

2010 GVKC Clone Club and Oval Track Rules

Rev 9 – 3/2/2010

The purpose of bringing the Clone engine to the oval is to develop a close form of “*fun*” wheel-to-wheel action for the competitor on the oval. This will remain a very inexpensive and very restricted class to entice new membership and also give existing members an alternative to the Sprint Racing schedule. Many will cross over and compete on both days; so again, low cost will be the factor in the success of this series. But hey, we will also have an L-Head WKA Class if the clone just won't do it for you.

Class Structure for the 2010 GVKC Oval season:

Clone Rookie.

Clone Junior 1.

Clone Junior 2.

Clone Senior (Light & Heavy).

Clone Master (over 50 years old).

L-head WKA. (Per WKA rules, not published below).

* Engines other than a clone or L-head will be considered case-by-case for competition but will not be eligible for championship points. The class structure can/will be adjusted based on participation.

Clone “Rookie” Junior Class:

Age: 5-7 years. **Weight minimum:** 200 lbs.

Clutch: Drum style 2 shoe clutch only – #35 chain, 13 tooth drum only – No disc clutches.

Tires: Open compound – 4.50 or 4.60 front & rear.

Maximum wheel width: 5” front & rear width, 5 or 6 inch diameter.

Engine: 2.5 HP OHV Harbor Freight Engine, box stock.

Restrictor plate: None at this time. This is subject to change at the discretion of the race director.

Air cleaner / Intake tract: Aftermarket air filter adapter **not** allowed. Stock air-box & filter assembly required. Foam pre-filter may not be removed. Stock air filter cover must be retained around the air filter. Excess plastic may be trimmed from the air-box assembly for throttle clearance providing no bypass of stock air inlet tract is achieved. If aftermarket catch can / breather is utilized, bung for factory PCV hose must be plugged.

Exhaust: Stock Muffler.

Bodywork: CIK style per WKA section 208 – 4 cycle style per WKA section 258

Chassis: Standard sprint chassis – Specifications per WKA 201.1 – 201.12.

Axle Sprocket: 70 tooth only.

Clone Junior I:

Age: 8-11 years. **Weight minimum:** 250 lbs.

Clutch: Drum style 2 shoe clutch only – #35 chain, 15 tooth drum only – No disc clutches.

Tires: Open compound – 4.50 or 4.60 front & rear.

Maximum wheel width: 6.5” front & rear width, 5 or 6 inch diameter.

Restrictor plate: None at this time. This is subject to change at the discretion of the race director.

Air cleaner / Intake tract: Aftermarket air filter adapter **not** allowed. Stock air-box & filter assembly required. Foam pre-filter may not be removed. Stock air filter cover must be retained around the air filter. Excess plastic may be trimmed from the air-box assembly for throttle clearance providing no bypass of stock air inlet tract is achieved. If aftermarket catch can / breather is utilized, bung for factory PCV hose must be plugged.

Exhaust: ARC DJ-1138 “Box Stock” Header & Muffler assembly. Header must be fully wrapped (to within .75” or less of end of header) with heat/flame retardant material.

Bodywork: CIK style per WKA section 208 – 4 cycle style per WKA section 258 (Sportsman 1 apply)

Chassis: Sprint or Offset chassis.

Axle Sprocket: 65 thru 70 tooth only.

Clone Junior II:

Age: 12-15 years. **Weight Minimum:** 290 lbs.

Clutch: Drum style 2 shoe clutch only – #35 chain, 15 tooth drum only – No disc clutches.

Tires: Open compound – 4.50 or 4.60 front & rear or optional 6.0 rear only.

Maximum wheel width: 6.5” front & rear or optional 7.50” rear maximum. 5 or 6 inch diameter.

Restrictor plate: None at this time. This is subject to change at the discretion of the race director.

Air cleaner / Intake tract: Aftermarket air filter adapter **not** allowed. Stock air-box & filter assembly required. Foam pre-filter may not be removed. Stock air filter cover must be retained around the air filter. Excess plastic may be trimmed from the air-box assembly for throttle clearance providing no bypass of stock air inlet tract is achieved. If aftermarket catch can / breather is utilized, bung for factory PCV hose must be plugged.

Exhaust: ARC DJ-1138 “Box Stock” Header & Muffler assembly. Header must be fully wrapped (to within .75” or less of end of header) with heat/flame retardant material.

Bodywork: CIK style per WKA section 208 – 4 cycle style per WKA section 258 (Sportsman 2 apply)

Chassis: Sprint or Offset chassis.

Axle Sprocket: 65 thru 70 tooth only.

Clone Senior Light / Heavy Classes

Age: 15 years & up for the light and heavy senior classes.

Weight Minimum: Light: 320 lbs. **Heavy:** 360 lbs.

