

## <u>2007</u>

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### **TECHNICAL REGULATIONS ROAD RACING**

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Each modification is prohibited, if it is not allowed expressively.

#### AARR 19 - Class 125 SPORT PRODUCTION

#### 19.1 – Machine Specifications

Rules intended to limit changes to the homologated motorcycle in the interests of safety.

#### EVERYTHING THAT IS NOT AUTHORISED AND PRESCRIBED IN THIS RULE IS STRICTLY FORBIDDEN

The Motorcycle must be homologated by the original manufacturer only, except new bikes from the year 2005 on. For these motorcycles, a complete technical documentation, including tolerances, must be published by the manufacturer.

As the name Sport Production implies, the machines used are allowed limited modifications. Most modifications are allowed for safety reasons.

All motorcycles must comply in every respect with all the requirements for Road Racing as specified in FIM Road Racing Technical Rules.

#### All parts of a motorcycle must consist of that year of production as the motorcycle is homologated.

The appearance from both front, rear and the profile of motorcycles must (except when otherwise stated) conform to the homologated shape (as originally produced by the manufacturer).

Classes over 80cc up to 125 cc max. 1 cylinder and max. 6 gears (7 gears in case of Cagiva Mito, subject to year of construction).

#### 19.2 Weight

The minimum weight of the motorcycle is 110 kg without oil and fuel.

In the final inspection at the end of the race, the checked machines will be weighed in the condition they were at the end of the race.

At any time of the event, the weight of the whole machine (including the tank) must not be less than the minimum weight.

#### **19.3 Number Plate Colours**

The background colours and figures for 125 cc SP motorcycles are black background with white numbers, with the RAL colour table values being 9005 for black and 9010 for white.

| The sizes for all the front numbers are: | Minimum height: | 160 mm |
|--|-----------------|--------|
|  | Minimum width:  | 80 mm  |
|  | Minimum stroke: | 25 mm  |
| The sizes for all the side numbers are:  | Minimum height: | 120 mm |
|  | Minimum width:  | 60 mm  |
|  | Minimum stroke: | 25 mm  |
|  |                 |        |

The allocated number & plate for the rider must be affixed on the machine as follows: once on the front, either in the centre of the fairing or slightly off to one side; once, located on the left and right sides of the seat or the fairing. The number must be visible to spectators and officials from both sides of the track. In case of a dispute concerning the legibility of numbers, the decision of the Chief Technical Steward will be

In case of a dispute concerning the legibility of numbers, the decision of the Chief Technical Steward will be final.

#### 19.4 Fuel

All engines must function on normal unleaded fuel with a maximum lead content of 0.005 g/l (unleaded) and a maximum MON of 90. (see also Art. 2.10 of FIM Technical rules)

#### 19.5 Machine Specifications

All items not mentioned in the following articles must remain as originally produced by the manufacturer for the homologated machine.

#### 19.5.1 Frame Body and Rear Sub Frame

Frames must remain as originally produced by the manufacturer for the homologated machine. The sides of the frame-body may be covered by a protective part made of plastic or composite material. These protectors must fit the form of the frame.

Nothing can be added by welding or removed by machining from the frame body.

All motorcycles must display the manufacturers' vehicle identification number on the frame body (chassis number).

Engine mounting brackets or plates must remain as originally produced by the manufacturer for the homologated machine.

The rear sub frame must remain as originally produced by the manufacturer for the homologated machine. Protrusive, not-stressed brackets can be removed on request of the Chief Technical Inspector if he supposes they can be dangerous.

Additional seat brackets may be added but none may be removed. Bolt-on accessories to the rear sub-frame may be removed.

The paint scheme is not restricted but polishing the frame body or sub frame is not allowed.

#### 19.5.2 Front Forks

The fork structure (spindle, stanchions, bridges, stem, etc.) must remain as originally produced by the manufacturer for the homologated machine.

Standard original internal parts of the forks may be modified.

After market damper kits/cartridges or valves may be installed but the external view of the fork must remain as homologated.

The fork caps can be modified or changed to add spring preload/compression adjusters.

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.

The upper and lower fork clamps (triple clamp, fork bridges) must remain as originally produced by the manufacturer on the homologated machine.

A steering damper may be added or replaced with an after-market damper.

The steering damper cannot act as a steering lock limiting device.

#### 19.5.3 Rear Fork (Swing arm)

Each part of the rear fork must remain as originally produced by the manufacturer for the homologated machine (including rear fork pivot bolt and rear axle adjuster).

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. For safety reasons it is compulsory to use a chain guard made with plastic rigid material fitted in such a way as to prevent trapping between the lower chain run and the final driven sprocket at the rear wheel.

#### 19.5.4 Rear Suspension Unit

The rear suspension unit (shock absorber and its spring) may be modified or replaced, but the original attachments to the frame and rear fork (swing arm) must be used and the rear suspension linkage must remain as originally produced by the manufacturer for the homologated machine.

The rear suspension unit spring may be changed.

#### 19.5.5 Wheels

Wheels must remain as originally produced by the manufacturer at the time of sale into the dealer/distributor network for the homologated machine.

The speedometer drive may be removed and replaced with a spacer.

No modification of the wheel-axles or any fixing and mounting points for front and rear brake caliper are authorized. Spacers can be modified. Modifications to the wheels to keep spacers in place are permitted. If the original design includes a cushion drive for the rear wheel, it must remain as originally produced for the homologated machine.

Wheel diameter and rim width must remain as originally homologated.

#### 19.5.6 Brakes

Brake discs must remain as originally produced by the manufacturer for the homologated machine. Front discs can be made floating, using original rotors and mounting points.

