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PIRELLI

SUPERSTOCK NATIONAL CHAMPIONSHIP

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SPORTING AND TECHNICAL REGULATIONS 2024

MSVR
MOTORSPORT VISION RACING

[TO BE READ IN CONJUNCTION WITH THE 2024 MCRCB YEARBOOK]

PLEASE NOTE: *The Promoter/Organiser reserves the right to issue amendments to this document from time to time.*

E1.10 MCRCB SUPERSTOCK TECHNICAL SPECIFICATIONS

Machines competing in the National Superstock Championships must comply with the MCRCB SUPERSTOCK REGULATIONS. These are as follows and are correct as of the printing of these regulations but which are subject to any amendments made by the FIM or MCRCB which will be issued by means of an MCRCB Bulletin.

EVERYTHING THAT IS NOT AUTHORISED AND PRESCRIBED IN THESE REGULATIONS IS STRICTLY FORBIDDEN

The motorcycles must be homologated by the original manufacturer only.

As the name Superstock implies, the machines used are allowed limited modifications. Most modifications that are allowed are only allowed for safety reasons or specific measures regarding the balance of performance between models as prescribed by the MCRCB. .

Superstock motorcycles require FIM Homologation or specific MCRCB approval in the case of motorcycles over 1000cc up to 1200cc accepted to participate in the championship at the invitation of the Promoter.

All machines must comply in every respect with all requirements of Road Racing as specified in the MCRCB Technical Regulations (G).

The Appearance from front, rear and the profile of Superstock motorcycles must (except when otherwise stated) conform to the homologated shape (as originally produced by the manufacturer). The appearance of the exhaust system and engine case and tank guards is excluded from this rule.

1.10.1 Machine Specifications

All items not mentioned in the following articles must remain as originally produced by the manufacturer for the homologated machine. Unless detailed in the MCRCB Authorised Parts List

1.10.2 Balancing various motorcycle concepts

At the request of the Promoter, acknowledging the current motorcycle market production cycles, in order to equalize the performance of motorcycles used in the MCRCB Superstock Championships a system of performance enhancements or restrictions (such as but not limited to authorised parts, minimum weight, air restrictor or Rev Limit) may be developed or applied according to their respective racing performances. The decision to apply a balancing system to a motorcycle will be taken by MCRCB at any time deemed necessary to ensure fair competition between varying makes and models of motorcycle, to reduce any disparity of performance and maximise the period of competitiveness of machine models given the much reduced

release of new material into the market.
Authorised parts and restrictions will be documented in the MCRCB Authorised Parts list.
Motorcycles over 1000cc up to 1100cc must be equipped with the MCRCB/MSVR specified ECU. MCRCB/MSVR will impose functionality and performance controls at their exclusive discretion. This may include; disablement of rider aids, rev limit, throttle position control.
Full details of the motorcycle model and the MCRCB/MSVR prescribed technical interventions will be published by Bulletin and in the MCRCB authorised parts list.

1.10.3 Displacement capacities

The following engine configurations compose the MCRCB Superstock class.

Over 750cc up to 1000cc	4-stroke	3 and 4 cylinders maximum
Over 1000cc up to 1100cc	4-stroke	4 cylinders maximum
Over 850cc up to 1200cc	4-stroke	2 cylinders maximum

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

1.10.3.1 Minimum Weight

The FIM decides the minimum weight value for a homologated model as sold to the public by determining its dry weight.

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 the main stand when fitted but with oil and radiator liquid at the prescribed level). To confirm the dry weight a minimum of three motorcycles are weight and compared. The result is rounded off to the nearest digit.

The minimum weight value is determined by the dry weight value (kg)

1100cc 4 cylinders	178kg
1000cc 4 cylinders	174kg
1200cc 2 cylinders	174kg

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.

The established weight limit must be met in the condition the machine finished the race. Nothing can be added to the machine including water, oil, fuel or tyres.

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

During the practice and qualifying sessions every rider may be asked to

submit his motorcycle to a weight control.

