

## SSR Motorsports Park 2026 JR Champ Rules

These rules are subject to change. The Race Director and Tech inspector's interpretation of these rules are **FINAL**.

This class is a competitive development class preparing drivers for higher-level racing.

The Tech Official's interpretation of these rules is final.

If a component, configuration, or condition is not specifically addressed in these rules, it will be deemed illegal unless explicitly approved by SSR Technical Officials.

SSR Motorsports Park reserves the right to inspect, confiscate, or replace any component at any time to ensure compliance.

### **RULES AND SPECIFICATIONS**

#### **Participants:**

- 1.) Racers must be between 6 years to 12 years of age at the start of the season

#### **Driver / Parent / Crew Conduct:**

- 1) Unsportsmanlike conduct from driver, parent or crew (language, threats, fighting, etc) = removal and or DQ with point loss for that day, possible suspension.
- 2) Deliberate and intentional contact or spinning of other racers = DQ
- 3) Verbal abuse of officials = DQ
- 4) SSR reserves right to remove participants

#### **Kart specifications:**

- 1) WKA or ARKA approved, Jr. champ or Jr. Sportsman factory-built chassis. No homemade or converted karts permitted.
- 2) Must have nose piece, right and left side panels
- 3) Fiberglass, plastic, or aluminum seat only.
- 4) Bolt on head and shoulder restraint permitted.

- 5) Minimum weight with driver: 300 lbs.
- 6) All bolt on ballast must be painted white with kart number present
- 7) All ballast must be securely bolted in place, no hose clamp or straps permitted. Minimum bolt size 5/16 and all bolts must be lock nutted, double nutted, and washers used, no exceptions.
- 8) All ballast must be visible and accessible for inspection.
- 9) Disc brake on rear axle only
- 10) No minimum or maximum ride height
- 11) Must have easy to read number on each side panel and nose piece
- 12) Minimum number height is 6 inches
- 13) Caster, camber, toe: Any setting permitted
- 14) Front and Rear approved bumper required; side panel bars required
- 15) Number plate on back of cage
- 16) RaceCeiver required by all competitors in working order and clearly able to hear control tower
- 17) Transponder to be mounted to front upright on left nerf bar only
- 18) Long Hair MUST be properly

### **Safety:**

**\*\*All belts and safety gear to be current date per Manufacturer\*\***

- 1) Parent or guardian must be present at all times while a minor is in the pit or racing area
- 2) No unauthorized persons allowed on track surface during active sessions
- 3) 5-point harness, 2in minimum width belts with no fraying or damage.
- 4) One- or two-piece fire-retardant suit required with minimum SFI 3.2A/1 rating or equivalent
- 5) Gloves required, minimum SFI 3.3/1 rating or equivalent
- 6) Full face helmet required, minimum SNELL 2020 rating or newer
- 7) All drivers with long hair must securely contain or restrain their hair (e.g., tucked into helmet or suit) while on track to prevent entanglement with moving components such as chains, clutches, or axles.
- 8) Visor down before entering race surface
- 9) Racing shoes, minimum SFI 3.3a/5 rating or equivalent
- 10) Working Kill switch within driver reach

- 11) Head and neck restraint required
- 12) Arm restraint mandatory
- 13) Engine mounted chain guard required

### **Tires and Wheels:**

- 1) Maxxis EL tires only
- 2) No tire prep allowed
- 3) No compound alteration permitted
- 4) No cutting, grinding, or truing permitted
- 5) Right side:
  - a. Maxxis 11 x 6.00 x 6 mounted on 8.5in wheel
  - b. Maxxis 12 x 8.00x 6
- 6) Left side: Maxxis 10.5 x 4.50 x 6 mounted on 6in wheel
- 7) Maximum tire circumference 35"

**\*\*SSR has MAXXIS EL tires and wheels for sale\*\***

### **NOTE:**

Parents and Crew, it is up to you to make sure specs are met. Not Passing specs means disqualification.

The tech official, at their sole discretion, may at any time replace a competitor's sealed engine, carburetor, or head assembly with another sealed engine or known stock part. Failure to comply is grounds for disqualification.

### **FUEL RULE (ALL CLASSES)**

Fuel must be one of the following:

- a) Commercially available pump gasoline with an octane rating of 87–93, purchased from a public retail fuel station, or
- b) SSR-approved fuel purchased at SSR Motorsports Park (Renegade Race Fuel).

The following are strictly prohibited:

- Any oxygenated fuels other than commercially available pump gasoline (E0–E10)
- Methanol, alcohol, ethanol blends exceeding E10
- Fuel additives of any kind
- Race fuels not specifically approved by SSR Motorsports Park
- Any fuel not meeting the specifications above

Inspection and Testing:

All fuel is subject to inspection and testing at any time. Approved testing methods include, but are not limited to, visual inspection, odor comparison, dielectric meter testing, and specific gravity testing. Fuel samples may be taken from the fuel tank at any time.