The front and rear brake caliper (mount, carrier, hanger) must remain as originally produced by the manufacturer for the homologated machine.

The rear brake caliper bracket may be mounted 'fixed' on the swingarm, but the bracket must maintain the same mounting (fixing) points for the caliper as used on the homologated machine. A modification of these parts is authorized. The swingarm may be modified for this reason to aid the location of the rear brake caliper bracket, by welding, drilling or by using a helicoil.

Front and rear master cylinder must remain as originally produced by the manufacturer for the homologated machine.

Front and rear brake fluid reservoir can be changed with an aftermarket product.

Front and rear hydraulic brake lines may be changed. The split of the front brake lines for both front brake calipers must be made above the lower fork bridge (lower triple clamp).

#### "Quick" (or "dry-brake") connectors in the brake lines are authorized.

Front and rear brake pads may be changed. Brake pad locking pins may be modified to quick-change type. Additional air scoops or ducts are not allowed.

#### 19.5.7 Tyres

Tyres must be a fully moulded carrying all size and sidewall marking of the tyres for sale to the public. Tyres of V to Z rating must be used. The tyres must have a DOT and/or E mark.

Wet weather tyres may only be used after the race or practice is declared "wet" by the Clerk of Course.

Wet tyres do not need to carry DOT or E mark; however these tyres must be marked "Not for Highway Use" or "NHS".

The use of tyre warmers is allowed.

#### 19.5.8 Foot Rest/Foot Controls

Foot rests may be relocated but brackets must be mounted to the frame at the original mounting points.

The foot controls linkage may be modified. The original mounting points must remain. Their two original points of fixture (on foot controls and on the shift shaft) must remain as original.

Foot rests may be rigidly mounted or a folding type which must incorporate a device to return them to the normal position.

The end of the foot rest must have at least an 8 mm solid spherical radius.

Non-folding **metal** footrests must have an end (plug), which is permanently fixed, made of plastic, Teflon or an equivalent type material (minimum radius 8mm).

## The plug surface must be designed to reach the wider possible area. The Chief Technical Steward has the right to refuse any plug not satisfying this safety aim.

#### **19.5.9 Handle Bars and Hand Controls**

Handle bars may be replaced (does not include brake master cylinder).

Handle bars and hand controls may be relocated.

Throttle grip can be modified or substituted.

Clutch and brake lever may be exchanged by an after-market copy.

Engine stop switch must be located on the handle bars and may not be original. The main ignition switch must not be located on the handle bars.

#### 19.5.10 Fairing/Body Work

a) Fairing, front mudguards and body work 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 machine, with slight differences due the racing use (different pieces mix, attachment points, fairing bottom, etc).

The material may be changed. The use of carbon fibre, Kevlar or carbon composite materials is not allowed. **b)** Overall size and dimensions must be the same as the original parts.

c) Windscreen may be replaced with an exact cosmetic duplicate and must be made of transparent material. Upper edge height tolerance: +/- 15 mm regarding to the vertical distance from to the upper fork bridge.

**d)** Motorcycles that were not originally equipped with streamlining are not allowed to add streamlining in any form, with the exception of a lower fairing device, as described in (g). This device cannot exceed above a line drawn horizontally from axle to axle.

e) The original combination of instrument/fairing brackets may be replaced. All other fairing brackets may be altered or replaced.

**f)** The original air ducts running between the fairing and the air box must remain as homologated, as the front meshes. Carbon fibre and other exotic materials are forbidden. The wire mesh/plastic grills at the entrance of the air intake(s) in the front of the fairing can be taken away.

**g)** The lower fairing has to be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (minimum 5 litres). The lower edge of openings in the fairing must be positioned at least 50mm above the bottom of the fairing.

h) The lower fairing must incorporate an opening of Ø 25 mm diameter in the front lower area. These holes must remain closed in dry conditions and must only be opened in wet race conditions as declared by the Clerk of the Course.

i) Front mudguard may be replaced with a cosmetic duplicate of the original parts and may be spaced upward for increased tyre clearance.

**j)** Rear mudguard fixed on the swing arm that incorporate the chain guard can be modified to accommodate larger diameter rear sprockets.

k) All exposed edges must be rounded.

#### 19.5.11 Fuel Tank

Fuel tank filler cap may be altered or replaced from those fitted to the homologated motorcycle, by a 'screw-on' type fuel cap.

The fuel tank valve petcock must remain as originally produced by the manufacturer for the homologated machine.

The sides of the fuel tank may be covered by a protective part made of a composite material. These protectors must fit the shape of the fuel tank.

Each tank must be completely filled with a fire-retartend foam (e.g. Explosafe).

#### 19.5.12 Seat

Seat, seat base and associated bodywork may be replaced with parts of similar appearance as originally produced by the manufacturer for the homologated machine.

The top portion of the rear body work around the seat may be modified to a solo seat.

The appearance from both front rear and profile must conform to the homologated shape.

The seat/rear cowl replacement must allow **space** for proper number display.

#### 19.5.13 Wiring Harness

The original wire-loom may be modified as indicated hereafter: The unused wire loom elements supplying current to direction indicators, horn, ignition contact and key-lock, etc, may be unplugged and/or removed (no cutting is allowed, but to disconnect connectors is allowed).

#### 19.5.14 Battery

The size and type of battery must be as originally produced by the manufacturer for the homologated machine.

#### 19.5.15 Air Filter

The air filter can be removed, the box of the filter can be removed or used, completely or partially maintaining the original attachments.

