Book 2 – 2012 Technical Regulations

Revision 1.0

BC KART CLUB ASSOCIATION

ASN Canada FIA – BRITISH COLUMBIA KARTING CHAMPIONSHIP SERIES

Note: Rules have been renumbered to follow ASN Canada FIA National Rule numbers wherever possible. This rules set is not to be considered a complete document. It is a supplement to the ASN Canada FIA rules package. As such it must be read as the areas where BCKCA deviates from ASN. It must also be read in conjunction with any subsequent club or event supplementary rules.

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6 Technical Procedures

6.1 Post race technical inspection. Clarification: All classes to proceed directly to weigh in area after the conclusion of qualifying and racing, and to the inspection area immediately after**,** qualifying, heat, or the final race(S). A competitor who receives more than one weight disqualification during an event may be excluded from the event.

6.1.1 Tech inspection area to be barricaded off to prevent visibility to spectators or non involved entrants.

6.1.2 Engine tech should not be done by an engine builder of that class.

8 Kart Chassis Specifications

8.3.2 Wdth overall, Formula C200: Maximum overall width is 140 cm (55.1").

8.4.3 ASN National tech regulation dealing with junior kart minimum weights shall not apply. However, much more stringent evaluation of ballast amounts, location, and mounting will be applied. Technical decisions made under this rule will not be protestable or subject to appeal.

8.15.1 Wheel Width, TAG Junior: Maximum rear wheel width is 215 mm.

8.15.2 Wheel Width, Formula C200: Maximum rear wheel width is 215 mm.

8.18.1 A rear torsion bar assembly may be considered as a lower bumper element provided that placement is within 75mm of the bumper attachment bolts.

8.18.2 Rear bumpers must be designed such that the ends will not insert into the center of wheels to the extent that they can contact valve stems, bead lock screws or wheel nuts.

8.18.3 Rear bumpers: In all conditions, the rear protection must at no time protrude beyond the external plane of the rear wheels.

8.25.1 Kart numbers are on a first come first served basis**.** Kart numbers must be in place and in all required locations throughout the event, for any on track session. Numbers that come off during a session are NOT subject to a Mechanical Defect (meat ball) flag.

8.25.2 Kart number 99 has been retired out of respect for Greg Moore, it will not be assigned at any BCKCA event

8.25.3 Classes with light and heavy divisions should have on the number panels of the "heavy division" a 1/2 in. (10mm) strip of tape the same color as the numbers placed under the numbers.

9.4 BCKCA Approved tires

9.4.1 All non-CIK classes, excluding Rotax Max & Formula C200, must qualify and race on one of the following dry tire compounds:

a. Vega SL7 (Red)
b. Vega SL6 (Green)
c. Vega SL3 (Blue)-NORDAM
d. Dunlop SL4
e. Maxxis HG3
f. MG AZ (Red)
g. MG SL (Orange)
h. Mojo D2
i. **Any CIK homologated HARD classification tire from the 2008 or 2011 homologation period.**

9.4.2 Formula C200 must qualify and race on **Maxxis HG1 (White) or Bridgestone YKC or YLC** tires, 10x4.50-5 front & 11x7.10-5 rear. Rear wheel width may exceed 185mm but not to exceed 215mm. This will be the spec tire for the 2011 season and beyond. Note that racers having Vega SL6 tires from last year may use them until they are worn out. No new Vega tires will be permitted at a regional race.

9.4.3 All CIK style classes and all 125cc shifter classes must qualify and race on a CIK homologated HARD or MEDIUM classification tire from the 2011 homologation periods, or any of the compounds listed in 9.4.1.

9.4.4 Junior Tire size specifications

9.4.4.a All junior classes except Junior TAG and Rotax JR will use the following maximum tire size's - Front Tires 4.60 X 10 – 5, Rear Tires 6.50 X 11 – 5

10 Definitions.

"OEM: Original Equipment Manufacturer" shall mean components that are produced by the original manufacturer of same brand and model of engine. No after-market components.

"Stock" shall mean as supplied out-of-the-box by the original equipment manufacturer. No modifications are approved within the definition.