Fuel must be consistent with SSR baseline standards for legal pump gasoline or approved fuel. Any fuel determined to be outside of acceptable characteristics will be deemed illegal. Fuel may be checked against SSR baseline samples. Any deviation from baseline characteristics may be deemed illegal regardless of source.

Fuel purchased at SSR Motorsports Park is automatically considered legal and not subject to disqualification based on composition.

SSR Motorsports Park reserves the right to require proof of fuel purchase.

The decision of SSR Technical Officials regarding fuel legality is final.

NOTICE: SSR Motorsports Park reserves the right to implement a spec fuel rule requiring SSR-approved fuel for all competitors. Advance notice will be provided prior to enforcement.

## **Engines:**

Moving forward in the 2026 racing season SSR Motorsports Park is transitioning to the GHOST™ from PREDATOR™ RACING 212cc Kart Racing Engine in it's OEM form as purchased from Harbor Freight and sealed by SSR with serial number recorded for all Kart classes: Mighty Mite, Jr, Teen, Sr, and Sr. Champ.

**This means Unaltered.**

Box Stock Project engines previously run at SSR Motorsports Park will be permitted to be used in their sealed, unaltered state under prior season rules for a transitioning period determined by SSR Motorsports Park. Announcement will be made on the SSR Motorsports park FaceBook page and website(s) as to when the BSP will no longer be permitted to run per class.

The terms stock, original equipment, OEM, unaltered, etc., refer to Original Equipment supplied by Harbor Freight or specified manufacturer (BSP).

Any material removal on any part beyond minimal maintenance or resulting in performance gain will be deemed illegal. Minimal maintenance is defined as work necessary for reliability only and may not alter performance characteristics.

Any part deemed to provide a performance advantage beyond normal production tolerances, whether modified or not, may be ruled illegal at the discretion of SSR Technical Officials.

## **GHOST™ from PREDATOR™ RACING 212cc Kart Racing Engine Factory Supplied by Harbor Freight and sealed by SSR Motorsports Park:**

### **Security Seal (GHOST™)**

- 1) Each engine comes with a RED security seal that is serialized from the track.
- 2) Tampering with the seal is not permitted.
- 3) Any engine with a missing, damaged, or tampered seal is automatically illegal for competition.
- 4) Should a seal be tampered with, the engine is no longer eligible for competition.
- 5) If an engine requires dismantling for any reason, see SSR staff management member for more information on procedure.

### **Block, Internals and Accessories (GHOST™)**

- 1) All parts must be unaltered Ghost 212 parts specifically made for these engines by Harbor Freight, unless authorized by SSR Motorsports Park.

- 2) No after-market parts are to be used unless specified in these regulations.
- 3) All parts are subject to comparison with a known stock part or track-supplied reference, and the determination of legality by the Tech Official is final.
- 4) This includes specified and mandated aftermarket parts. (Example: RLV exhaust and silencer is supplied by SSR and permitted for use.)
- 5) A tech official may use additional means of measuring components to compare against a known stock part.
- 6) The tech official, at their sole discretion, may at any time replace a competitor's sealed engine, carburetor, or head assembly with another sealed engine or known stock part. Failure to comply is grounds for disqualification.
- 7) If a competitor's part is replaced, old part must be handled in a way that prohibits the reuse of that part.
- 8) All Ghost 212s must have a serialized block. Blocks without a factory serialization on the front base next to the oil drain are illegal for competition.
- 9) Standard organizational protest procedures can allow for short block inspection (seal removal), the individual/team calling out the protest is responsible for the cost of a new seal, gaskets, and labor for the tech official to complete the process if the engine or part that was protested is deemed Legal, this cost may or may not meet or exceed that of the full claimer rule cost.
- 10) If the engine is deemed to have been tampered with and therefore deemed illegal the offending driver is then disqualified, and engine left unsealed with serial numbers noted, so that the engine will not be allowed to race at the track again.
- 11) No grinding, polishing, or machining of parts allowed. If any questionable part develops it can/will be compared to a known supplied part.
- 12) No tape on outside of engine for the purposes of air flow changes to the engine itself.
- 13) Chain guard, throttle linkage and top plate are non-tech items if not a performance gain if changed from as supplied stock parts.
- 14) Any spark plug is allowed
- 15) Any attempt to defeat the rev limiting coil of 6,200 +/- 50 will be disqualified.
- 16) Stock coils ONLY.

