equipment is found legal the protestor will surrender the \$150.00.
- Any protest of a race procedure or a driver’s conduct during the race must be submitted in writing to the Race Director within 30-minutes of said infraction. The protest will be reviewed by the Race Director and an appropriate action will be determined. All protests involving specifications, legality and driver conduct shall be submitted by legal entrant from the same class in which the protested infraction occurred. When filing a protest, the legal entrant filing must remain in the area and have their kart available for inspection as well if the protest involves any technical item.
- **What can be protested**  
The following are eligible for protest at a Black Hills Speedway Kart Track event:
  - Chassis and bodywork specifications
  - Verification of Technical Compliance
  - Driver Conduct
  - Verification of Spec parts
  - Scoring Results
  - Tire prep. The protestor is responsible at the time of the protest for the cost to send the sample off. This is in addition to the protesting fee and nonrefundable.

## Engine Impound

Black Hills Speedway Kart Track has the right, at any time, to confiscate any competitor’s engine to check for legality. If the competitor refuses the engine impound, they are permanently suspended from Black Hills Speedway Kart Track events.

## Engine Rules

Specifications for Clone Class engines. These are 6.5 horsepower “Clone” engines only. No Honda engines. All parts must be factory production parts unless otherwise specified. No machining or alteration of parts is permitted unless specially noted.

### Clutch

Shoe type clutch only, no disc type clutches allowed. Drum must be stamped steel. No cooling fins may be either machined into drum or added on.

### Fuel Tank

Must be floor mounted

### Carburetor

- All stock gaskets must be present. Huayi or Ruixing only.
- Choke assembly must be functioning, cannot be altered, and must remain flat.
- Venturi 0.608" No Go with blade gauge 0.615."
- Venturi may not be polished.
- Back carb bore 0.751" No Go.
- Emulsion tube must remain stock. Must have 20 holes on top. Minimum tube length 1.092" minimum diameter 0.154" I.D. 0.066" No Go.
- Emulsion tube may have 2 or 4 holes on bottom.
- Main jet and low speed idle jet are non-tech. Jet may not be drilled through to outside air.
- Throttle shaft 0.115 minimum thickness.
- Butterfly 0.037" minimum Butterfly screw minimum length 0.305."
- **Throttle rod must be safety wired to the carburetor throttle shaft.**



### Fuel Pump

Any Pulse type fuel pump is allowed. Fuel pump may be pulsed from valve cover only.

### Fuel Filter

Fuel filter can only be placed between the fuel tank and the fuel pump. **No fuel filter between the fuel pump and the carburetor.**

### Air Filter

After market air filter adapter are allowed. Maximum length 1.375". Filter element is non tech but must not be of ram air design.

### Block

Block must remain stock. Maximum bore is 2.700" Stroke is 2.126" plus or minus 0.007" No piston pop-up allowed. Matting surfaces of block and cylinder head are non-tech items.



## **Cylinder Head**

No porting or grinding or modification. Valve seats may have two or three angles. Two angle seats have a 30-degree top and 45 degrees at the valve face and 60 degree and the base. Intake seat is 0.899" maximum. Exhaust seat is .862" maximum. Head gasket must be stock configuration. Gasket must be steel. No minimum head gasket thickness. No angle milling of head. Head thickness from valve breather mating surface to in between the valve guides is 1.150" max. Port depth measured from top of the valve seat to the port floor. Intake = 0.880" Exhaust = 0.830" Max. Maximum head thickness 2.640" as measured from the valve breather mounting surface to in between the valve seats and the combustion chamber.

## **Combustion Chamber Volume**

Minimum volume 26.5cc, as measured through the spark plug hole using the LAD tool and with head on the engine.