"As supplied" shall mean same as Stock.

"Stock Appearing" shall mean appearing to closely resemble Stock in general appearance and dimension. Minor modifications are approved within the definition.

"Original Dimension Components" shall mean to be equal in general dimension to the original homologated components. Modifications and alternative components are approved within the definition.

"As Cast" shall mean as supplied out-of-the-box by the original equipment manufacturer. No modifications are approved within the definition.

"As Machined" shall mean as machined within manufacturers specifications and dimensional tolerances. The Technical Inspector may require that a competitor provide a manufacturers fiche in support any machining, to confirm specifications. It will be a competitor's responsibility to prove that machine work has been carried out within the manufacturers specifications and tolerances.

"As Homologated" shall mean within the dimensions and tolerances, as approved and registered by CIK for use in the class listed. No modifications outside of the CIK regulation is approved within the definition.

14 FORMULA SENIOR (KZ2) ENGINE PREPARATION.

14.1 Allowable engines: As per ASN 14.a as well as CIK Formula C homologated engines.

14.2 Kill Switch: A kill switch is required on all shifter karts.

18.2 JUNIOR 2 - 2 CYCLE ENGINE PREPARATIONS

18.2.1 Rotax Mini Max As per Rotax Max Challenge series. With exhaust socket #273972, and inlet restrictor #660750

18.2.2 Leopard Jr. restricted. As per Parilla publication for Leopard Jr. 2 with 15mm intake, and 25 mm restricted header.

18.2.3 Vortex ROK As per Vortex ROK publication for Vortex Jr2 engine specifications (available from selling dealer) Includes 15mm intake restrictor, & Vortex junior pipe

19.1.1 Gasoline may be obtained from any location, or as specified for certain classes, detailed in event supplementary regulation.

19.1.2 All other 2-cycle classes. SR Any readily available leaded or non-leaded pump or racing gasoline.

20. GENERAL HONDA FOUR CYCLE REGULATIONS

20.1 Air Filters and Adapters

20.1.e Centerline of the filter only may deviate from perpendicular to the mounting face of the adapter as long as the filter is a production part having an angled attachment boot.

20.2 Clutches

20.2.a The clutch must be an engine mounted centrifugal drum type dry clutch with radially expanding friction shoes. Disk type clutches are not permitted. It must be protected with an engine clutch guard.

20.14.a All Honda engines (Jr or Sr) sparkplug shall have a max reach of .755" (1.9177cm)

20.15 Junior Honda eligible Engines

20.15.a Allowable engines are Honda GX160 (all versions).

20.15.b Junior 1 Honda shall run **with a 0.500 intake restrictor plate.**

22. FORMULA C200 FOUR CYCLE REGULATIONS

22.1 Description: Single cylinder, 2 valve, OHV 4 cycle 6.5 HP.

22.2 Eligible Engines:

a. Honda GX200 – 6.5 HP

b. OHV 6.5 HP engines of compatible design and parts interchange ability with the GX200 (clones).

22.3 Stock specification: All parts must be stock factory production parts unless otherwise specified in this rules manual. No machining or alteration of parts is allowed unless specifically noted. All parts will be subject to a comparison to a known stock part (when performing a comparison check it is recommended to use a + /- .005" tolerance). Engine will be teched as raced.

22.4 Combustion chamber volume: 29.5 cubic centimeter minimum, with piston at TDC, using prescribed procedure.

22.5 Head Gasket Requirements: Must be of stock configuration. Minimum thickness is 0.008 in..

22.6 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 mating surface must remain in its unaltered stock condition.

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

22.8 Piston and rings: Standard size piston and rings only allowed. No oversize pistons or rings permitted. No machining of piston and rings allowed.

22.9 Carburetor requirements: Carburetor and all internal parts except for the main jet size must remain stock to the engine used. 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. Choke bore .810" NO-GO. Main fuel jet .035" NO-GO. Rear carb bore .751" NO-GO.
Venturi NO-GO for Honda GX200 – 0.575`` or for 6.5 OHV Chinese clone engines – 0.615``.