- 17) Stock Cast Iron Fly wheel as supplied by Harbor Freight Only. No other Fly Wheel will be permitted.
- 18) Stock Plastic cooling fan.
- 19) NO shaving or intentionally cutting of fly wheel fan blades is allowed. In the event of failure Tech will investigate to be sure they were not cut. Typically, there will be evidence of failure in the blower housing.
- 20) Any method of altering ignition timing beyond factory specification, including component tolerances or mounting variation, is prohibited.
- 21) Any altered engine will have seals cut by SSR Motorsports Park official and will no longer be allowed to run as a sealed engine at the track.

SSR Motorsports Park has the right to impound any engine, at any time, for any reason, and check that engine for legality, which can include sending the engine to a track designated expert for review, measurement, and analysis.

### **Carburetor (GHOST™)**

- 1) Denki PZ22 carburetor must be run as supplied by Harbor Freight and SSR.
- 2) No alterations to throttle stop or throttle slide.
- 3) **Jr1 'Green Slide (#555740) .490 (.491 No-go) Pin gauge MUST not go under the slide. when engine is hot, after operation.**
- 4) Main Jet Size 80 (.031 MUST go) to 107 (.042 NO GO) LIMITS
- 5) Idle Jet (.039 MUST go) to (.043 NO go) Limits
- 6) MUST use the Denki/Keihin style emulsion tube.
- 7) No polishing or reworking the Venturi area.
- 8) No blueprinting of the carburetor allowed.
- 9) The only alterations that can be made are as follows but with no cutting, grinding, or drilling:
  - a. Main Jet
  - b. Pilot Jet
  - c. Jet Needle
  - d. Float Height
- 10) A slight chamfer around the choke bore ID (air horn) may be present. 1.149" no go.

- 11) Slide to remain unaltered. Slide cutaway to be measured on flat surface. .075 no go.
- 12) All intake manifold fasteners must be present.
- 13) All individual carburetor components must be tight and must remain UNALTERED as shipped from the factory.
- 14) Denki stock unaltered aluminum needle is required. Needle may be inspected and must be 0.070 thickness and must not pass through the check block.
- 15) Throttle cable cap on the top of the carburetor must be properly installed and secured in the fully tight position.
- 16) Metal choke cover must remain in place but may be secured with silicone or epoxy sealer.
- 17) Additional pin punching/nut tightening is allowed to tighten choke. Air must only enter the engine from the air filter horn of the carburetor. Air entering through any other method or opening is illegal.
- 18) All carburetor and intake connections must be airtight. Any intentional or unintentional air leaks will result in disqualification
- 19) The only Intake allowed is the one that came with the engine. Unless track says otherwise.

### **Oil Breather (GHOST™)**

- 1) Rocker cover oil breather must vent through a hose.
- 2) A catch can is permitted.

### **Things That Are NOT Permitted**

- a. Tampering with the installed engine seal.
- b. Addition or subtraction of material in any form or matter.
- c. "Blueprinting" unless stated herein, Removal of small "burrs".
- d. Modification to or the machining of any parts in order to bring them to stated minimum/maximum specification, (or for any reason).

#### **Exception - Valve maintenance (valve job).**

- a. Valve seats must remain with the factory specification of 30- and 45-degree angles only.

- b. Valve seats of additional angles and/or angles not comparable to the factory stock of 30 and 45 degrees are not permitted. Grinding of valve stem or excessive material removal prohibited.
- c. Valve Springs must remain stock style 22lb valve springs.

**Exception** – Optimization of the slide opening to be within spec.

### **Cooling Shrouds, Covers and Blower Housings (GHOST™)**

- 1) All pieces of the engine cooling shroud/blower housing and control panel must be stock and properly installed. Rewind housing and cooling shroud (air guard) must remain stock.
- 2) Engine Shroud may be painted any color. Any bolt, with the exception of the head bolt, that is used to secure sheet metal shrouds and covers may be replaced with larger diameter bolts.
- 3) No taping, covering, or restricting air to the rewind shroud is permitted.
- 4) Quick-release throttle cable linkages are allowed, provided they are securely mounted to control plate. In the event of a Top 3 winner with a fan failure. This will be taken into account.
- 5) Coil or its position, other than air gap, may not be altered in any way.
- 6) Coil mounting bolts must be stock and cannot be altered in any way to advance or retard timing.
- 7) Attachment bolts and/or bolt holes may not be altered.
- 8) Clutch **MUST** be a drum clutch in Jr Champ class.
- 9) Head gasket must remain stock thickness, unless otherwise noted and authorized by the Track.
- 10) The transition from intake bowl to port must have factory defined machining burr at this junction.
- 11) Valve Springs must remain stock style 22lb valve springs.
- 12) Rocker arms and rocker arm mounts must remain stock and unaltered.

### **Exhaust (GHOST™)**

- 1) Unaltered RLV Thick flanged long header pipe (supplied by track inside accessory kit) and RLV muffler teched per AKRA rules and measurements.
- 2) The RLV muffler must be clamped with small self-tapping screw onto exhaust pipe all the way and tight.

