

**JG1.0 Group** Junior (Gearbox)

**JG1.1 Class** Junior Gearbox

**Affiliation** MSA and ABKC

**JG1.2 Introduction:** This class may be part of the Super 4 ABKC national championship. New engines will be considered for registration periodically. The next opportunity is expected to be during 2010 for use from 1.1.2011. Tuning rules, restrictors and carburettor sizes may be varied during the year to ensure that all registered engines are approximately equal in performance. Official copies of the registration documents can be purchased from the MSA Sales Department.

**JG1.3 Chassis.** 2 or 3 pedal with minimum wheelbase of 104cms and having 4 wheel braking upon 5 inch diameter wheels only. Bodywork shall conform to direct drive type to MSA and ABKC regulations.

**JG1.4 Engine.** Engines must be registered in writing with the MSA. The MSA and ABKC reserve the right to refuse registration of an engine type or permit registration with additional modifications to the standard engine. The only engines currently registered for the class are the TM 85 MC and the Honda CR80.

**JG.4.1 Engine Tuning Regulations:** Modifications to the engine are allowed, providing the following are not varied:

- a) Stroke.
- b) Bore (outside maximum limits 85cc).
- c) All components must be original engine manufacturer parts.
- d) Number of transfer passages and inlet ports in the cylinder and crankcase
- e) Number of exhaust ports and passages.
- f) External appearance of the engine other than carburettor, engine mounting points. (The addition of a fuel pulse pump adapter is permitted)
- g) Deleted
- h) All systems of injection and/or spraying of products other than permitted fuel are forbidden.
- i) No form of electronic carburation management.
- j) Ignition system must be on the manufacturer's parts list, with no modification, no programmable ignition or coils and no additional retarder box.
- k) Cylinder head volume must be a minimum of 7.5cc using the CIK specification plug insert and measured as per the CIK method described in MSA Kart Race Yearbook Appendix 5. For the Honda engine it is permitted to fit the original sealing spark plug washer on the insert. Ambient temperature is defined as any temperature between -5°C and +50°C. Spark plugs must be un-modified and the thread must not protrude into the combustion chamber when fully tightened. Modification to the spark plug thread is not permitted except for helicoil repair so long as the repair is to the full depth of the thread.
- l) Maximum total exhaust port opening 195 degs.

**JG1.4.2** Power valve is to be operational if fitted on the registered engine, or otherwise as registration but no changes are permitted to its operation or the materials.

**JG.4.3 Carburettor.** The carburettor must be of the same make, type and model number as registered with the engine. No modifications are permitted other than changing the jets, atomiser tube, needle and cut-off valve with original manufacturer's parts. For the Kiehin carburettor, it is also permitted to change the cut-off valve with a non-standard part by following the procedure in Appendix 5. The carburettor specified for the TM85MC is the Mikuni 32mm (maximum bore) and for the Honda the Kiehin 28mm (maximum bore). The mandatory airbox is CIK homologated type as per MSA Kart Race Yearbook Appendix 3 1.1 (air intakes maximum 23mm diameter). In replacing the cut-off valve in the Kiehin carburettor for the Honda engine, it is permitted to lower the pedestal, which forms the integral cut-off valve, to a limit of 4mm measured from the top face of the carburettor body to the top of the pedestal. A maximum hole of 8mm is permitted to be drilled into the original cut-off valve in order to insert a new cut-off valve. Removal of the webbing in the inner side of the float support is also permitted to the same minimum level of 4mm. No other modifications are permitted for any reason.

**JG1.4.4 Exhaust.** Exhaust silencers as per MSA Kart Race Yearbook Appendix 3. The exhaust pipe must be used as supplied and registered with the engine. For the Honda engine the only exhaust pipe to be used is the HGS type TR02. If the exhaust type is not from the original manufacturer an identification mark will be put on by the supplier or designated by the MSA and ABKC, the exhaust conforming in all respects with the registration document. The suppliers who register engines have the right to make one change during the year to a quieter exhaust type. This must be agreed with the MSA and ABKC and be registered before use.

**JG1.5 Transmission.** Gearbox ratios (maximum 6-speed) are as registered with the standard engine, and may not be varied.

**JG1.6 Brakes.** In accordance with U.16.10 to U.16.10.10 inclusive.

**JG1.7 Tyres** Slick: Dunlop SL4. Front 10 x 4.5 x 5 marked ABKC, Rear 11 x 7.1 x 5 marked ABKC

Wet: Dunlop KT10 or KT11 Front 10 x 4.50 x 5, Rear 11 x 6.50 x 5.

**JG1.8 Price.** The engine maximum retail price to include complete engine, water pump, carburettor, ignition, exhaust, silencer and engine cradle mount (for direct drive type chassis) is £1750 plus vat.

**JG1.9 Weight.** Minimum race weight is 155 kg including driver. Maximum kart weight without driver is 115kg.

**JG1.10 Plates.** Red with white numbers, U.17.27 to U.17.27.3 inclusive applies.

**JG1.11 Age.** From 13th birthday to 31st December in year of 17th birthday.

**JG1.12 General.**

**JG1.12.1 Race Procedure.** Standing or rolling starts (SRs must define).

Approved by MSA 28.01.10