#### 19.5.16 Carburettors

No modifications are allowed. The maximum diameter of the carburettor must be 28 mm Carburettor jets, slide spring and needles may be replaced. The slide metering holes may not be changed. Electronic or mechanical cold start devices must remain installed but may be deactivated. Bell mouths must be as originally produced by the manufacturer for the homologated machine.

#### 19.5.17 Lubrication system

The system of lubrication is free.

#### 19.5.18 Cylinders

No modifications are allowed.

The cylinders cannot replaced and must remain original.

The cylinders can be rebuilt only on constructor's limits.

The cylinders must remain original, as the number of opening and size.

The head of the engine must remain original, changing the compression ratio is allowed, but must not be higher than 13,5:1.

#### 19.5.19 Crankcase and all other Engine Cases (i.e. ignition case, clutch case.)

No modifications are allowed (including painting, polishing and lightening).

#### 19.5.20 Clutch

No modifications are allowed.

Only friction and drive discs may be changed, but their number must remain as original.

Clutch springs may be changed.

It is not allowed to change the clutch system. A slipper clutch or back-torque clutch may be used only if it is standard equipment on the homologated model.

#### 19.5.21 Generator

No modifications are allowed.

#### 19.5.22 Exhaust System

Exhaust pipes and silencers slip-on may be changed or modified.

The noise limit for 125 cc Sport production machines will be 102 dB/A with a tolerance of + 3dB/A The location of the silencer must remain as original.

Wrapping of the exhaust system is not allowed.

Titanium and carbon exhaust pipers and silencers are allowed.

For safety reasons the exposed edge(s) of the exhaust pipe(s) outlet must be rounded to avoid any sharp edges.

#### 19.5.23 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.

Fasteners may be drilled only for mounting a safety wire, but intentional weight-saving modifications are not allowed.

Fairing/body-work fasteners may be changed to a quick disconnect type. Aluminium fasteners may only be used in non-structural locations.

## <u>19.5.24 the following items may be altered or replaced from those fitted to the homologated</u> motorcycle.

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. Gaskets and gasket materials (with the exception of cylinder gaskets) Painted external surface finishes and decals.

#### 19.5.25 The Following Items MAY BE Removed

Instrument and instrument bracket and associated cables. Horn Tool box Tachometer Speedometer Light switch Signal (Horn) switch Turn signal switch Radiator fan and wiring Chain guard as long as it is not incorporated in the rear fender Bolt on accessories on a rear sub frame

#### 19.5.26 The Following Items MUST BE Removed

Headlamp, rear lamp and turn signal indicators (when not incorporated in the fairing).
Openings must be covered with suitable materials.
Rear-view mirrors.
License plate bracket.
Helmet hooks and luggage carrier hooks
Passenger foot rests.
Passenger grab rails.
Safety bars, centre and side stands must be removed (fixed brackets must remain).

#### 19.5.27 The Following Items MUST BE Altered

Motorcycles must be equipped with a functional ignition kill switch or button mounted at least on one 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.

#### 19.6 Additional Equipment

Additional equipment not on the original homologated motorcycle must not be added. (i.e. data acquisition, computers, recording equipment etc.), with the exception of lap timing system.

Telemetry is not allowed during the whole event, but potentiometers and other sensors can be maintained, if disconnected.

#### AARR 20 - Class 125 GRAND PRIX

Look at code F.I.M. and its annexes. (Technical Appendices for International Road Racing Meetings) **The minimum weight permitted: Only for AA Ch.** <u>Motorcycle 70 kg</u>

#### AARR 21 - SUPERSTOCK 600 / 1000

Rules intended to limit changes to the homologated motorcycle in the interests of safety.

EVERYTHING THAT IS NOT AUTHORISED AND PRESCRIBED IN THIS RULE IS STRICTLY FORBIDDEN

The Motorcycle must be homologated by the original manufacturer only. The model will be eligible for Superstock competition for a maximum period of 5 years.

As the name Superstock implies limited modifications are allowed to the machines. Most modifications are only allowed safety reasons.

Superstock motorcycles require an FIM homologation (see Art.FIM 2.9). All motorcycles must comply in every respect with all the requirements for Road Racing as specified in these Regulations, unless it is equipped as such on the homologated machine.

The appearance from both front, rear and the profile of Superstock 600 / 1000 motorcycles must (except when otherwise stated) conform to the homologated shape (as originally produced by the manufacturer). The appearance of the exhaust system is excluded from this rule.

#### 21.1 Discipline Specifications Superstock 600 / 1000

#### Superstock 600

| 04001010011 01 |                           |                      |
|----------------|---------------------------|----------------------|
| 4 cylinders    | over 400 cc up to 600 cc  | 4-stroke             |
| 3 cylinders    | over 500 cc up to 675 cc  | 4-stroke             |
| 2 cylinders    | over 600 cc up to 750 cc  | 4-stroke             |
|                |                           |                      |
| <b>O</b>       |                           |                      |
| Superstock 10  | )00                       |                      |
| 4 cylinders    | over 600 cc up to 1000 cc | 4-stroke             |
|                |                           | 4-stroke<br>4-stroke |

The displacement capacities must remain at the homologated size. Modifying the bore and stroke to reach class limits is not allowed.

#### 21.2 Minimum Weights

The dry weight of a homologated motorcycle is defined as the total weight of the empty motorcycle as produced by the manufacturer (after removal of fuel, vehicle number plate, tools and main stand when fitted). To confirm the dry weight a minimum of three (3) motorcycles are weighed and compared. The result is rounded off to the nearest digit.

Superstock 600 machines: minimum weight = dry weight minus 14 kg

Superstock 1000 machines: minimum weight = dry weight minus 15 kg

In the final inspection at the end of the race, the checked machines will be weighed in the condition they were at the end of the race.