22.10 Air Filter: Option one - Stock air cleaner assembly only.

Option two – Air filter and filter adapter per ASN Canada Honda Technical rule 3.1.

22.11 Valve Train: Stock valve cover only with any stock configuration gasket, no sealer. Factory stock rocker arms and push rods only. Stock valves only 45 degree angle only both valves, no modifications allowed.

22.12 Valve springs: Stock or Honda G200 (part number 14751-883-000) valve springs permitted per ASN Canada Honda Technical rule 4.h**.** Valve springs may not be shimmed.

22.13 Ignition system: Stock system only and must be unaltered. Kill switch must be functional and mounted on the engine in reach of the driver. Low oil sensor may be disabled and removed. Sparkplug connector may be replaced with a non stock part. If the sparkplug connector does not have a "pull-off" handle a zip tie must be attached as a pull handle. Spark plug may be any 0.750`` reach single side electrode non platinum type. Sparkplug gasket is open.

22.14 Flywheel: Stock flywheel only with plastic fins. No alterations of any type allowed.

22.15 Flywheel key: Key may be modified or omitted.

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

22.17 Crankshaft Requirements: 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.

22.18 Camshaft Requirements: Stock as cast camshaft only. Maximum running lift of .245" checked at valve as run. Camshaft must also conform to ASN Canada Honda Technical rule 8.2.

22.19 Block Requirements: Block must remain stock as produced. Stub for governor may be removed and its hole plugged. No machining of block allowed except for the deck surface. Welding to the block shall be for rod damage repair only and may not constitute a functional modification.

22.20 Parts replacement: Worn or damaged parts may be replaced as needed with original, jobber or genuine Honda parts, except for the following major parts that may not be replaced:

Block, Head, Crankshaft, Camshaft, Flywheel and Carburetor.

22.21 Exhaust system: Header with silencer per ASN Canada Honda Technical rule 7.2 with the following exceptions allowed.

The following optional silencers are allowed in lieu of the RLV B91-1``. Princess Auto 8197725 or 8197758, Canadian Tire 60-7087-8, Briggs 392989 and their equivalent jobber parts.

A steel pipe fitting may be welded or clamped to the header for attachment of one of the optional silencers. This fitting must be within the overall header length required.

If a silencer is attached by pipe thread, a secondary positive means of locking the thread or securing the silencer to the kart must be included.

22.22 Fuel System: Floor mounted fuel tank and pulse driven pump to be used in accordance with ASN Canada Honda Technical rule 3.5.

22.23 Clutch: Allowable clutches only include – Max Torque model SS and Comet 400 series both being metal shoe / garter spring type. Clutch must be run in its un-altered stock condition. Driver size is optional.

22.24 Tires: As per BCKCA rule 9.4.2

22.25 Wheels: Rear wheel width may exceed 185mm but not to exceed 215mm.

22.25 Chassis: Maximum overall width for FC200 is 55.1" (140cm).

23. FORMULA C200 JUNIOR FOUR CYCLE REGULATIONS

23.1 Description: Single cylinder, 2 valve, OHV 4 cycle 6.5 HP. All as per section 22 (Formula C200) except for the following limitations.

23.2 Carburetor restrictor – Must use a 0.500" ASN type intake restrictor between the carburetor and the insulator.

23.3 Flywheel Key: Must have a stock un-altered flywheel key in place. Ignition coil and its mounting must also be stock and un-altered.

23.4 Exhaust System: Must use a stock un-altered muffler mounted directly to the exhaust port. No header or extension pipe allowed.

33.A.3 TAG JUNIOR Eligible Engines. – Rotax Max Junior, Parilla Leopard Junior 3, ROK ***.**

33.A.3 a Rotax Max Junior, As per published Rotax Max Junior specifications. (available from supplying dealer) *

33.A.3.b Parilla Leopard , As per Parilla Leopard Jr.specifications. (Available from supplying dealer) *

33.A.3.c Vortex ROK Junior , As per Vortex ROK Jr. specifications. (Available from supplying dealer) * includes 30mm exhaust restrictor.

