# **Team Green Junior Cup**

# & **BMCRC Ninja Senior Series**

## **Technical Regulations 2022**

Two championships are covered by these regulations :-

#### **Team Green Junior Cup** for riders aged 13 to 18 years on 1<sup>st</sup> January of the race season.\* **BMCRC Ninja Senior Series** for riders aged 19 years and over on 1<sup>st</sup>. January 2022

\*The Club may on occasion seek dispensation to vary this rule for a rider who demonstrates potential talent and allow a younger rider to compete. This would be sanctioned by the ACU Road Race Committee. The right to protest the rider's inclusion in results would still remain at each race meeting.

The purpose of this class is to provide a level playing field to illuminate the quality of the riders, not the investment in, or calibre of the machines they ride. To achieve this, the class will be restricted to un-tuned production motorcycles, and tightly policed to ensure fair competition.

References to "homologation" refer to, and shall be deemed to mean "as produced by the original manufacturer for this model". Where the motorcycle is produced by the manufacturer or his nominated approved dealer, as a "race" machine, the race kit included in the package shall be included in the homologation.

BMCRC shall appoint a Technical Official as Series Eligibility Officer for this class, whose interpretation of the regulations shall be final. All motorcycles must comply in every other respect with all the requirements for Road Racing as specified in the ACU handbook.

## Everything that is not authorised or prescribed in these regulations is strictly forbidden.

## **1.1 ELIGIBLE MOTORCYCLES**

This class is restricted to the following motorcycles

- "Kawasaki Ninja 300R and 250R" motorcycle as originally produced by Kawasaki and race prepared by their nominated dealers, including engine upgrading of the 250R to 300R specifications. Other parts from the latest models may be used to upgrade earlier 250 or 300 models. The Appearance from front, rear and the profile of the motorcycle must (except when otherwise stated) conform to the homologated shapes.
- "Kawasaki Ninja 400" motorcycle as originally produced by Kawasaki and race prepared by their nominated dealers and *restricted in accordance with fitment of a BMCRC* restrictor kit. The Appearance from front, rear and the profile of the motorcycle must (except when otherwise stated) conform to the homologated shapes.

## **1.2 MINIMUM WEIGHT & MAXIMUM POWER**

- Weight - Motorcycles may be weighed at the end of a race in the condition they were at the end of the race. No coolant, fuel or oil may be topped-up between the end of the race and the weight checking. The minimum post-race weight of the motorcycle, including all residual fluids must not be less than 145 kgs as measured on the BMCRC scales.

- Power – Motorcycles may be run on the BMCRC Dynamometer at the end of a race, to measure their power output. The maximum permitted power measured at the back wheel is **37 bhp**. Refusal to accept a dyno test shall count as a failure to comply with the regulations.





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## **1.3 RACE NUMBERS AND BACKGROUND COLOURS**

Race numbers for 300cc machines must be **WHITE on a GREEN background**. Race numbers for 400cc machines must be **GREEN on a WHITE background**.

## 1.4 FUEL

Only unleaded pump fuel sold for use on UK roads is permitted, upon which all tax and duty has been paid. Additives that were not in the original manufacturer's formula are not allowed. At least 2 litres of fuel must remain in the tank at the end of a race, for fuel control tests.

## 1.5 COOLANT

The only coolants permitted are tap water or distilled water. Nothing else.

## **1.6 ROLLING CHASSIS**

#### 1.6.1 Frame Body and Rear Sub Frame

- The frame must remain as originally produced by the manufacturer for the homologated machine.
- Nothing can be added or removed from the body, engine mountings, brackets and plates, all of which must remain as homologated. (only exception is side stand bracket removal on 250 model)
- The rear sub-frame must remain as homologated without modification or alteration, except that accessories bolted onto the rear sub frame may be removed.
- Holes may be drilled into the frame only to fix approved components (e.g. fairing brackets & steering damper mount).
- Polishing or non-original coating of the frame body or the sub frame is not allowed.