At any time of the event, the weight of the whole machines (including the tank) must not be less than the minimum weight, with a tolerance of 1 kg.

#### 21.3 Number Plate Colours

Superstock 600: Red background with yellow numbers, with the RAL colour table values being 3020 for red and 1003 for yellow.

Superstock 1000. Red background with white numbers, with the RAL colour table values being 3020 for red and 9010 for white.

| The sizes for all the front numbers are: | Minimum height: | 160 mm |
|--|-----------------|--------|
|  | Minimum width:  | 80 mm  |
|  | Minimum stroke: | 25 mm  |
| The sizes for all the side numbers are:  | Minimum height: | 120 mm |
|  | Minimum width:  | 60 mm  |
|  | Minimum stroke: | 25 mm  |
|  |                 |        |

The allocated number & plate for the rider must be affixed on the machine as follow: once on the front, either in the centre of the fairing or slightly off to one side; once, located on the left and right sides of the seat or the fairing. The number must be visible to spectators and officials from both sides of the track.

For light coloured bodywork, there will be a black line of 8 mm minimum all around the perimeter of the red background.

In case of a dispute concerning the legibility of numbers, the decision of the Chief Technical Steward will be final.

#### **21.4 Carburation Instruments**

Carburation instruments must remain as homologated.

#### 21.5 Fuel

All engines must function on normal unleaded fuel with a maximum lead content of 0,005 g/l (unleaded) and a maximum MON of 90. (see also Art. 2.10 of FIM Technical rules)

#### 21.6 Machine Specifications

All items not mentioned in the following articles must remain as originally produced by the manufacturer for the homologated machine.

#### 21.6.1 Frame Body and Rear Sub Frame

The frame must remain as originally produced by the manufacturer for the homologated machine. The sides of the frame-body may be covered by a protective part made of plastic or composite material. These protectors must fit the form of the frame.

Nothing can be added by welding or removed by machining from the frame body.

All motorcycles must display the manufacturer's vehicle identification number on the frame body (chassis number).

Engine mounting brackets or plates must remain as originally produced by the manufacturer for the homologated machine.

Rear sub frame must remain as originally produced by the manufacturer for the homologated machine. Protrusive, not-stressed brackets can be removed on request of the Chief Technical Inspector if he supposes they can be dangerous.

Additional seat brackets may be added but none may be removed. Bolt-on accessories to the rear sub-frame may be removed.

The paint scheme is not restricted but polishing the frame body or sub frame is not allowed.

#### 21.6.2 Front Forks

The fork structure (spindle, stanchions, bridges, stem, etc.) must remain as originally produced by the manufacturer for the homologated machine.

Standard original internal parts of the forks may be modified.

After market damper kits or valves may be installed, but the external view of the fork must remain as homologated (for Superstock 600: including the fork cap).

## For Superstock 1000, the fork caps can be modified or changed to add spring preload/compression adjusters.

#### The dust seal can be modified, changed, or removed if the fork is totally oil sealed.

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.

The upper and lower fork clamps (triple clamp, fork bridges) must remain as originally produced by the manufacturer on the homologated machine.

Steering damper may be added or replaced with an after-market damper.

The steering damper cannot act as a steering lock limiting device.

#### 21.6.3 Rear Fork (Swing arm)

Every part of the rear fork must remain as originally produced by the manufacturer for the homologated machine (including rear fork pivot bolt and rear axle adjuster).

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. For safety reasons it is compulsory to use a chain guard made with plastic rigid material fitted in such a way as to prevent trapping between the lower chain run and the final driven sprocket at the rear wheel.

#### 21.6.4 Rear Suspension Unit

Rear suspension unit (shock absorber and its spring) may be modified or replaced, but the original attachments to the frame and rear fork (swing arm) must be used and the rear suspension linkage must remain as originally produced by the manufacturer for the homologated machine. Rear suspension unit spring may be changed.

#### 21.6.5 Wheels

Wheels must remain as originally produced by the manufacturer at the time of sale into the dealer/distributor network for the homologated machine.

The speedometer drive may be removed and replaced with a spacer.

No modification of the wheel-axles or any fixing and mounting points for front and rear brake caliper are authorized. Spacers can be modified. Modifications to the wheels to keep spacers in place are permitted. If the original design includes a cushion drive for the rear wheel, it must remain as originally produced for the homologated machine.

Wheel diameter and rim width must remain as originally homologated.

#### 21.6.6 Brakes

Brake discs must remain as originally produced by the manufacturer for the homologated machine. Front discs can be made floating, using original rotors and mounting points.

The front and rear brake caliper (mount, carrier, hanger) must remain as originally produced by the manufacturer for the homologated machine.

The rear brake caliper bracket may be mounted 'fixed' on the swingarm, but the bracket must maintain the same mounting (fixing) points for the caliper as used on the homologated machine. A modification of these parts is authorized. The swingarm may be modified for this reason to support the location of the rear brake caliper bracket, by welding, drilling or by using a helicoil.

Front and rear master cylinder must remain as originally produced by the manufacturer for the homologated machine.

#### The front and rear brake fluid reservoir can be changed with an aftermarket product.

#### (For Superstock 600: must remain as homologated except for AA Ch.)

Front and rear hydraulic brake lines may be changed. The split of the front brake lines for both front brake calipers must be made above the lower fork bridge (lower triple clamp).

"Quick" (or "dry-brake") connectors in the brake lines are authorized.

Front and rear brake pads may be changed. Brake pad locking pins may be modified to quick change type. **The hand lever adjuster is allowed.** 

Additional air scoops or ducts are not allowed.