## **Valve Train**

Valve train to remain stock. No polishing. No grinding. No alterations. Intake valve diameter .0975" minimum with 45-degree angle. Exhaust valve diameter 0.937" minimum with 45-degree angle. Minimum weight 21 grams. Valve angle 45 degrees. Stock OEM steel rockers arms only. 1 to 1 ratio. Rockers subject to magnetic check. Rocker arms can be ground on valve stem location only or on bottom of rocker arm to allow running lift to be legal. Grinding on the sides of rocker arms is not allowed. Stock valve springs only. Must be magnetic material with 4 coils. Maximum wire diameter is .071". Maximum spring pressure is 10.8 Lbs. at a height of 0.850." Spring shims are allowed and must be magnetic. Any thickness. Must maintain the 0.815 height check. Maximum spring pressure @.650 is 18 lbs. If light shows all the way around spacer the spring is illegal on .850 and .650 tech. Lash cap on exhaust valve only. Valve stem seals are optional on intake and exhaust valves. Stock lifters length +1.3501.390 OD+ 0.935 minimum. Minimum weight = 18 grams. Minimum valve installed height is 0.815. Valve spring shims are allowed. Inside diameter of valve seats Intake =0.899" maximum. Exhaust = 0.862" maximum. Top of valves may not be below the floor of the combustion chamber. Pushrods 5.285" Maximum length. Must be 3piece design. Minimum weight 9 grams.

## **Rod**

Stock rod only. Rod may be honed. No modifications are allowed. Must maintain factory defined edge. Rod length = 2.350" min 2.375" Maximum. Rod minimum weight =133 grams including cap and rod bolts.

## **Piston and Rings**

Stock piston and rod only. No aftermarket light weight piston. No machining allowed. No flat top pistons allowed. All three rings must be in place and functional. Top and middle rings 0.053" minimum. 0.063" maximum thickness. 0.115" maximum width. Both must be self-supporting in cylinder when removed from piston. Oil ring 0.090" minimum, 0.100" Maximum. 0.087" minimum and 0.097" maximum width.

## **Crankshaft**

Stock crankshaft only. No modifications. Crankshaft journal is 1.180" maximum and 1.168" minimum.

## **Crankshaft Bearings**

Must be the same dimensions as stock bearings. Conventional design. No exotic or ceramic types. Retainers may be steel or non-metallic material.

## **Camshaft**

Stock appearing cores only with EZ-spin assembly un-altered and in stock condition. Dynocam CL3. (Dynocam CL4 not legal). Cam based circle 0.860" minimum. 0.875" maximum. Duration measured at pushrod. Intake duration

221 degrees at 0.50" lift and 88 degrees at 0.200" lift. Exhaust duration 224 degrees at 0.050" lift and 99 degrees at 0.200" lift, tolerance plus 2 degrees. Intake lift at pushrod 0.215-0.225". Exhaust lift at pushrod 0.222"-0.232". Intake lift at retainer 0.238" maximum. Exhaust lift at retainer 0.242." Lift checks to be performed as raced

### **Flywheel and Ignition**

The following flywheels are the only approved flywheels: ARC model 6619 and ARL model 6689. Or PVL flywheel. Stock flywheel may not be used. No machining or alterations of any kind are allowed. Ignition coil must be stock. Ignition timing is non-tech. The flywheel may be run with or without key.

### **Header Pipe**

Pipe must be round 0.750" outside diameter steel tubing and constant diameter for entire length of header (no multistage). Entire length of pipe not to exceed 15 inches in length and 10 inches minimum length including silencer. Header pipe wrap required from the mounting surface of head to silencer. Silencer must be safety wired to the header pipe. Must be overlapped with no part of header showing. Studs on exhaust may be replaced with regular threaded bolts of equal diameter and must be safety wired. Maximum thickness of a mounting flange of the header is 0.500."

### **Muffler**

No aftermarket coatings of any type are allowed. Muffler must be RLV mini-91. Box stock threaded nipple. No grinding. ID is 0.685" + or - 0.005." Rear baffle holes maximum ID is 0.1285" No Go. Inner baffle holes maximum ID is 0.0965." Muffler must be screwed on end of header pipe, not welded. Silencer must be safety wired to header pipe.

### **Starter**

Starter must be present and remain stock. Pull starter may be rotated for better cranking angle.

### **Engine Oil Recovery**

Engine oil recovery system (catch can) mandatory.

### **Oil Sensor**

Oil sensor may be removed.

### **Governor**

Governor and governor components are non tech.

### **Side Cover**

2 gaskets maximum.

### **Gaskets**

Gaskets must be OEM design. Sealer ok except on intake or carburetor side.