#### 1.6.2 Front Forks

- Forks externals must remain as the manufacturer's originals for the homologated machine model.

- Fork internals may be replaced, but with adjustable "*Maxton GP20"* or "*K-Tech 20IDS"* cartridges.

- The original finish of the fork tubes (stanchions, fork pipes) must remain as homologated.
- The upper and lower fork clamps must remain as homologated.
- A "GPR" Steering Damper may be added or removed, but not replaced with another product.
- The steering damper cannot act as a steering lock limiting device.

## 1.6.3 Rear Fork (Swing arm)

- Rear fork must remain as originally produced by the manufacturer for the homologated machine.
- A chain guard must be fitted in such a way to reduce the possibility that any part of the riders' body could become trapped between the lower chain run and the rear wheel sprocket.
- Rear fork pivot bolt must remain as homologated.
- Rear axle chain adjusters must remain as homologated.
- Rear wheel stand brackets may be added to the rear fork by welding or by bolts. Brackets must not have sharp or pointed edges.
- Holes may be drilled only to fix approved components (e.g. chain guard).

#### 1.6.4 Rear Suspension Unit

- The rear suspension may be replaced but with the "*Maxton RT10"* unit or the "*K-Tech Razor-R"* unit and must always retain and use the homologated mounting attachments and linkage to the frame.

- Rear suspension unit spring may be changed.

#### 1.6.5 Wheels

- Wheels must remain as homologated for the machine model and later versions.
- The Speedometer drive may be removed and replaced with a spacer.
- The original cushion drive for the rear wheel must remain as homologated.

- Front and rear axles must remain as homologated.

#### 1.6.6 Brakes

- Front and rear brake discs, brake pads and brake hydraulic pipes may be changed.

- Front and rear master cylinders, brake fluid reservoirs and calipers must all remain as homologated.

- Additional air ducts are not allowed.

- Front brake system of the 250/300 model can be upgraded to use the front system used by the Ninja 400

#### 1.6.7 Tyres

- Dunlop Series Control tyres are as follows

110/70R17 (54H) TL SPORTSMART TT **(FRONT DRY)** 140/70R17 (66H) TL SPORTSMARTS TT **(REAR DRY)** 110/70R17 KR189 **(FRONT WET)** 140/65R17 KR389 **(REAR WET)** 

- Un-treaded "slick" racing tyres, and "hand-cut slicks" are not allowed. Modifications to the manufacturers' original moulded tyre tread pattern is forbidden.
- The minimum depth of tyre treads must be at least 1.6mm over the entire pattern width.

#### **1.6.8 Foot Rest/Foot Controls**

- Foot rest/controls may be relocated or replaced but replacement brackets must be mounted to the frame at the original mounting points.
- The end of the footrest must have an 8mm solid spherical radius.

#### **1.6.9 Handle Bars and Hand Controls**

- Handle bars, and hand control levers may be relocated or replaced.
- Throttle assembly, cables, electrical switches and master cylinder must all remain as homologated.
- Electric starter switch and engine stop switch must be retained and working as homologated. They must start and stop the engine at any time on demand, and not be disabled.

#### **1.6.10 Fairing/Body Work**

- Fairing, front mudguards and seat unit must appear to be as homologated units.
- For Senior 300 & 400 class bikes, rear seat unit must be of Orange appearance.
- Official sponsor stickers may have to be displayed on bodywork, position to be announced.
- The use of carbon fibre or Kevlar® materials is not allowed.
- Size and dimensions must be the same as the original parts without any addition or subtractions of the homologated design elements.
- Windscreens may be replaced using transparent material only. "Double-bubble" screens are allowed.
- The lower fairing must be constructed to hold, in case of engine breakdown, at least half of the total oil and engine coolant capacity used in the engine. The lower edge of the openings in the fairing must be positioned at least 50mm above the bottom of the fairing.
- Plastic or rubber crash protectors may be fitted.
- The existing rear mudguard under the seat may be modified or removed.