Clutch: Drum style 2 shoe clutch only – #35 chain, 15 tooth drum only – No disc clutches.

Tires: Open.

Maximum wheel width: Open.

Restrictor plate: none

Air cleaner / Intake tract: Aftermarket air filter adapter **not** allowed. Stock air-box & filter assembly required. Foam pre-filter may be removed. Filter cover may be removed. Excess plastic may be trimmed from the air-box assembly for throttle clearance providing no bypass of stock air inlet tract is achieved. If aftermarket catch can / breather is utilized, bung for factory PCV hose must be plugged.

Exhaust: ARC DJ-1138 “Box Stock” Header & Muffler assembly. Header must be fully wrapped (to within .75” or less of end of header) with heat/flame retardant material.

Bodywork: CIK style per WKA section 208 – 4 cycle style per WKA section 258.

Chassis: Sprint or Offset chassis.

Axle Sprocket: 65 thru 70 tooth only.

Clone Master Class

Age: 50 years and older. **Weight Minimum:** 350 lbs.

Clutch: Drum style 2 shoe clutch only – #35 chain, 15 tooth drum only – No disc clutches.

Tires: Open.

Maximum wheel width: Open.

Restrictor plate: none

Air cleaner / Intake tract: Aftermarket air filter adapter **not** allowed. Stock air-box & filter assembly required. Foam pre-filter may be removed. Filter cover may be removed. Excess plastic may be trimmed from the air-box assembly for throttle clearance providing no bypass of stock air inlet tract is achieved. If aftermarket catch can / breather is utilized, bung for factory PCV hose must be plugged.

Exhaust: ARC DJ-1138 “Box Stock” Header & Muffler assembly. Header must be fully wrapped (to within .75” or less of end of header) with heat/flame retardant material.

Bodywork: CIK style per WKA section 208 – 4 cycle style per WKA section 258.

Chassis: Sprint or Offset chassis.

Axle Sprocket: 65 thru 70 tooth only.

Section 1 – Clone Engine Rules (apply to all clone classes):

1.1 Approved engine: Out of the box gasoline 6.5 HP Clone only, Blue or Yellow. No Honda engines.

Important Note: All parts must be Box Stock factory production parts unless otherwise specified in this rulebook. No machining or alteration of parts is allowed. All parts will be subject to a comparison to a known Box Stock part with a +/- .005" tolerance. Any and all parts are subject to visual tech at the discretion of the tech official.

1.2 Fuel: Retail pump automotive gasoline only. Race officials can obtain a race day sample from competitors upon request. No additives of any type allowed.

1.3 Oil: Any commercially available oil – **No additives allowed.**

1.4 Fuel Tank Requirements: Floor Mounted fuel tank or the factory stock engine mounted tank. Pulse type fuel pump allowed. Fuel pump must be pulsed from either crankcase or 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.

1.5 Carburetor: Stock model carburetor only. No Honda carburetors. 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. Stock emulsion tube must be used and unaltered.

Choke bore - .810" NO-GO

Venturi - .615" NO-GO

Rear carb bore - .751" NO-GO

Main fuel jet - Jet must be less than .030. If a .030 pin fits in, it's illegal.

1.6 Restrictor Plate Installation: None at this time. Subject to change.

1.7 Combustion chamber volume: 27.5 cubic centimeter minimum, with piston at TDC.

1.8 Cylinder head requirements: Must be OEM casting only. Porting and / or grinding are not permitted. Valve seats are two angles 45 degrees valve face and 30 degrees top relief. Stock head bolts only, must have four. Head gasket may be aftermarket, must be of stock configuration. No copper or aluminum gaskets allowed.

1.9 Bore and Stroke: Stock cylinder bore is 2.685" max. Stroke is 2.123" +/- .005"

1.10 Valve Cover: Stock valve cover only – a fitting may be added for fuel pump pulse tube and/or oil catch can.

1.11 Push Rods: Factory stock push rods only – subject to visual tech.

1.12 Rocker Arms: Factory stock rocker arms in stock position and configuration only – subject to visual tech.

1.13 Valve Springs: Factory stock valve springs only. Max wire diameter on spring wire is .071" with a maximum pressure of 10.8 lbs. at a height of .850"

1.14 Valve spring retainers: Stock retainers required in stock position and configuration only. Minimum thickness: .088 intake & .060 exhaust.

1.15 Valves: Factory stock valves only. 45 degree angle only, both valves, no modifications allowed.

1.16 Ignition system: Box Stock system only and must be unaltered. Low oil sensor may be disabled and removed. All engines must have a functional kill switch. *It is strongly recommended that engines have a kill switch that is easily accessible to, and able to be operated by, the driver.*

1.17 Flywheel: Box Stock flywheel only with plastic fins. No alterations of any type allowed. Must also run stock flywheel key in stock position, **no offset or modified keys allowed.** Plastic fan assembly is a tech item and will be compared to known stock assembly.

