2024 Clone Category Rules

- Approved Engines: OHV (Overhead Valve) engines commonly known as Clones. The engines are limited to a maximum displacement of 196cc. We will follow the 2020 AKRA ENGINE SPECIFIC TECH SHEET FOR: BOX STOCK 6.5 OHV, with the exceptions as listed in this document.

- Engine Components: Must be original OEM 196cc clone components unless otherwise specified. You may remove unnecessary OEM items such as stock exhaust, air cleaner, fuel tank, governor, low oil sensor etc.

- Headers and Muffler: Lock nuts or lock washers required to fasten pipe to block. All classes are permitted to run the choice of "weenie" pipe or big pipe with RLV BL-91 or RLV 4104 muffler. No loop pipes or custom pipes. All pipes must meet AKRA length and size requirements. Exhaust pipe MAY NOT PROTRUDE inside of the exhaust port and may not protrude past the rear bumper. Wrapping the Exhaust Pipe and Muffler is mandatory.

- Fuel: Only Gasoline no greater than 94 octane sold at Canadian roadside fuel stations open to the public. The addition of fuel additives is not permitted. No E85 Flex Fuel permitted.

- Carburetor: Huayi, K-TAI, or Ruxing type carb only (No Walbro or Mikuni). Choke assembly must be in place and functional. Blueprinted carbs are permitted providing they are blueprinted for AKRA box stock clone class. Venturi .615" max diameter and round checked with a no-go gauge. .751" max rear bore. .750" max depth to ridge behind butterfly. No dimpling or swirl cutting venturi or carb bore. Jetting is non tech. No grinding of emulsion tubes. They must appear as stock (2 or 4-hole max). Aftermarket filter and filter adaptor are permitted. The filter adapter that bolts to the carb must be straight. (no angle). The Air Filter must be a molded 1 piece (No other adapters allowed between the filter adapter and the air filter). Any pulse type fuel pump is permitted and may be pulsed from the crankcase, side cover, or valve cover. Plastic isolator plate must be **unaltered** and installed in its original location. Mounting holes may not exceed .300".

- Head: YD, TG-1 or JT castings only. (4 bolt valve cover heads). High compression 14cc heads are not permitted. The heads may have 3 angles on the valve seats. 45° face angle, 30° top relief, and 60° bottom relief. .899 max intake seat I.D. Stock valve sizes only. Intake valve .982" max. O.D. Exhaust valve .945" max. O.D. You may run the shorter valve of stock configuration to meet the .815" installed height rule. Tension of 10.8 lb. max @ .850" height (valve springs only) and tension of 18 lbs @ .650" height (valve springs only). Max wire dia.071". Minimum installed height .815" check with no go gauge. Shims may be used to meet this requirement providing they do not exceed .075" thickness total including valve seal lip. Head porting is allowed. No sinking the valves below the deck of chamber. Head must remain stock geometry no valve angle changes or angle milling. Head may be resurfaced to meet the AKRA CC rule of 26.5cc. Head gasket is non tech item.

- Camshaft: Stock or aftermarket camshafts are allowed providing they meet the following requirements: Ez-spin assembly 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 218.5 degrees at .050 lift/85.5 degrees at .200 lift. Exhaust duration of 221.5 degrees at .050" lift/96.5 degrees at .200" lift. All checks will allow +/- .5 degrees for wear and gauge variances. 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 as raced. 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 as raced.

- Valve Train: OEM Stock lifters only, no modifications allowed. Over-all length of push rod 5.285" max, 5.230" min. Push Rod must be of the 3-piece design (Hollow or solid tube with 2 solid ball ends). Lifter Head diameter .915" min with no visible modifications. Factory 1:1 rocker arm only. (No roller rockers). Rockers may be ground at tips to meet running lift requirements.

- Block: 2.691" Max. Bore (approx.010" over). Oil return hole not to exceed .251". Stock crank bearings only (no ceramic bearings permitted). Re-sleeving of block is not permitted. No piston pop-out allowed.

- Crankshaft: Stock Clone crankshaft required. Machining, polishing, addition of material or other alteration of crankshaft is prohibited. Removal of Governor Sprocket permitted. Stock factory timing gear mandatory and must be installed in original location. Crankshaft journal diameter is 1.180"max - 1.168" min. Crankshaft stroke is 2.123" +/- .010.

- Connecting Rod: OEM Stock Connecting Rod measuring 2.350" to 2.375" (from the bottom of the wrist pin to the top of the crankshaft journal). **or** ARC 6270 (3.303) & ARC 6269 (3.313) Rods allowed.

- Piston: Must be unaltered box stock dished piston only. No machining or drilling of piston allowed. File fitting of piston rings is permitted. No flat top pistons. Piston must be of a 3-ring design and all rings must be intact and functional. Maximum oversize .010" (see block section).

- Flywheel and Ignition: Must use stock 196cc clone ignition coil, plug wire, and resistor spark plug boot with minimum of 4 OHM resistance. Spark Plug Boot must be the stock black hard plastic boot ONLY! Spark plug is non tech. Stock flywheels are prohibited. Must use billet flywheel. Flywheel must be from approved list, 3.3 lb. minimum weight. No flywheel modifications allowed. The following flywheels are allowed: ARC 6619, ARC 6689, King billet steel and Dyno PVL aluminum flywheel.

- Starter: Electric starter with starter nut permitted. May also use recoil pull start. Pull starter may be rotated for better cranking angle and have better quality replacement rope installed.

- Clutch: Open to any centrifugal drum or dry disc clutch. **(Except for Box Stock where ONLY DRUM CLUTCH is Allowed)**

Please note that these rules are general guidelines. If you are chosen for tech, please do so without confrontation. Refusing tech will result in you being suspended for the next 2 complete race events (rain outs do not count toward the suspension). If any confrontation is given you will forfeit your finish and point for the day. If chosen, please take kart directly to the designated tech area where there will be a track official to watch your equipment. No work may be performed on kart at this time. Driver/owner of kart being teched and tech official only permitted in the tech area during tech sessions. It is not the responsibility of the tech inspector to reassemble engine post tech. If you are deemed illegal, you will be given "one week" to correct any illegal findings. First offence you will forfeit your finish and points for the day. Second offence forfeits finish and points and will not be permitted to race next scheduled race day (rain outs do not count towards the suspension). Third offence to be determined by track owner. Any issues that are questionable will be discussed by the tech inspector and track owner and decision will be made in the best interest of both parties.