#### 21.6.7 Tyres According to FIM 2.7.6.7

#### 21.6.8 Foot Rest/Foot Controls

Foot rest may be relocated but brackets must be mounted to the frame at the original mounting points. Foot controls linkage may be modified. The original mounting points must remain. Their two original points of fixture (on foot controls and on the shift shaft) must remain as original.

Foot rests may be rigidly mounted or a folding type which must incorporate a device to return them to the normal position.

The end of the foot rest must have at least an 8 mm solid spherical radius.

Non-folding **metal** footrests must have an end (plug), which is permanently fixed, made of plastic, Teflon or an equivalent type material (minimum radius 8mm).

The plug surface must be designed to reach the wider possible area. The Chief Technical Steward has the right to refuse any plug not satisfying this safety aim.

#### 21.6.9 Handle Bars and Hand Controls

Handle bars may be replaced (does not include brake master cylinder).

Handle bars and hand controls may be relocated.

Throttle grip can be modified or substituted.

Throttle assembly and associated cables can be modified or replaced.

Switches can be changed but electric starter and engine stop switch must be located on the handlebars.

Clutch and brake lever may be exchanged by an after-market copy.

Only for AA Ch. :Electric starter switch and engine stop switch must be located on the handlebars and may not be original.

#### The main ignition switch must not be located on the handlebars.

#### 21.6.10 Fairing/Body Work

a) Fairing, front mudguards and body work 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 machine, with slight differences due the racing use (different pieces mix, attachment points, fairing bottom, etc).

The material may be changed. The use of carbon fibre, Kevlar or carbon composite materials is not allowed. b) Overall size and dimensions must be the same as the original parts. c) The windscreen may be replaced with an exact cosmetic duplicate and must be made of transparent material. Upper edge height tolerance: +/- 15 mm regarding to the vertical distance from to the upper fork bridge.

d) Motorcycles that were not originally equipped with streamlining are not allowed to add streamlining in any form, with the exception of a lower fairing device, as described in (g). This device cannot exceed above a line drawn horizontally from axle to axle.

e) The original combination of instrument/fairing brackets may be replaced. All other fairing brackets may be altered or replaced.

f) The original air ducts running between the fairing and the air box **may be altered or replaced. Carbon fibre** composites and other exotic materials are forbidden. Particle grills or "wire-meshes" originally installed in the openings for the air ducts may be removed.

For Superstock 600: The original airducts between the fairing and the airbox must remain as homologated, including the particle grills or "wire-meshes installed in the air intake opening,

The wire mesh/plastic grills at the entrance of the air intake(s) in the front of the fairing can be removed. g) The lower fairing has to be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (minimum 5 litres). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing.

h) The lower fairing must incorporate **an opening of 25 mm diameter in the front lower area.** These holes must remain closed in dry conditions and must only be opened in wet race conditions as declared by the Clerk of the Course.

i) The front mudguard may be replaced with a cosmetic duplicate of the original parts and may be spaced upward for increased tyre clearance.

j) The rear mudguard fixed on the swing arm that incorporate the chain guard can be modified or changed but the original profile must be respected.

k) All exposed edges must be rounded.

#### 21.6.11 Fuel Tank

(For Superstock 600: Fuel tank filler cap must remain standard except for AA Ch.)

Fuel tank filler cap may be altered or replaced from those fitted to the homologated motorcycle, by a 'screw-on' type fuel cap.

The fuel tank valve petcock must remain as originally produced by the manufacturer for the homologated machine.

The sides of the fuel tank may be covered by a protective part made of a composite material. These protectors must fit the shape of the fuel tank.(not for Superstock 600 except for AA Ch)

Fuel tanks with tank breather pipes must be fitted with non-return valves that discharge into a catch tank with a minimum volume of 250cc made of a suitable material.

Each tank must be completely filled with fire-retartend foam (e.g. Explosafe).

#### 21.6.12 Seat

The original seat locking system (with plates, pins, rubberpads, etc.) can be removed.

The seat/rear cowl replacement must allow proper space for number display.

#### 21.6.13 Wiring Harness

The original wire-loom may be modified as indicated hereafter: The unused wire loom elements supplying current to direction indicators, horn, ignition contact and key-lock, etc, may be unplugged and/or removed (no cutting is allowed). The wire-loom and the key lock may be relocated from the original location. For Superstock 600: The wiring harness and connectors must be used, either as originally produced for the homologated machine. Cutting of the wiring harness is not allowed, but to disconnect is allowed, or the racing kit model ( supplied by the manufacturer and approved by FIM)

#### 21.6.14 Battery

The size and type of battery must be as originally produced by the manufacturer for the homologated machine.

#### 21.6.15 Radiator and oil coolers

Additional radiators and/or oil coolers are not allowed.

Protective meshes can be added in front to the oil and/or water radiators to cover the radiators core. The radiators tubes to and from the engine can be changed but the system must be maintained, with its original tanks.

Thermal switches, water temperature sensor and thermostat can be removed inside the cooling system. The electric fan can be removed.

#### 21.6.16 Air Box

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The air box must remain as originally produced by the manufacturer on the homologated machine, but the air box drains must be sealed. The air filter element may be modified or replaced. All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the air box.

#### 21.6.17 Carburettors

No modifications are allowed.

Carburettor jets, slide spring and needles may not be replaced.

The slide metering holes may not be changed.

Electronic or mechanical cold start devices must remain installed but may be deactivated.

Bell mouths must be as originally produced by the manufacturer for the homologated machine.

#### 21.6.18 Fuel Injection System

No modifications are allowed.