1.18 Flywheel Key: Must be stock, unaltered key. Minimum thickness .156".

1.19 Piston and Rings: Must be unaltered Box Stock only. No oversize pistons or rings allowed. No machining of piston and rings allowed.

1.20 Connecting Rod: Box Stock rod only. No machining of any type allowed. Stock rod bolts only.

1.21 Crankshaft Requirements: 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"- 1.175" min.

1.22 Camshaft Requirements: Stock as cast camshaft only. Maximum running lift of .245" checked at valve as run. Maximum lift of .227 at lifter. Cam profile as measured at lifter:

Lift Minimum Maximum Lift Minimum Maximum

Exhaust: 0.050 23.3° 29.3° Intake: 0.050 5.3° 11.3°
0.100 6.8° 12.8° 0.100 23.7° 29.7°
0.150 6.5° 12.5° 0.150 43.8° 49.8°
0.200 34.7° 43.2° 0.200 72.7° 78.7°
Max Lift: 0.227 Max Lift: 0.227
0.200 63.7° 69.7° 0.200 30.7° 36.7°
0.150 35.5° 41.5° 0.150 1.7° 7.7°
0.100 15.5° 21.5° 0.100 12.7° 18.7°
0.050 0.0° 6.5° 0.050 31.0° 37.0°

1.23 Block Requirements: Block must remain stock as produced. Stub for governor may be removed and hole plugged. Oil level sensor 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.

1.24 Recoil Starter: Stock recoil starter must be installed as supplied from factory and must be the only available method for starting.

1.25 Clutch: Drum style 2 shoe clutch only – #35 chain only – No disc clutches

1.26 Claimer Rule: There will be a \$200.00 claiming rule in place for this engine and an \$80.00 claiming rule for the clutch. Refusing to accept the claim will result in immediate disqualification of competitor along with forfeiture of any points earned to date in class. You must finish the race in the box stock clone class to purchase an engine for \$200.00 (minus the clutch, chain guard, throttle kit, header pipe, muffler, air filter, top plate, and fuel pump). You must finish the race in the box stock clone class to purchase a clutch for \$80.00 Competitors finishing 4th or worse may claim the engine or clutch of anyone in class finishing higher than them. Competitors finishing in positions 1 through 3 may claim the engine or clutch of finishers in positions 1 through 3, regardless of finishing position. (For example a winner may claim the engine of the 2nd or 3rd place finisher if he/she chooses). Claimed engines or clutches will be subject to technical inspection prior to claim and subsequent transfer to claimant. If engine or clutch is found to be illegal during inspection claim will be void and claim fee will be returned to claimant. To initiate a claim the \$200.00/80.00 claim fee shall be presented in cash to the race director or a 4-cycle director within **15 minutes of the conclusion of the feature event.**

1.27 Enforcement Actions: A competitor found violating any of the above rules will be disqualified for that race day with no points being awarded. Refusal of tech, flagrant or repeated violations will result in severe disciplinary actions to be determined by the full board. Possible penalties may include one or more of the following: DQ for the race day, no award of points, forfeiture of all points accumulated that season, 1 or more race suspension, and competitor being banned from any further participation in any box stock clone class. Flagrant violations shall include (but not be limited to) aftermarket valve-train components, machine work of any kind, discovery of any performance-enhancing fuel or oil additive, or any unapproved carburetor modifications. In the event of a DQ a competitor may not “drop” that race for class championship purposes.

1.28 Appeal Process: A disqualified competitor may appeal a DQ decision by submitting a written appeal to the race director or 4 cycle directors no later than 30 minutes after the disqualification is rendered. This written appeal along with track official testimony will be reviewed by the full board and a final decision will then be made. Every attempt will be made to have the decision at the event following the appeal. All decisions made by the full board shall be final.

1.29 Rules Revisions: Rules are subject to adjustment at any time to accommodate production tolerances or engine & parts availability.

1.30 Protest Procedure: All protests must be submitted in writing, on the Official Race Protest Form (available at the scoring tower), within fifteen (15) minutes of the completion of the applicable main event. Protest should be submitted to the race stewards or other present board members. Protests may only be filed by kart drivers (or guardians for drivers under 18). Individual filing protest must be participating in the class in which the protest is filed. Protests must be specific, and reference the applicable GVKC rule(s) that is/are being questioned. A fee of \$50 shall accompany any tech-related protest, \$25 of which shall be retained by GVKC. The remaining \$25 will be returned to the protesting party (if upheld) or to the competitor being protested (if rejected).

* **ARC DJ-1138 “Box Stock” Header & Muffler Only**: Single stage, one piece header made from .750” O.D. steel tubing with the Briggs & Stratton tube style muffler part #89966 or it’s aftermarket equivalent (ex: rotary power) installed at the end of pipe.

