

# **BAHRAIN MOTORCYCLE CHAMPIONSHIP**

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## **1. TECHNICAL SPECIFICATIONS & REGULATIONS**

- The machines used are allowed limited modifications.
- All motorcycles must meet the requirements of the Regulations and those that may be set by the Bahrain National Sporting Code (NSC).
- Bikes are road-based machines 600cc and 1000cc (with allowances, see Regulations) (includes triples & twins, see Regulations) that have been prepared for racing with a few upgrades, as allowed in regulations.
- Eligible machines for this series are any 600cc and 1000cc homologated sport bike, with allowable capacity exceptions.

## **2. DISPLACEMENT CAPACITY**

**2.1.** The following engine configurations comprise the Stock 600cc class:

600cc 4 cylinders 675cc 3 cylinders 750cc 2 cylinders

**2.2.** The following engine configurations comprise the Stock 1000cc class:

Over 750cc up to 1000cc 4-stroke 3 and 4 cylinders Over 850cc up to 1200cc 4-stroke 2 cylinders

## **3. DISPLACEMENT (cc) MEASUREMENT**

**3.1.** Engine displacement may be measured upon the request of the Scrutineers at any time during the event.

**3.2.** There will be no allowed change of engine displacement from the manufacturer's technical specifications.

#### 4. NUMBER PLATE COLORS

**4.1.** The background colours and figures (numbers) must be in different and clear colors.

**4.2.** The sizes for all the front numbers are: Minimum height: 100 mm  
Minimum width: 80 mm  
Minimum stroke: 20 mm  
Minimum space between Nos 10 mm

**4.3.** The size for all the Tail numbers are: Minimum height: 80 mm  
Minimum width: 60 mm  
Minimum stroke: 15 mm

**4.4.** Minimum space between Nos 10 Race Numbers may also be applied to the side of the front fairings (Optional)

#### 5. FUEL

**5.1.** The use of any octane boosting additives (such as VP or Panta and the like) is permissible so long as the maximum octane level of the mixed fuel does not exceed 104 octane.

**5.2.** At any point during the event the stewards may take samples from the mixed fuel and after any race may take samples directly from the fuel tank of the competing machine.

#### 6. MACHINE SPECIFICATION

- All items not mentioned in the following articles must remain as originally produced by the Manufacturer for that model.
- The date of the frame manufacture is used as a base date for the machine eligibility.

##### 6.1. Frame Body & Rear Sub-Frame

- The main frame must remain as originally produced by the manufacturer.
- Vehicle identification number (VIN) must be displayed on the mainframe body (chassis number).
- The paint scheme is not restricted.
- Engine mounting brackets or plates must remain as originally produced.
- Additional crash protectors may be added at the rider's discretions without the modification to the mainframe structure.

##### 6.2. Front Forks

- The use of titanium in the construction of the front forks, the handlebars and the wheel spindles is forbidden.
- For wheel spindles, the use of light alloys is forbidden.
- OEM forks must be used that fit in original unmodified triple clamps (Yokes, Fork Bridges, Triple Trees).
- The upper and lower fork clamps must remain as originally produced by the manufacturer.
- The following standard original internal parts of the forks can be modified: shims, oil passages.
- Springs and Spacers are free.
- Any quality and quantity of oil can be used in the front forks.
- The height and position of the front fork in relation to the fork crowns is free.

- Steering damper may be added or replaced with an after-market damper.
- The steering damper cannot act as a steering lock limiting device.

### 6.3. Rear Fork (swing arm)

- The rear swing arm may not be modified.
- Standard rear forks must be used; (including rear fork pivot bolt).
- Rear wheel stand positioning (support) brackets may be added to the rear fork by welding or by bolts. Brackets must have rounded edges (with a large radius) viewed from all sides. Fastening screws must be recessed.
- It is compulsory to use a chain guard and have a shark fin (protector) fitted.