### **Coatings**

No aftermarket coatings of any type are allowed. No tumbling or polishing allowed.

### **Sheet Metal**

All sheet metal must be used as supplied with the engine.

### **Valve Breather**

Tab must be intact and not broken or missing. Bending tab up into breather is allowed. Flapper valve must be operational and stock. Crankcase breather to be routed internally thru valve cover as factory intended. No extra breathers allowed.

### **Hardware and Fasteners**

Must be original size. Thread repair by inserts, studs or heli coils are allowed.

### **Fuel**

Up to 91 Octane only. No fuel additives. Fuel will be checked.

### **Chain**

#35 chain is the only acceptable type. No chain oilers.

### **Pure Stock 212 (Adult All Star Series and Ladies Only Engine Rules)**

- **Engine.** Must be Predator 212cc or Predator Hemi 212cc purchased from Harbor Freight. Ducar 212cc engines are also allowed. Ducar 212 has proper aluminum flywheel installed from the factory. Predator engines must have Aluminum flywheel installed ARC 6625,6626,6695 or 6696 non-adjustable type only with stock keyway used. OEM parts only. This means no alterations to any internal parts allowed. All governor components must remain. The only item that can be altered is the carburetor main jet. If any motor is found to have any altered parts, driver will be permanently disqualified from all Black Hills Speedway Kart Track events.
- **Exhaust.** Stock Exhaust may be removed and replaced with RLV 5348C header or Robertson's torque tubes BW902. No alterations to pipe allowed. Silencer RLV 4104 only, silencer is optional.
- **Top Plate.** Stock fuel tank must be removed, and any top plate allowed to mount fuel pump.
- **Fuel Pump.** Pulse type fuel pump, vacuum pulse fitting must be installed in the valve cover only.
- **Air Filter.** After market air filter adapter are allowed. Maximum length 1.375". Filter element is non tech but must not be of ram air design.
- **Fuel.** 87-octane only no additives.
- **Spark Plug.** Open, no specifications.
- **Carburetor.** Must remain stock, no alterations allowed. Main jet may be changed.
- **Oil Sender.** Oil sender may be disconnected but not removed.
- **Governor.** Must remain but can be wired open.
- **Clutch.** Steel drum clutch only

### **General Rules**

- **Bodywork.** All body work must be neat in appearance and in good repair. Bodywork that appears loose and in danger of falling off may be subject the entrant to black flag and or disqualification. Mounting method open but must be secure and of good workmanship. Rookie, Jr. 1 and Jr. 2 classes maximum nose height 14". No driver fairing allowed. All others maximum of 17".
- **Number and number panels.** Four numbers are to be displayed on the kart. Including one at the front of the kart, on both sides in a vertical plane between front and rear wheels, and at the rear of the vehicle as viewed from behind. All numbers must be easily readable to the scoring and race officials. If numbers are not clearly visible by track scoring personnel, driver will be disqualified. All numbers and letters must be 6" minimum height with contrasting background. Participants numbers must be between one and three digits. No duplicate numbers allowed in the same class. If another participant has registered the same number before you registered, you will

have to register a different number, or you may display a letter after your number on the kart. If your numbers are not readable you will be required to run a white number plate with black numbers.