Section 2 – Clone Chassis and Body

2.1 In an effort to meet cost effectiveness we also encourage the use of older model chassis for the clone oval classes. Should you wish to purchase a new model chassis, it is requested, but not required that you purchase one of the new non-adjustable budget models.

2.2 Must have full bodywork to protect the kart and driver from the front, and both sides. Type, combination and manufacture are of your choice. Must be neat in appearance. No metal bodywork allowed, only plastic or fiberglass.

Section 3 – Clone Tires and Wheels, Again

3.1 Clone Rookie: Tires, open compound, sizes 4.50 or 4.60 front & rear. Maximum wheel width: 5” front & rear.

3.2 Clone Junior I: Tires, open compound, sizes 4.50 or 4.60 front & rear. Maximum wheel width: 6.5” front & rear. 5 or 6 inch diameter.

3.3 Clone Junior II: Tires, open compound, sizes 4.50 or 4.60 front & rear or optional 6.0 rear. Wheel width: 6.5” front & rear or optional 7.50” rear maximum. 5 or 6 inch diameter.

3.4 Clone Senior Light / Heavy / Masters:

Tires, open compound, any 5” or 6” size. Wheels, any 5” or 6” wheels.

3.5 Track Spec Tire: *After review of the oval this year there may be a track spec tire for 2011.*

Section 4 – Clone Axel Sprocket, Again

4.1 Axle Sprocket: 65 thru 70 tooth only.

Section 5 – Race day Fees

5.1 Driver fee, includes pit pass: \$20.00

5.2 Pit pass only: \$10.00

5.3 GVKC membership is required to be eligible for year-end awards: \$90.00 annual.

5.4 Track Officials will receive a pit pass for the season for their contributions from GVKC.

Section 6 – Race Program

6.1 There will be 2 qualifying heats consisting of 15 laps each. The average of your two(2) heat finishes will determine where you will start in the feature event. Example: If you finish 2nd in the first heat and 4th in the second heat you will start 3rd on the grid for the feature event.

6.2 The feature event will consist of 25 laps. The clone engine has shown to run very consistent with multiple drivers and you will need time to pass. The feature event can be adjusted in number of laps to meet those needs.

6.3 Championship Point System for the Oval: *You can only score points if you start the feature event.* The championship point scoring is listed below and applies to all classes. Only the top 9 in the feature event receive points:

1st place – 10 points

2nd place – 8 points

3rd place – 7 points

4th place – 6 points

5th place – 5 points

6th place – 4 points

7th place – 3 points

8th place – 2 points

9th place – 1 point

There will not be a drop of any races on the oval. If you miss a weekend, you miss out on points. He/She with the highest points wins, very simple. **Year-end and weekly awards TBD.** You may find we will combine classes into a race group. Points will be awarded (1st thru 9th) for your class within that race group (separate scoring).

6.4 Driver Registrations for the Clone Classes: There is a registration fee, per driver if the kart is competing in more than one class; that must be paid at the time of registration. This fee is non-refundable. One kart can be driven by several different drivers. Example: A junior kart can be driven in the senior class by another driver simply by changing tires and removing the air filter cover.

6.5 For the Clone Classes only: A “bump” rule of three(3) places will apply to the previous weeks feature winner. Example: If the previous feature winner qualified 2nd for the feature through the heats for that day we will “bump” them back to 5th for the start of the feature. The intent is not to penalize you for winning but to challenge your driving skills.

6.6 For the Clone Classes only: The “tire change” rule: It is the option of the race officials for that day to replace one (1) of the tires (mounted on a wheel) on the front or rear of your kart for the feature event. A race official will present the tire 15 minutes before the start of the feature. The tire will be provided by the track and will be in good useable condition. More than 1 kart racing in the feature can be affected by this rule. If this rule applies to you for the day’s feature event, you are then exempt from it for the following three(3) events. The intent is not to penalize you but to challenge your driving skills.

Section 7 – Clarifications:

7.1 No K&N brand air filter. Stock manufacture only.

7.2 No aftermarket camshaft of any kind. Manufacture fitted and installed only.

7.3 Clone Class weights may be adjusted as we observe karts on the scales for the first 3 weeks.

The 2010 Genesee Valley Kart Club (GVKC) Rulebook applies and must be followed at all times. The above rules are unique to the Oval program and are an addition to the current 2010 GVKC rules. The 2010 GVKC and Oval rules are subject to change at any time determined by the Board of Directors. It is your responsibility to review this supplement along with the master rulebook.

Interested or have questions? Please contact William & Sandra Barkley at 585-243-2075 or e-mail ecuriekart01@yahoo.com

Notes: **Items in RED are under review.**