#### The central unit can be relocated.

The injectors must be standard units as used on the homologated motorcycle. Bell mouths must be as originally produced by the manufacturer for the homologated machine.

Fuel pump and fuel pressure regulator must remain as homologated.

#### 21.6.19 Fuel Supply

Fuel lines may be replaced but fuel petcock must remain as originally produced by the manufacturer. Quick connectors or dry break quick connectors may be used. Fuel vent lines may be replaced. Fuel filters may be added.

#### 21.6.20 Cylinder Head

No modifications are allowed. No material may be added or removed from the cylinder head. The cylinder head gasket can be changed. The valves, valve seats, guides, springs and retainers must be as originally produced by the manufacturer for the homologated machine. Valve spring shims are not allowed.

#### 21.6.21 Camshaft

No modifications are allowed.

At the technical checks: for direct **cam** drive **systems**, **the cam lobe lifts are measured**; for non direct **cam** drive **systems (i.e. with rocker arms)**, the valve lift is measured.

The timing of the camshaft is free, however no machining of the camshaft sprocket is authorized.

#### 21.6.22 Cam Sprockets

No dimensional modifications are allowed.

#### 21.6.23 Crankshaft

No modifications are allowed (including polishing and lightening)

#### 21.6.24 Oil Pumps and Oil Lines

Only oil lines may be modified or replaced. Oil lines containing positive pressure, if replaced, must be of metal reinforced construction with swaged or threaded connectors.

#### 21.6.25 Connecting Rods

No modifications are allowed (including polishing and lightening).

#### 21.6.26 Pistons

No modifications are allowed (including polishing and lightening).

#### 21.6.27 Piston Rings

No modifications are allowed.

#### 21.6.28 Piston Pins and Clips

No modifications are allowed.

#### 21.6.29 Cylinders

No modifications are allowed.

#### 21.6.30 Crankcase and all other Engine Cases (i.e. ignition case, clutch case.)

No modifications are allowed (including painting, polishing and lightening).

Engine case guards in the form of strengthened engine side covers may be installed. These covers must not be lighter in weight than the standard part.

Covers may be modified without any modification to the position and dimensions of the covered parts.

The crankcase/gearbox casing, ignition, clutch and generator covers may be protected by additional means i.e. protective covers.

# For AA ref. to FIM 2.7.6.30 <u>Recommendation</u>: All engine cases containing oil and which could be in contact with the ground during a crash must be protected by a second cover made from composite materials, type carbon or Kevlar.

#### 21.6.31 Transmission/Gearbox

An external quick-shift system on the gear selector (including wire and potentiometer) may be added.

Other modifications to the gearbox or selector mechanism are not allowed. Only countershaft sprocket, rear wheel sprocket, chain pitch and size can be changed.

The sprocket cover can be modified or eliminated.

#### For Superstock 600: The sprocket cover can be modified but cannot be removed.

#### 21.6.32 Clutch

Only friction and drive discs may be changed, but their number must remain as original. Clutch springs may be changed.

It is not allowed to change the clutch system. A slipper clutch or back-torque clutch may be used only if it is standard equipment on the homologated model.

#### 21.6.33 Ignition/Engine Control System

The CDI must be either

- a) as homologated and the inner software can be changed.
- b) or the CDI kit model (produced and/or approved by the machine manufacturer) can be used. A special connector can be used to connect CDI and original wire loom. The retail price of the full system (software included) must not be more than 1,5 times higher than the price of the original system.
- c) In addition to option a) and b) mentioned above external ignition and/or injection module/s can be added to the standard production ECU, but their total retail price cannot be higher than the complete CDI kit.

#### 21.6.34 Generator

No modifications are allowed.

The electric starter must operate normally and always be able to start the engine during the event.

#### 21.6.35 Exhaust System

Exhaust pipes and silencers may be modified or changed. Catalytic converters **must be removed** (for AA Ch. can be removed).

#### The number of the final exhaust silencer(s) must remain as homologated.

The noise limit for Superstock 600 machines will be 102 dB/A with a tolerance of + 3dB/A after the race The noise limit for the Superstock 1000 will be 107 dB/A (with a 3 dB/A tolerance after the race). The location of the silencer must remain as original.

Wrapping of the exhaust system is not allowed except in the area of the riders foot or an area in contact with the fairing for protection from heat.

For safety reasons the exposed edge(s) of the exhaust pipe(s) outlet must be rounded to avoid any sharp edges.

#### 21.6.36 Fasteners

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

Fasteners may be drilled only for mounting a safety wire, but intentional weight-saving modifications are not allowed.

Fairing/body-work fasteners may be changed to a quick disconnect type.

Aluminium fasteners may only be used in non-structural locations.

## 21.6.37 The following items may be altered or replaced from those fitted to the homologated motorcycle.

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.

Gaskets and gasket materials (with the exception of cylinder gaskets)

Painted external surface finishes and decals.

Material for brackets connecting non original parts (fairing, exhaust, etc) to the frame (or engine) cannot be made from titanium or fibre reinforced composites.

Protective covers for engine, frame, chain, footrests, ect. can be made in exotic material like fibre composite material if these parts do not substitute original parts mounted on the homologated model.

#### 21.6.38 The Following Items MAY BE Removed

Instrument and instrument bracket and associated cables Horn Tool box Tachometer Speedometer Light switch Signal (Horn) switch Turn signal switch Radiator fan and wiring Chain guard as long as it is not incorporated in the rear fender Bolt on accessories on a rear sub frame

#### 21.6.39 The Following Items MUST BE Removed

Headlamp, rear lamp and turn signal indicators (when not incorporated in the fairing) Openings must be covered by suitable materials

#### Rear-view mirrors

License plate bracket Helmet hooks and luggage carrier hooks Passenger foot rests Passenger grabs rails Safety bars, centre and side stands must be removed (fixed brackets must remain)

#### 21.6.40 The Following Items MUST BE Altered

Motorcycles must be equipped with a functional ignition kill switch or button mounted at least on one 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 drain plugs must be wired. External oil filter(s) screws and bolts that enter an oil cavity must be safety wired (i.e. on crankcases, oil lines, oil coolers, etc.)