- **Weight.** All ballast must be secured with minimum 5/16" grade 8 bolt with double nuts and or drilled and safety wired. Any ballast over 7 pounds must be secured with 3/8" grade 8 bolt with double nuts and or drilled and safety wired. All ballast shall be painted white in its entirety and have the number of the kart visible on the ballast. If mounted through seat ballast, must be secured with large fender washers on both sides of the seat. No ballast can be mounted on rear bumper or nerf bars. If a weight falls off the kart during a race driver will be disqualified.
- **Rear Bumper.** Constructed of 3/4" minimum diameter steel tubing, minimum tubing wall thickness of 0.065 and positioned so that the following requirements are met: maximum height 7.5" Minimum height no lower than bottom of the rear axle. Maximum width no wider than rear tires. Minimum width no less than the lateral width of main frame rails. **Rookie class must have full width bumper not to be wider than outside of wheels.** Jr 1, Jr 2, and Jr 3 must have bumper extended so that the left rear wheel is covered. Not to extend past the outside of the rear wheel.
- **Seat Mounting.** Seats must be mounted securely to a minimum of four points on the chassis with two at the front and two on the sides, to solid metal frame or adjustable mounts.
- **Chain Guard.** Karts shall be equipped with adequate chain or gear guard designed to eliminate possibility of personal injury.
- **Exposed Sprocket.** No axle sprockets without a chain guard allowed.
- **Belt Drives.** Prohibited in all classes.
- **Rear View Mirrors.** Prohibited in all classes.
- **Tires.** Non-tread, any manufacture, dirt slick. **Absolutely no chemical treatment allowed. Tires will be inspected.** Tires can be confiscated anytime by Black Hills Speedway Kart Track to be tested. Blue Ridge Labs, Inc. Lenoir, NC. will be responsible for conducting sample test on all tires and their decision will be final. If found illegal, driver is banned from all Black Hills Speedway Kart Track events. Tires can be ground/scuffed but not siped, grooved or shaved down to form a profile. Any compound is allowed, but tire cannot durometer test under 40. Tires can be checked anytime during the race event. Tires will be allowed to cool for 10 minutes after race event before durometer test.

### Other Items

Anything not covered in the rules will be up to the discretion of the Race Director, Tech Inspector and Track Officials without recourse from any owner, driver, crewmember, or spectator. The rules and regulations set fourth and contained herein are designed to provide for the orderly and SAFE conduction of racing events and to establish minimum acceptable standards and requirements for said events. The Race Director shall be empowered to deviate from the established rules and procedures as deemed necessary.

- **RACEceiver.** Raceceivers or Nitro Bee are required by all drivers, no exceptions. Pit to driver communications prohibited. Drivers use channel 454.000.
- **Cameras & Camera Mounting**  
Cameras must be hard mounted by bolt and nut to a driver faring or side pod. Mounting by use of any form of adhesive is prohibited. The Race Director or Tech Official may require additional measures. **Mounting of raceceiver, camera or any device to the helmet in any way is always prohibited.**
- **Kill Switch**  
An Ignition kill switch must be installed on the steering wheel or a spot easily accessible to the driver on Rookie, Jr 1, Jr 2, Jr 3 division karts.
- **Clutch Cover**  
A clutch cover is recommended for karts that have enough space between the seat and the clutch for an arm to slip between.

### Rookie Division Specific Rules

- **Age.** 5-8 years old. If the 8-year-old has previously raced, he or she will move up to the Junior 1 class.
- **Engine Restrictor Plate.** Red Plate 0.375"
- **Weight.** 235 lbs. post-race
- **Body.** No steering fairing allowed
- **Rear Bumper.** Rear bumper must be hoop type that is full width not to extend past of the rear wheels.
- **Race procedure.** Heat race lineup to be determined by draw at time of registration. Low number will start on pole. Rookie heat races will start from a dead stop on the front straightaway. The drivers will stage in the correct starting positions in the stagg line. Drivers will drive to turn 4 and stop prior to the race start. The Head Flagman will drop the green flag to start the race. If there is a yellow flag karts are to slow and stop in turn 4 to line up for a restart. There is a 3 spin-out rule for the rookie division. If the driver spins three times in a race, they will be black flagged and disqualified. Top 4 karts to proceed to tech inspection.

### Junior 1 Division Specific Rules

- **Age.** 8-10 years old. If the 10-year-old has previously raced, he or she will move up to the Junior 2 class.
- **Engine Restrictor Plate.** Green 0.425"
- **Weight.** 265 Lbs. post-race
- **Body.** No Steering fairing allowed.
- **Rear Bumper.** Left rear bumper must cover left rear tire not to extend past wheel.
- **Race Procedure.** Heat race lineup to be determined by draw at time of registration. Low number will start on pole. Jr 1 heat races will be a rolling start. The drivers will stage in the correct starting positions in the pit staging line. Drivers will complete 1 pace lap. The Flagman will drop the green flag to start the race. If there is a yellow flag, karts are to slow and stop on the back straightaway to re-line the starting positions. If the first lap is not completed before a yellow flag, there will be a complete restart. If one lap is completed the lineup will be a single file start. There is a 2 spin-out rule for the Jr 1 division. If the driver spins two times in a race, they will be black flagged and disqualified. Top 4 karts to proceed to tech inspection. Jr 1 drivers are expected to learn the lineup procedures and to know all the meaning of the flags and the use of hand signals.