### 6.4. Rear Suspension Unit

- Rear suspension unit (shock absorber) may be modified or replaced with OEM fitting components.
- The rear ride height adjuster may be modified or replaced with OEM.
- The rear suspension linkage may be changed with OEM.
- Rear suspension unit spring may be changed with OEM.

### 6.5. Wheels

- Wheels must remain as originally produced.
- If the original design included a cushion drive for the rear wheel, it must remain as originally produced for the homologated machine.
- The speedometer drive may be removed and replaced with a spacer.
- No modifications of the wheel-axles or any fixing and mounting points for front and rear brake caliper are authorized.
- Spacers can be modified

### 6.6. Brakes

- Front and rear brake discs may be changed with OEM fitment.
- Carbon or ceramics not allowed.
- Front and rear brake calipers are free but must be as homologated.
- The front master cylinder is free.
- Rear master cylinder is free.
- Front and rear hydraulic brake lines may be changed.
- The brake fluid reservoir may be replaced and/or repositioned.
- The split of the front brake lines for both front brake calipers must be made above the lower fork bridge (lower triple clamp).
- Front and rear brake pads are free and may be changed.

### 6.7. Tires

- Tire make, model and compounds are free. (the promotor reserves the right to specify a single brand of tire anytime of the championship) which shall be used for the whole season.
- Only two (2) sets of Tires can be used per Round
- Tires used for qualifying must be used for the Race. In case of rain, and if the race is declared “ WET” by the Race Director, this rule shall not be applicable.
- If more than two (2) tires are used for either front or rear wheels, for whatever reason, the rider must start the race from the back of the grid, for the race in which the additional tires are used. In case of rain, and if the race is declared “ WET” by the Race Director, this rule shall not be applicable.

- SLICK and TREADED tires are permitted.
- The use of tire warmers is allowed.

#### **6.8. Foot Rest / Foot Controls**

- Foot rest/foot controls may be relocated but brackets must be mounted to the frame at the original mounting points.
- The two original points of fixture (for the footrest, foot-controls and on the shift shaft) must remain as original.
- Footrests may be rigidly mounted or a folding type which must incorporate a device to return them to the normal position.
- Non-folding metallic footrests must have an end (plug) which is permanently fixed, made of plastic, aluminium, Teflon® or an equivalent type material (minimum radius 8mm).

#### **6.9. Handle Bars / Hand Controls**

- Handle bars and handle bar controls may be replaced.
- Height of Handle bars from ground level must be within 10% of Homologated specification. Hand controls may be relocated.
- Clutch and brake levers may be exchanged.
- Electric starter switch and engine stop switch must be located on the handlebars, or in a location easily reached by the Rider or any Official in a seated position on the machine.

#### **6.10. Fairing / Bodywork**

- Fairing and bodywork may be replaced with exact cosmetic duplicates of the original parts but must appear to be as originally produced by the manufacturer for the homologated motorcycle, with slight differences due to the racing use (different pieces mix, fixing points, fairing bottom, etc).
- The material may be changed.
- Specific reinforcements in Kevlar® or carbon are allowed locally around holes and stressed areas.
- The colour scheme is free.
- The original combination instrument/fairing brackets may be replaced.
- All other fairing brackets may be altered or replaced.
- The lower fairing has to be constructed to hold, in case of an engine breakdown, at least half of the total oil capacity used in the engine.
- The lower edge of the openings in the fairing must be positioned at least 50 mm above the bottom of the fairing. Front mudguards may be replaced and may be spaced upward for increased tire clearance.

#### **6.11. Fuel Tank**

- Fuel tanks must remain as homologated.
- Fuel tanks with tank breather pipes must be fitted with non-return valves.

#### **6.12. Seat**

- Seat, seat base and associated bodywork may be replaced with parts of similar appearance as originally produced by the manufacturer for the homologated motorcycle.
- The appearance from front, rear and profile must conform to the homologated

shape.

- The top portion of the rear bodywork around the seat may be modified to a solo seat.
- The seat/rear cowl replacement must allow for proper number display.
- The homologated seat locking system (with plates, pins, rubber pads etc.) maybe removed.