All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the air box.

Where breather or overflow pipes are fitted they must discharge via existing outlets.

The original closed system must be retained, no direct atmospheric emission is permitted.

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.

The minimum size of a catch tank shall be 250 cc for gear-box breather pipes and 500 cc for engine breather pipes

#### 21.7 Additional Equipment

Additional equipment not on the original homologated motorcycle may not be added. (i.e. data acquisition, computers, recording equipment etc.), with the exception of lap timing systems.

Telemetry is not allowed during the whole event, but potentiometers and other sensors can be maintained, if disconnected.

#### AARR 22 - Class 600 cc. SUPER SPORT

Look at code F.I.M. Technical Appendices for International Road Racing Meetings 02.5 and its annexes.

#### 2.5.2 Minimum Weights

The minimum weights will be : 600 cc four cylinders 158 kg, 750 cc two cylinders 166 kg.

#### 2.5.6.20 Cylinder head (to add. the following)

Rocker arms (if any) must remain as homologated (material and dimensions)

**<u>2.5.6.30</u>** Crankcases and all other engine cases (to delete 3<sup>rd</sup> paragraph and add) For AA ref. Recommendation: All engine cases containing oil and which could be in contact with the ground during a crash must be protected by a second cover made from composite materials, type carbon or Kevlar.

#### 2.5.6.31 Transmission/Gearbox (change 4<sup>th</sup> sentence)

Quick-shift systems are allowed.

#### 2.5.6.35 Exhaust (First paragraph

Exhaust pipers and silencers may be modified or changed. Catalytic converters must be removed.

#### 2.5.10 The following items MUST BE altered Delete 6<sup>th</sup> and last sentences.

#### **AARR 23 - SUPERBIKE**

Look at code F.I.M. Road Racing World Championship Superbike & Supersport Regulations and its annexations.

2.4.2 Minimum Weight The minimum weight will be: 165 kg

2.4.6.7 Tyres The number and brand of the tyres is free.

#### 2.4.6.29 Crankcase/Gearbox and lateral covers

For AA ref. Recommendation: All engine cases containing oil and which could be in contact with the ground during a crash must be protected by a second cover made from composite materials, type carbon or Kevlar.

#### Meeting of Alpe Adria Road Racing Technical Commission Vienna / Wien, 04. November 2006

| ACCR          | ACCR        | FMI            | OeAMTC           | OeAMTC       | FMI         |
|---------------|-------------|----------------|------------------|--------------|-------------|
| Vojtech Kolic | Karel Zucha | Luigi Favarato | Günther Zaritsch | Ingo Partsch | Luca Borsoi |

#### Meeting of the Alpe Adria RRC

Vienna / Wien, 10. November 2006 Praha / Prag, 09. December 2006

| ACCR           | ACCR        | AMZS         | FMI             | HMS              |
|----------------|-------------|--------------|-----------------|------------------|
| Gerhard Ittner | Karel Naus  | Erik Logar   | Luigi Favarato  | Igor Eskinja     |
|                |             |              |                 |                  |
| MAMS           | MAMS        | OeAMTC       | SMF             | AAMU             |
| Rezsö Bulcsu   | Attila Nagy | Martin Suchy | Milan Jakubovic | Günther Zaritsch |

#### APPENDIX A

#### LIST OF HOMOLOGATED MODELS

All Models which were homologated by the FIM for the class "SSP 600" in the year 2001, 2002 and 2003.

#### SUPERSPORT and SUPERSTOCK 600

#### Model

DUCATI 748 R (H3) JAN 01 - end DUCATI 748 R (H3) JAN 02 - end DUCATI 749 R (H5) JAN 04 - present

HONDA CBR 600 FS JAN 01 - end HONDA CBR 600 F4i JAN 01 - end HONDA CBR 600 RR (PC37) JAN 03 - end HONDA CBR 600 RR (PC37) JAN 05 - end HONDA CBR 600 RR (PC40) JAN 07 - present

KAWASAKI ZX 600 K (ZX-6RR) JAN 03 - end KAWASAKI ZX 600 M (ZX-6RR) JAN 04 - end KAWASAKI ZX 600 M (ZX-6RR) JAN 05 - end KAWASAKI ZX 600 P (ZX-6RR) JAN 07 - present

SUZUKI GSX 600 R (K4) JAN 04 - end SUZUKI GSX 600 R (K6) JAN 06 - present

TRIUMPH DAYTONA 600 JUL 03 - end TRIUMPH DAYTONA 675 JAN 06 - present

YAMAHA YZF R6 JAN 03 - end YAMAHA YZF R6 JAN 05 - end YAMAHA YFZ R6 JAN 06 - present

Model Year 2007: To be announced

#### SUPERSTOCK 1000

#### Model

APRILIA RSV 1000 RP JAN 03 - end APRILIA RSV 1000 RR JAN 04 - end APRILIA RSV 1000 RR JAN 06 - present

DUCATI 996 S JAN 01 - end DUCATI 998 S (H2) JAN 02 - end DUCATI 999 S (H4) JAN 03 - end DUCATI 999 R (H4) MAR 06 - end **DUCATI 1098 S (H7) JAN 07 - present** 