### Jr 2 Specific Rules

- **Age.** 10-12 years old. If the 12-year-old has previously raced, he or she will move up to the Junior 3 class.
- **Engine Restrictor Plate.** Purple .500"
- **Weight.** 290 lbs. post-race
- **Body.** No Steering fairing allowed.
- **Rear Bumper.** Left rear bumper must cover left rear tire not to extend past wheel.
- **Race Procedure.** Heat race lineup to be determined by draw at time of registration. Low number will start on pole. Jr 2 heat races will be a rolling start. The drivers will stage in the correct starting positions in the pit staging line. Drivers will do 1 pace lap. The Flagman will drop the green flag to start the race. If there is a yellow flag karts are to slow and stop on the back straight a way to re line the starting positions. If the first lap is not completed before a yellow flag a complete restart. If one lap is completed the lineup will be a single file start. There is a 2 spin out rule for the Jr 2 division. If the driver spins two times in a race, they will be black flagged and disqualified. Top 4 karts to proceed to tech inspection. Jr 2 drivers are expected to know the lineup procedures and to know the meaning of all flags and using hand signals.

### Jr 3 Specific Rules

- **Age.** 12-16 years old. Any 16-year-old that has previously raced will move to an adult class. Any 16-year-old rookie that has never raced will have the option to stay in Junior 3 or move to an adult class.
- **Engine Restrictor Plate.** No
- **Weight.** 320 lbs. post-race
- **Body.** Steering fairing allowed.
- **Rear Bumper.** Left rear bumper must cover left rear tire not to extend past wheel.
- **Race Procedure.** Heat race lineup to be determined by draw at time of registration. Low number will start on pole. Jr 3 heat races will be a rolling start. The drivers will stage in the correct starting positions in the pit staging line. Drivers will do 1 pace lap. The Flagman will drop the green flag to start the race. If there is a yellow flag karts are to slow and stop on the back straight a way to re line the starting positions. If the first lap is not completed before a yellow flag a complete restart. If one lap is completed the lineup will be a single file start. There is a 2 spin out rule for the Jr 3 division. If the driver spins two times in a race, they will be black flagged and disqualified. Top 4 karts to proceed to tech inspection. Jr 3 drivers must know the lineup procedures and to know all the meaning of the flags and must use hand signals.

### Ladies Only All-Star Series Specific Rules •

- **Age.** Must Be 16 years old.
- **Weight.** 375 lbs. post-race
- **Race Procedure.** Heat race lineup to be determined by draw at time of registration. Low number will start on pole. All-Star heat races will be a rolling start. The drivers will stage in the correct starting positions in the staging line. Drivers will do 1 pace lap. The Flagman will drop the green flag to start the race. All Star drivers are expected to be able to line up in the correct starting positions while pacing. If the first lap is not completed before a yellow flag a complete restart. If one lap is completed the lineup will be a single file start. There is a 2 spin out rule for the All-Star division. If the driver spins two times in a race, they will be black flagged and disqualified. Top 4 karts to proceed to tech inspection. All-Star drivers are expected to race in a professional manner and to lead by example for our youth drivers. No unsportsmanlike behavior will be allowed.

### Adult All-Star Series Specific Rules

- **Age.** Must Be 16 years old.
- **Weight.** 390 lbs. post-race
- **Race Procedure.** Heat race lineup to be determined by draw at time of registration. Low number will start on pole. All-Star heat races will be a rolling start. The drivers will stage in the correct starting positions in the staging line. Drivers will do 1 pace lap. The Flagman will drop the green flag to start the race. All Star drivers are expected to be able to line up in the correct starting positions while pacing. If the first lap is not completed before a yellow flag a complete restart. If one lap is completed the lineup will be a single file start. There is a 2 spin out rule for the All-Star division. If the driver spins two times in a race, they will be black flagged and disqualified. Top 4 karts to proceed to tech inspection. All-Star drivers are expected to race in a professional manner and to lead by example for our youth drivers. No unsportsmanlike behavior will be allowed.