1.10.4 Number and Background Colours

The front number plate background colour must correspond to the manufacturers identity colour as listed below:

Brand		
Aprilia	**Purple / White**	Avery 717 violet lucido
BMW	**Light Blue / White**	
Honda	**Red / White**	
Kawasaki	**Green / White**	Pantone 368
Suzuki	**Yellow / Black**	Yellow (Not Fluoro)
Yamaha	**Blue / White**	Blue (RAL5002)

~~Aprilia – Black (white numbers)~~
~~BMW – Light blue (white numbers)~~
~~Ducati – White (black numbers)~~
~~Honda – Red (white numbers)~~
~~Kawasaki – Green (white numbers)~~
~~Suzuki – Yellow (black numbers)~~
~~Yamaha – Dark blue (white numbers)~~

The sizes for each front digits is:	Minimum height:	**140 mm**
	Minimum width:	80 mm
	Minimum stroke:	25 mm
	Minimum space between numbers	**10** mm
The sizes for each of side digit is:	Minimum height:	120 mm
	Minimum width:	60 mm
	Minimum stroke:	20 mm
	Minimum space between numbers	**10** mm

The allocated number (& plate) for the rider must be affixed on the motorcycle as follows:

a. **The only font that may be used is 'ConthraxSB'. The numbers must use the design/font and precise colours prescribed by these regulations.**

0123456789

b. Only single or double digit numbers will be allowed.

c. Numbers must be clearly visible to public and officials on both sides of the track.
d. Numbers must be fitted:
   i. Once on the front, in the centre of the fairing. If the design of the faring makes this impossible then the number must be aligned to the side of the machine that has the timing/data centre. The number must be centred on the background with no advertising within 25mm in all directions.
   ii. Once on each side on the lower rear portion of the lower fairing with a **white number on a black background.**
   iii. Any change to this position must be pre-approved a minimum of 2 weeks before the first race by the Technical Director.
e. A single outline is permitted and the outline must be of a contrasting colour and the maximum width of the outline is 3mm. The background colour must be clearly visible around all edges of the number (including outline). Reflective or mirror type numbers are not permitted.
f. Numbers cannot overlap.
g. No machine may enter the circuit if it does not meet the above regulations. If the rider does enter the circuit then no lap times will be recorded and Race Direction will at their discretion black flag the rider.
h. The English form for the number must be used. That is single vertical line for the "one" and a sloping line without a horizontal line for the "seven" (see technical diagrams)
i. In case of a dispute concerning the legibility of numbers, the decision of the Technical Director will be final.
j. The organisers will not be responsible or give dispensation to any competitor who is delayed or misses their practice session or race due to numbers not complying with the regulations. Nor will the timekeepers be responsible for not recording times. In addition a competitor may be fined or excluded by the Race Direction for non-compliance.

1.10.5 **Fuel**

The MCRCB Control Fuel must be used in every practice session and race. **This is supplied by Panta**, see D-Championship Conditions and any Bulletins issued by MSVR.

1.10.6 **Tyres**

The MCRCB will impose a controlled tyre. Further conditions will be stated in D - Championship Conditions and any Bulletins issued by MSVR.

The use of tyre warmers is allowed.

Any modification (cutting, grooving) is forbidden.

1.10.7 **Engine**

1.10.7.1 Carburetion Instruments / Fuel Injection System

Carburetion instruments refer to throttle bodies and variable length intake track devices.

Carburation instruments must remain as homologated.

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

The injectors must remain standard units as on the homologated motorcycle. See also 1.10.7.17 Fuel Supply.

1.10.7.2 Cylinder Head

No modifications are allowed.

No material may be added or removed from the cylinder head.

The head gaskets cannot be changed from the standard homologated one.

The valves, valve seats, guides, springs, tappets, oil seals, shims, cotter valve, spring base and spring retainers must be as originally produced by the manufacturer for the homologated machine.

Valve springs shims are not allowed.

1.10.7.3 **Camshaft**

No modifications are allowed.

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

The timing of the camshaft cannot be altered from the manufacturers homologated timing.

1.10.7.4 **Cam Sprockets or Gears**

No dimensional modifications are allowed.

1.10.7.5 **Cylinders**

No modifications are allowed.

1.10.7.6 **Pistons**

No modifications are allowed (including polishing and lightening).