#### 1.6.11 Fuel Tank

- Fuel lines may be replaced, and fuel filters may be added.
- Fuel tank body and cover must remain as originally produced, and fixed as homologated.
- Fuel tank may be filled with fire retardant material, or fitted with a fuel cell bladder.

#### 1.6.12 Wiring Harness

- The wiring harness may not be altered or replaced.
- Cutting of, or additions to the wiring harness are therefore not allowed.

#### 1.6.13 Battery

- The size and type of battery may be changed but must remain in original location.

#### 1.6.14 Radiators and Oil Coolers

- The radiator and oil cooler must remain as homologated.

## **1.7 ENGINE & COMPONENTS**

#### 1.7.1 Air Box

- The air box must remain as homologated without alterations or modifications of any kind.

- The air filter element may be removed or replaced.

#### 1.7.2 Fuel Induction System

- Throttle bodies must be standard units as homologated, and may not be modified or altered.

- The Injectors must be standard units as homologated.

- The butterfly cannot be removed, changed or modified.
- No modification of the fuel pump or pressure regulator are allowed.
- The tilt sensor which cuts off the fuel pump in the event of a crash must remain connected and working as homologated.
- The "*Power Commander*" fuel injection management may be re-mapped but not otherwise modified nor replaced. Devices for operating alternative or variable mapping are prohibited.

#### 1.7.3 Engine & Gearbox (including Clutch)

- All engine and gear box components and gaskets must remain as homologated and sealed by the Kawasaki dealer. Breaking of the seals, replacement, alterations, modifications or additions to any of the engine or gearbox components are strictly prohibited.
- Engine drive sprocket, rear wheel sprocket, chain size and pitch are free and can be changed.
- The part of the engine case that covers the engine drive sprocket may be removed or modified to provide easier access for changing sprockets, always provided that no part of the rider can then be drawn into, or trapped by the chain run.
- The addition of "Quick Shifters" or other ignition interrupters are permitted.

#### 1.7.4 Oil Containment

- Engine cases containing oil and which could come into contact with the ground during a crash **MUST** be protected by a second cover made of **either** injection moulded nylon with 60% 6.6 long glass fibre, **or** aluminium, **or** steel, as approved by the FIM or MCRCB.

- All such protecting covers must be designed to be resistant against sudden shocks, and be fixed by bolts onto engine covers/cases.

#### 1.7.5 Ignition/Engine Control System

- Ignition/engine control system (CDI) must remain as homologated.
- Spark plugs and plug leads may be replaced.

#### 1.7.6 Generator & Electric Start

- Generator and starter motor must remain as homologated.
- The electric starter must operate normally and always be able to start the engine on demand.
- The engine must start and turn on its own power when the electric starter has stopped its procedure.

#### 1.7.7 Exhaust System

- The exhaust pipes and silencers must remain as the "*Arrow*" homologated system.
- Wrapping of exhaust systems is not allowed.
- The noise limit is 105 dB/A in accordance with the ACU handbook.

#### 1.7.8 Fasteners

- Standard fasteners may be replaced with fasteners of any design and material.
- Aluminium & Titanium fasteners may only be used in non-structural locations.
- Fasteners may be drilled for safety wire, but intentional weight saving modifications are not allowed.
- Fairing/body work fasteners may be changed to the quick-disconnect type.

#### **1.7.9 Dashboard and Clocks**

- Standard dashboard and clocks may be replaced, but any replacements must not be capable of any functions additional to those provided by the homologated originals, with the exception of lap

timing, gear position and shift lights

## <u>1.8 The following items may be altered or replaced from those fitted to the homologated motorcycle</u>

- Any type of lubrication oil, brake or suspension fluid, oil filter or air filter may be used.
- Any type of spark plug may be used.
- Wheel balance weights may be discarded, changed or added to.

## **1.9 Additional Equipment**

Additional electronic hardware equipment not on the original homologated motorcycle, is not permitted. The only exceptions are lap timing, Gear shift Indicators and Shift lights. Telemetry remains prohibited

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