#### **6.13. Wiring Harness**

- The wiring harness must remain as homologated. Unused wiring to be blanked off and secured to the main harness or bike frame

#### **6.14. Battery**

- Free

#### **6.15. Air Box**

- The air box must remain as homologated.
- Air Ducts can be modified.
- The air filter element may be modified or replaced.
- The oil breather line must be connected and discharge into a separate tank.

#### **6.16. Carburettor**

- The outer housing must remain original OEM.
- Jetting is free
- Internal polishing or any modification is prohibited.

#### **6.17. Fuel System**

- Fuel systems must remain as homologated.

#### **6.18. Oil System**

- Crankcase bolt, Oil drain plug, filler plug, and the oil filler must be secured with a wire to secure them from undoing themselves.

#### **6.19. Fuel Supply**

- Quick connectors or dry break quick connectors may be used.
- Fuel vent lines may be replaced.
- Fuel filters may be added.

#### **6.20. Engine Components**

- OEM replacement parts only permitted
- The homologated engine design model cannot be changed.
- The Tuning of existing engine parts is strictly forbidden
- Engines to remain standard (Stock) as homologated

#### **6.21. Transmission / Gearbox**

- Front & rear sprockets sizes are free to change.
- Chain pitch and size can be changed.
- Transmission/gearbox ratios are to remain as Homologated.

#### **6.22. Clutch**

- Clutch operation must remain as OEM for the relevant model.

#### **6.23. Flywheel, Generator, Alternator, Electric Starter & ECU**

- Modifications are allowed.
- The use of total loss systems is allowed.
- The electric starter must operate normally and always be able to start the engine

during the event and until the time limit for a protest expires.

- The engine must start and turn on its own power when the electric starter has stopped its procedure.
- The ECU must be OEM and remain as homologated

#### **6.24. Exhaust System**

- Exhaust silencers may be changed or modified by means of a 'slip-on' End Can.
- Down pipes/header pipes and link pipes may be changed using OEM fitment points
- For safety reasons, the exposed edges of the exhausts pipe(s) outlet must be rounded to avoid any sharp edges.
- The noise limit will be 115 dB/A (with a 3 dB/A tolerance after the race only) measured at 6000rpm (4-cylinder) and 5500rpm (2-, 3- cylinder).

#### **6.25. Fasteners**

- Standard fasteners may be replaced with fasteners of any material and design but titanium fasteners may not be used.
- The strength and design must be equal to or exceed the strength of the standard fastener it is replacing, if it is part of the structural integrity of the machine.

### **7. ALTERATIONS**

#### **7.1. Items that MAY Be Altered**

- Any type of lubrication, brake or suspension fluid may be used.
- Any type of spark plug.
- Any inner tube (if fitted) or inflation valves may be used.
- Wheel balance weights may be discarded, changed or added to. If used Wheel balance weights must be suitably taped.
- Gaskets and gasket materials.
- Instrument and instrument bracket and associated cables.
- Painted external surface finishes and decals.

#### **7.2. Items that MAY Be Removed**

- Bolt on accessories on a rear sub frame.

#### **7.3. Items that MUST Be Removed**

- Turn signal indicators (when not incorporated in the fairing).
- The openings in the fairing must be covered by a suitable material.
- Lights integral in fairing must be taped up
- Rear-view mirrors.
- Horn (removed or disabled)
- License plate bracket.
- Toolbox.
- Helmet hooks and luggage carrier hooks.
- Passenger foot rests.
- Passenger grab rails if bolted on to the chassis.
- Safety bars, centre and side stands must be removed, or wired in up position. (fixed brackets must remain)

#### **7.4. Items that MUST Be Altered**

- Motorcycles must be equipped with a functional ignition kill switch or button

mounted on either side of the handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine.

- Throttle controls must be self-closing when not held by the hand.
- All motorcycles must have a closed breather system.
- The oil breather line must be connected and discharge into a catch tank.
- Where an oil breather pipe is fitted, the outlet must discharge into a catch tank located in an easily accessible position and which must be emptied before the start of a race.
- Oil cooler must not be mounted on or above the rear mudguard.