1.10.7.7 **Piston Rings**

No modifications are allowed.

1.10.7.8 Piston Pins and Clips

No modifications are allowed.

1.10.7.9 **Connecting Rods**

No modifications are allowed (including polishing and lightening).

1.10.7.10**Crankshaft**

No modifications are allowed (including polishing and lightening).

1.10.7.11**Crankcase/Gearbox housing**

No modification to the crankcases are allowed (including painting, polishing and lightening).

Crankcases must remain as homologated. No modifications are allowed (including painting, polishing and lightening).

It is not allowed to add a pump used to create a vacuum in the crankcase. If a vacuum pump is installed on the homologated motorcycle then it may be used only as homologated.

1.10.7.11.1 **Lateral covers and protection**

Lateral (side) covers may be altered, modified or replaced. lf altered or modified the cover must have at least the same resistance to impact as the original one. If replaced, the cover must be made in material of same or higher specific weight and the total weight of the cover must not be less than the original one.

All lateral covers/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 metal such as aluminium alloy, stainless steel, steel or titanium.

Plates or crash bars from aluminium or steel also are permitted in addition to these covers. AII of these devices must be designed to be resistant against sudden shocks, abrasions and crash damage.
MCRCB authorised covers will be permitted without regard of the material. These covers must be fixed properly and securely with case cover screws that also mount the original covers/engine cases to the crankcases.

The Chief Technical Officer has the right to forbid any cover, if the evidence shows the cover is not effective.

No damaged cases will be permitted unless approved by the Chief Technical Officer.

1.10.7.12 **Transmission/Gearbox**

No modifications or alterations are allowed to the gears, gearbox

or gear ratios.

Other modifications or additions to the gearbox or selector mechanism, including quick shift systems are not allowed. Quick shift systems **and** aftermarket systems are allowed if fitted on the homologated model (the original wiring loom must remain unmodified).

Countershaft sprocket, rear wheel sprocket, chain pitch and size can be changed.

The sprocket cover can be modified or eliminated.

1.10.7.13 **Clutch**

No modifications are allowed.

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

Clutch springs may be changed but the number must remain as that on the homologated model.

The clutch secondary (or spider) slipper clutch springs may be changed or modified and the number can change from that initially supplied on the homologated model.

1.10.7.14 **Oil Pumps and Oil Lines**

No pump modifications are allowed

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.

1.10.7.15 **Radiator and oil coolers**

The only liquid engine coolants permitted will be water.

Additional radiators and / or oil coolers are not allowed.

The radiator tubes to and from the engine can be changed but the system must be maintained, with its original tanks.

Protective meshes can be added in front of the oil and/or water radiator(s).

Radiator fan and wiring may be removed

1.10.7.16 **Air Box**

The air box must remain as originally produced by the manufacturer for 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. All the oil breather line must be connected and discharge in the airbox.

1.10.7.17 **Fuel Supply**

An additional control unit to change the fuel mixture may be installed and must be fitted to the original connectors, the unit must not be able to perform any other function. (The original wire-loom must remain unmodified).

Auto tuning map devices are not allowed.

Fuel pump and fuel pressure regulator must remain as homologated.

Fuel lines may be replaced but the 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. See also 1.10.7.1 Carburetion Instruments/Fuel Injection.

Bazzas Z – FI, Power Commander V fuel control unit or any other plug in fuel control units of other manufactures that are used, must only be used for the change of the fuel mixture. Any other function such as traction control, quick shifting, response control ignition timing and the addition of dual fuel maps are not allowed. The Technical Officials in determining compliance with this regulation may require any team/competitor to supply verifiable evidence including software. Breaches of this regulation may result in the prohibition of specific makes and models of fuel control units. At pre-qualifying Technical Control riders/teams must declare any such fuel control systems. 1000-1200cc machines may use the quick shifting function**.**

1.10.7.18 **Exhaust System**

Exhaust pipes and silencers may be modified or changed from those fitted to the homologated motorcycle.

The number of the final exhaust silencer(s) must remain as homologated. The silencer(s) must be on the same side(s) of the homologated model.

Catalytic converters must be removed.