33.A.3.d Vortex ROK Junior spec engines to have a tie wire loop installed between the exhaust header and the expansion chamber to prevent removal of the expansion chamber and thus the exhaust restrictor. The tie wire loop will be installed through the chamber retaining spring loops and twisted to close the loop. Sealing paint will then be applied to the twisted wire at time of engine sealing.

34. Senior TAG Classes

34.1 TAG Eligible engines – As currently listed by TAG USA for the TAG Senior class, including archived engines, on the TAG USA web site www.tagracing.net. Engines and weights will be as listed by TAG USA rules 14 days prior to the first day of the BCKCA event.

34.2 TAG Eligible engines - Vortex ROK , As per Vortex ROK **Cup** specifications. (Available from ROK **Cup** sponsoring dealer) *

NOTE * Master copies of dealer supplied technical information is held by BCKCA. There shall be no deviation from those supplied technical forms without BCKCA approval, and enough time to disseminate the information to all clubs, and end users.

38.0 COMPETITION CLASS STRUCTURE

Days run	Class	Age	Lic	Engine	Weight LB.
Both	Junior 1 (J1)	7/8 – 12	D	Honda GX 160/K1 & T1 (0.500 restrictor) Formula C200 Jr. Briggs LO-206 Jr. (slide-555733) Rotax Micro Max	225 225 275 225
Both	Junior 2 (J2)	9/10 – 15	C	Honda GX160/K1 &T1 Formula C200 Briggs LO 206 (slide-555734)	260 280 300
Both	TAG Junior (JTAG)	12 – 15	C +	Vortex ROK (30mm exhaust restrictor) Leopard Jr. (30mm header, 27mm intake) Rotax Max Junior (RMC regs apply)	320 320 320
Both	Briggs Senior	15/16-up	B	Briggs LO 206	365
Both	Canada Senior (CS)	15/16-up	B	Honda GX200 Briggs LO 206	350 370
Both	TKM	15/16-up	B	TKM 4S Tag	380
Both	Formula C200	15/16-up	B	BCKCA Formula C200 Senior	370
Saturday	Leopard	15/16-up	B	Parilla Leopard spec engines only.	365
Saturday	125 Rotax Max (FR125)	16 - up	B	As per BC Rotax rules.	364
Saturday	ROK	15/16-up	B	Vortex ROK Cup spec engines only.	365
Sunday	TAG-A division (TAG-A)	15/16-up	B	TAG USA listed engines for TAG senior . Vortex ROK to ROK Cup or TAG USA spec.	TAG USA 360
Sunday	TAG-B division (TAG-B)	15/16-up	B	TAG USA listed engines for TAG senior Vortex ROK to ROK Cup or TAG USA spec.	TAG USA 360
Both	TAG MASTERS (MTAG)	35-up	B	TAG USA listed engines for TAG senior . Vortex ROK to ROK Cup or TAG USA spec.	380
Both	TAG SHIFTER	15/16-up	B+	As per TAG USA TAG SHIFTER spec.	400
Both	Formula Senior (KZ2)	15/16-up	A	Formula Senior (KZ2) per ASN Canada and Formula C per CIK	385

40 NOTES

Notice 1 Number Plates For Drivers With a Disability.

They are to use a white panel, with bright blue numbers. The original discussion was for blue panels with white numbers, however this has been changed to a white panel with blue numbers to comply with the international standard. This requirement may be applied to any driver who is not capable of removing a kart from the track.

Notice 2 BCKCA Will Set Standards For BC Region Licensing.

BCKCA has set its licensing requirements in 2002. Compliance with BCKCA medical is required. Some areas of our licensing differ from the national standards, be sure you check ASN regulation before applying for national Licensing.

Notice 3 Combining of Classes

For 2012 all classes will be run separately unless special circumstances require combining. The Clerk of the Course may combine classes and score separately if conditions require.

Notice 4 Archived Regulations

Regulations not currently pertinent to the BCKC have been removed from this document and saved in "BCKCA Archived Technical Regulations" document. Clubs that have classes or equipment not covered in this document are asked to consult the Archived Regulations.