### 7.5. Additional Equipment

- Additional equipment not on the original motorcycle may not be added. i.e. data acquisition, computers, (other than for fuel mapping or lap timing transponders, recording equipment, etc.).
- An exception to this rule is cameras, which may be added whereby the written permission of the RD is required and the safety of its installation checked by the Technical Officials.
- Engine Crash Sliders are mandatory on both sides of the motorcycle. These must be project past the frame by a minimum of 3 cm

## 8. Helmet

Valid Homologated Helmets bearing the current FIM RACING HOMOLOGATION and in good condition, properly fitted and must be worn by all riders while practicing, qualifying and racing.

## 9. Protective Clothing

**9.1.** During practice, qualifying and racing riders must wear the following clothing and footwear:

**9.2.** A one-piece leather suit of at least 1.2mm in thickness on all parts of the suit. Suits zipped together at the waist are not permitted.

**9.3.** The following areas must be padded with at least a double layer of leather or enclosed plastic foam at least 8mm thick: Shoulders, elbows, both sides of the torso and hip joint, the back of the torso, knees.

**9.4.** Competitor's footwear must be of leather or an approved substitute material and of a minimum height of 200mm to provide, with the suit, complete protection (i.e. no exposed areas).

**9.5.** Competitors must wear leather protective gloves.

**9.6.** The use of metallic material in any item of clothing or personal protection which regularly comes into contact with the track is prohibited (i.e. metal studs in knee sliders, boots etc.).

**9.7.** A back protector is compulsory.

## 10. TECHNICAL COMPLIANCE

### 10.1. COMPLIANCE CONTROL

**10.1.1.** At the end of the race, Scrutineers can request that all classified motorcycles are placed in a parc-fermé for a period of at least 30 minutes.

**10.1.2.** Any motorcycle can be checked for compliance with these rules, and any other technical requirement, if requested by the Scrutineer.

**10.1.3.** Scrutineers may require a Rider or team to provide such parts or samples as they deem necessary without the need to resort to the NSC protest procedure.

**10.1.4.** Dyno Testing – when available the intention will be to either Dyno test the top 3 finishers in each class and a few at random or as chosen at the discretion of the meetings Scrutineer.

**10.1.4.** Dyno testing is carried out at the bike owners' risk and refusal to be tested will result in disqualification from the results for that meeting.

### 10.2. CONFLICTS WITH NSC

In the event that there is a conflict between these rules and the NSC, the NSC have priority.

## 11. PROTEST PROCEDURE

- In case of a dispute concerning the interpretation of these rules, or the conformity of any parts, the decision of the series Organizers will be final.
- In the event that a RIDER wishes to protest another entrant's bike, they must make that protest known to the Race Director within 30 minutes of the end of a race.
- In the event that a RIDER wishes to protest a decision or penalty placed against them by the Race Director, they must do so within 30 minutes of being informed of such decision or penalty.
- All RIDER protests will be investigated under the process defined within the NSC.
- RIDER Protests will only be investigated after the payment of a deposit (as defined in the NSC for that year) that will be returned if the protest is upheld.
- If the protest is in relation to the eligibility of an engine and disassembly of the engine is required, the Rider submitting the protest will pay the appropriate fee as defined in the NSC for that year.

**ANYTHING THAT IS NOT AUTHORISED & PRESCRIBED IN THIS RULE BOOK IS STRICTLY FORBIDDEN**

**ANY SUBSEQUENT CHANGES THAT TAKE PLACE AFTER THE PRINTED VERSIONS DURING THE SEASON WILL BE MADE ELECTRONICALLY, AND THE ON-LINE VERSIONS WOULD THEN BE THE PREVAILING VERSIONS. THIS BOOK PREVAILS ALL PREVIOUS RULE BOOKS EXCEPT THOSE REFERRED TO AS AN APPENDIX  
BAHRAIN MOTORCYCLE COMMISSION (BMC).**