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

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

The noise limit for Superstock is 107 dB/A (with a 3 dB/A tolerance after the race). There is also an equipment tolerance of 2dB/A, the actual maximum reading before race or practice is 109 dB/A and after race or Practice 112dB/A.

1.10.8 Electrics and Electronics

1.10.8.1 Ignition/Engine Control System (ECU)

The standard homologated ECU may be used. For the avoidance of doubt flashing the standard supplied ECU is NOT authorised.

A manufacturer's authorised "kit" ECU may be used with manufacturer authorised firmware. The rev limit must be as the standard homologated ECU and will be checked on the Dyno for compliance. Where a manufacturers "kit" ECU has a dash that is an integral part of the "kit" with no additional functions over the "dash" from the homologated model then it may be used, providing there is no alternative "kit" ECU from that manufacturer for that model and is within the MSVR price cap of £3,500 plus VAT for the complete kit. The manufacturer must provide MSVR with the means to check the dash.

For models where a manufacturer's kit ECU is not available, the promoter/organiser will in conjunction with the relevant manufacturer and an official technical partner, make available authorised firmware for use with the standard ECU. This will be the sole authorised firmware for that particular machine model.

As detailed in 1.10.2 in the case of the Superstock class, motorcycles over 1000cc up to 1100cc must be equipped with the MCRCB/MSVR specified ECU and dash - see MCRCB authorised parts list. MCRCB/MSVR will impose functionality and performance controls at their exclusive discretion. This may include; disablement of rider aids, rev limit, throttle position control.
Full details of the motorcycle model and the MCRCB/MSVR prescribed technical interventions will be published by Bulletin.

The British Superstock Optional Electronics Package may be used as detailed in the MCRCB Authorised Parts List.

Alternatively, a dash as per the MCRCB authorized list may be used as a replacement in both classes. The dash used must be the correct model for the particular motorcycle model (no wiring modifications allowed).

At technical control machines may be checked on a dyno and/or the ECU

sealed with a tamperproof sticker.

At post qualifying and post race technical control any irregular dyno reading and/or evidence of the ECU being tampered with may constitute a fail and subsequent judicial action. The decision of the Chief Technical Officer in this respect will be considered a matter of fact.

Any team refusing to co-operate with the instructions of the Technical Officials in respect of any aspect of pre and post qualifying/race Technical Control will be penalised.

The MCRCB may invite manufacturers to participate in matters of technical control and eligibility. Any manufacturer's recommendations and determinations on matters of machine compliance with the class technical rules will be considered a matter of fact.

Spark plugs may be replaced.

1.10.8.2 **Generators**

No modifications allowed.

The electric starter must operate normally and always be able to start the engine during the event (including at pre and post race inspections). The engine must start and run when the electric starter has stopped its procedure.

1.10.8.3 Additional Equipment

ECU DATA BUS refers to any form of CAN/LIN/Proprietary or data protocols

ECU DATA BUS channels may be logged. This must be 'listen only.' Other than messages/data found on the stock machine, no messages/data may be presented on any ECU DATA BUS.

For example: Some stock systems use the ECU DATA BUS to send BUTTON state and other similar messages to the ECU. Aside from these 'stock' messages, no other messages may be presented to ECU DATA BUS.

Use of a GPS or infra-red based Lap Timer is allowed. Use of a Lap Timer display is allowed.

Any form of telemetry (remote/wireless communication in either 'ship to shore' or 'shore to ship') is not allowed unless it is in the form of an infrared signal for the purposes of a lap timer beacon only.

Additional sensors not on the original homologated motorcycle may be added for the recording of data, these are explicit and limited to five channels as follows:

1. Front Suspension
2. Rear Suspension
3. Front Brake Pressure
4. Rear Brake Pressure
5. Lambda (per cylinder) can be used for autotuning strategy

A data logger connected to the ECU DATA BUS may not connect to any dedicated ECU diagnostic/programming pins/wires.

All such systems must be authorised by technical control.

1.10.8.4 Wiring Harness

A manufactures kit wiring harness may be used only if a manufactures authorised kit ECU is used.

The original wire-loom may be modified only 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 allowed).

Cutting of the wiring harness is not allowed but to disconnect connectors is allowed.