HONDA CBR 900 RR (SC50) JAN 02 - end - (CBR 900 RR for EURO model), - (CBR 954 RR' for USA, J model) HONDA CBR 1000 RR (SC 57) JAN 04 - end HONDA CBR 1000 RR (SC 57) JAN 06 - present HONDA VTR 1000 SP (SC45) JAN 02 - present

KAWASAKI ZX 9 R (F) JAN 02 - end KAWASAKI ZX 10 RR JAN 04 - end KAWASAKI ZX 10 RR JAN 06 - end

MV AGUSTA F4 1000 R (+1) APRIL 06 - present

SUZUKI GSX R 750 (K2) JAN 02 - end SUZUKI GSX R 750 (K4) JAN 04 - present (including LTD version) SUZUKI GSX R 750 (K6) JAN 06 - present SUZUKI GSX R 1000 (K1) NOV 00 - end SUZUKI GSX R 1000 (K3) JAN 03 - end SUZUKI GSX R 1000 (K5) JAN 05 - present YAMAHA YZF R1 (2002 model) JAN 02 - end YAMAHA YZF R1 (2004 model) JAN 04 - present YAMAHA YZF R1 (2006 model) JAN 06 - present YAMAHA YZF R1-SP (2006 model) JAN 06 - present YAMAHA YZF R1 (2007 model) JAN 07 - present (with 4-valve engine)

Model Year 2007: To be announced

#### SUPERBIKE

#### Model

APRILIA RSV 1000 RP JAN 03 - end (+ optional fuel injection instrument) APRILIA RSV 1000 RR JAN 04 - end (+ optional fuel injection Instrument) APRILIA RSV 1000 RR JAN 06 - present (+ optional fuel injection Instrument)

DUCATI 998 R (H2) JAN 02 - end DUCATI 999 R (H4) JAN 03 - end (+ optional fuel injection instrument) DUCATI 999 R (H4) JAN 05 - present (+ optional fuel injection instrument)

HONDA CBR 900 RR (SC50) JAN 02 - end - (CBR 900 RR for EURO modelCBR 954 RR for USA J model) HONDA CBR 1000 RR (SC57) JAN 04 - end HONDA CBR 1000 RR (SC57) JAN 06 - present HONDA VTR 1000 SP2 (SC45) JAN 02 - end (+ optional fuel injection instrument)

KAWASAKI ZX 9 R (F) JAN 02 - end KAWASAKI ZX 10 RR JAN 04 - end KAWASAKI ZX 10 RR JAN 06 - present

MONDIAL PIEGA 1000 JUL 03 - present (+ optional fuel injection instrument

MV AGUSTA F4 1000 (MT) JAN 05 - present (Tamburini model)

PETRONAS FP1 JAN 03 – JUL 03 (+ optional fuel injectioninstrument)

SUZUKI GSX R 1000 (K3) JAN 03 - end SUZUKI GSX R 1000 (K5) JAN 05 - end SUZUKI GSX R 1000 (K7) JAN 07 - present

YAMAHA YZF R1 (2002 model) JAN 02 - end YAMAHA YZF R1 (2004 model) JAN 04 - end YAMAHA YZF R1 (2006 model) JAN 06 - end YAMAHA YZF R1-SP (2006 model) JAN 06 - end YAMAHA YZF R1 (2007 model) JAN 07 - present (4-valve engine)

Model Year 2007: To be announced

| SUPERSTOCK 600   | Model year | Dry weight | Allowed lightening | Minimum weight |
|------------------|------------|------------|--------------------|----------------|
| Ducati 749 R     | 2004       | 183 kg     | -14 kg             | 169 kg         |
| Kawasaki ZX 6R   | 2005       | 180 kg     | -14 kg             | 166 kg         |
| Honda CBR 600 RR | 2005       | 179 kg     | 14 kg              | 165 kg         |
| Suzuki GSX-R 600 | 2004       | 179 kg     | -14 kg             | 165 kg         |
| Yamaha YZF R6    | 2004       | 186 kg     | -14 kg             | 172 kg         |
| Yamaha YZF R6    | 2005       | 178 kg     | -14 kg             | 164 kg         |
|                  |            |            |                    |                |

| SUPERSTOCK 1000 Model year | Dry weight | Allowed lightening | Minimum weight |
|----------------------------|------------|--------------------|----------------|
|----------------------------|------------|--------------------|----------------|

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| Aprilia RSV 1000 RR  | 2004 | 192 kg | -15 kg | 177 kg |
|----------------------|------|--------|--------|--------|
| Ducati 999 S         | 2004 | 194 kg | -15 kg | 179 kg |
| Honda CBR 1000 RR    | 2004 | 189 kg | 15 kg  | 174 kg |
| Kawasaki ZX 10 R     | 2004 | 186 kg | -15 kg | 171 kg |
| MV Augusta F4 1000 S | 2004 | 203 kg | -15 kg | 188 kg |
| Suzuki GSX-R 1000 K5 | 2005 | 184 kg | -15 kg | 169 kg |
| Yamaha YZF R1        | 2004 | 186 kg | -15 kg | 171 kg |
|                      |      |        |        |        |

| SUPERSPORT        | Minimum weight | SUPERBIKE          | Minimum weight |
|-------------------|----------------|--------------------|----------------|
| 600 cc 4 cylinder | 158 kg         | 1000 cc 4 cylinder | 165 kg         |
| 675 cc 3 cylinder | 162 kg         | 1000 cc 3 cylinder | 165 kg         |
| 750 cc 2 cylinder | 166 kg         | 1000 cc 2 cylinder | 165 kg         |