- 3) A tie wire securing muffler to clamps on pipe as to keep muffler from falling fully off. Broken or cracked header found in tech will not be a cause for disqualification, however if your header or muffler is knocked off or falls out for any reason during the race you will be black flagged. Any header pipe that is found to be broken or cracked in tech, after the race, must be replaced before the engine will be allowed to compete again.
- 4) Pipe can be wrapped with a heat shield, or not, racers decision. If wrapped it must be securely wrapped or sleeved starting at the beginning of the silencer to mounting flange. No wrapping/sleeving allowed on silencer.
- 5) You may add an after-market header brace.

### **Clutch and drive train (ALL):**

- 1) Stock North American 14 tooth only
- 2) ***Drum clutch only***
- 3) Number 35 chain
- 4) Axle sprocket: 59 tooth only, No skip tooth sprocket

### **Factory Box Stock Project Sealed engine**

- 1) All Parts and Accessories must be raced as supplied by Box Stock Project unless otherwise noted in the rules.
- 2) No grinding, polishing, or machining of parts allowed. If any questionable part develops it can/will be compared to a known supplied part.
- 3) Air Filter must run a stock regular air filter as supplied. RED in color or any #175 style angled filter allowed.
- 4) No performance gain air filters allowed.
- 5) No alterations to the filter. You MAY use a filter sock on the air filter, racers decision.
- 6) NO RC2 filters are allowed.
- 7) No tape on outside of engine for the purposes of air flow changes to the engine itself.
- 8) Chain guard, throttle linkage and top plate are non-tech items if not a performance gain if changed from as supplied stock parts.
- 9) TIMING will be no more than 32 degrees before TDC. Engine MUST have an offset key of 10 degrees installed having a maximum step of .075 +/- .002, No alterations to the shaft, key, keyway or flywheel allowed.

- 10) Any method of altering ignition timing beyond factory specification, including component tolerances or mounting variation, is prohibited.
- 11) Any spark plug is allowed

If a part fails size of NO/GO GAGE will result in DQ and in loss of Points for that Event (Heat and Feature races).

The track has the right to impound any engine, at any time, for any reason, and check that engine for legality, which can include sending the engine to a track designated expert for review, measurement, and analysis.

Any altered engine will have seals cut by SSR official or Box Stock Project official and will no longer be allowed to run as a sealed motor at any track.

### **Carburetor (BSP)**

- 1) RUI\*ING carburetor must be run as supplied from Box Stock Project.
- 2) No alterations to throttle stop, throttle shafts or emulsion tube. MUST use the RUI\*ING 2-hole emulsion tube. No polishing or reworking the Venturi area, (the carburetor venturi size from BSP is .611)
- 3) No blueprinting of the carburetor allowed. The only alterations that can be made are as follows:
  - a. Main Jet Size (.036 MUST go) to (.042 NO GO) LIMITS
  - b. Low Speed Jet Size - .027 max NO-GO with O-ring must be intact and present.
- 4) Air Filter must run a stock regular air filter as supplied by track in accessory kit.
- 5) The following restrictor plate will be used per class rules. Gasket required on both sides of plate for all classes:

|              |                 |       |
|--------------|-----------------|-------|
| a. JR. CHAMP | Arc GREEN plate | 0.425 |
|--------------|-----------------|-------|
- 6) Restrictor plate must be installed directly between carburetor and intake with one gasket on each side. No additional gaskets, spacers, or modifications permitted.
- 7) All carburetor and intake connections must be airtight. Any intentional or unintentional air leaks will result in disqualification

## **Exhaust (BSP)**

- 1) Exhaust Pipe Unaltered Rapp thin flanged header pipe and RLV small muffler teched per AKRA rules and measurements and raced unaltered as supplied by Box Stock Project.
- 2) The RLV small muffler must be screwed into the exhaust pipe all the way and tight.
- 3) Pipe can be wrapped with a heat shield, or not, racers decision. If wrapped it must be securely wrapped or sleeved starting at the beginning of the silencer to mounting flange. No wrapping/sleeving allowed on silencer.
- 4) You may add an after-market header brace.
- 5) Any header pipe that is found to be broken or cracked in tech, after the race, must be replaced before the engine will be allowed to compete again. Broken or cracked header found in tech will not be a cause for disqualification, however if your header or muffler is knocked off or falls out for any reason during the race you will be black flagged.

## **Clutch and drive train (ALL):**

- 1) Stock North American 14 tooth only
- 2) Drum clutch only
- 3) Number 35 chain
- 4) Axle sprocket: 59 tooth only, no skip tooth sprocket

**SSR reserves the right to make amendments to these rules as needed.**