The wiring harness may only be used for the purpose it is homologated for unless stated in these regulations.

When using the Superstock 1000 Optional Electronics Package the team must supply their own harness to the specific pinout and specification supplied the system supplier.

1.10.8.5 **Battery**

Battery may be replaced, if replaced nominal capacity must be equal or higher than the homologated type.

1.10.9 Frame and Body

1.10.9.1 Frame Body and Rear Sub Frame

Frame must remain as originally produced by the manufacturer for the homologated machine.

For the avoidance of doubt machine models fitted with steering head cap bearing inserts, the manufacturer's standard original fitted homologated inserts for that model are the only ones allowed.

The sides of the frame-body may be covered by a protective part made of composite material. These protectors must fit the form of the frame.

Holes may be drilled on the frame only to fix approved components (i.e. fairing brackets, steering damper mount).

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), with the exception of spare frames.

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.

Additional seat brackets may be added, non-stressed protruding brackets may be removed if they do not affect the safety of the construction or assembly.

Bolt on accessories to the rear sub-frame may be removed.

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

1.10.9.2 Suspension – General

Any exceptions to section 1.10.9 will be noted in the MCRCB Authorised Parts List.

a. Participants in the Superstock classes must only use units from the MCRCB Authorised Parts List:
The price limits are:
a. Fork: For the fork kit, including all parts such as but not limited to cartridge, springs (1 set), adjusters, fork caps, blanking inserts, seals, bushes but excepting oil and fitting the price limit is €2450 excluding tax
b. Shock Absorber/RCU: For the complete shock absorber / RCU including but not limited to spring (1 of), pre-load adjuster and length/ride height adjuster the price limit is €2000 excluding tax
b. The eligible products from the suspension manufacturers must be available to all participants at least one month before the first round of the Championship, and remain available all season. The products must be available within 6 weeks of a confirmed order.
c. Setting parts and tuning parts must be provided by the suspension manufacturers to all customers/ teams/ participants using the manufacturer's products. These parts can be used by all

participants during the season. These parts shall be available for immediate delivery to all teams/customers.

d. Teams may not modify any part of the forks or shock absorber; all setting parts must be supplied by the Suspension manufacturer and available to all teams/riders.

e. The suspension manufacturers are allowed to offer service contracts when the team is using the eligible suspension products. The suspension manufacturers cannot demand a service contract for a customer or participant in order to obtain a suspension product.

i. No aftermarket or prototype electronically-controlled suspensions maybe used. Electronically-controlled suspension may only be used if already present on the production model of the homologated motorcycle.

ii. The electronically-controlled valves must remain as homologated. The shims, spacers and fork/shock springs not connected with these valves can be changed.

iii. The ECU for the electronic suspension must remain as homologated and cannot receive any motorcycle track position or sector information; the suspension cannot be adjusted relative to track position.

iv. The electronic interface between the rider and the suspension must remain as on the homologated motorcycle. It is allowed to remove or disable this rider interface.

v. The original suspension system must work safely in the event of an electronic failure.

vi. Electro-magnetic fluid systems which change the viscosity of the suspension fluid(s) during operation are not permitted.

f. Electronic controlled steering damper cannot be used if not installed in the homologated model for road use. However, it must be completely standard (any mechanical or electronic part must remain as homologated).

1.10.9.3 Front Forks

Forks (stanchions, stem, wheel spindle, upper and lower crown, etc.) must remain as originally produced by the manufacturer for the homologated motorcycle.

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

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

Fork caps on the mechanical forks may only be modified or replaced to allow external adjustment. (This does not include the mechanical fork leg that is part of the homologated electronic fork set).

- Fork caps may be modified or replaced to allow external adjustment They may extend the clamping area of the fork leg a maximum of 18mm above the standard fork tube. The fork 'drop' must never be set allowing the fork to be submerged in the top yoke/clamp. The full clamping area of the top yoke/clamp must be used.

- The fork stroke will be a maximum of 125mm to the bump stop plus a maximum of 5mm bump stop stroke.

- The fork kit manufacturer will be wholly responsible for ensuring the safe operation of the fork.

- The manufacturer service agents will be required to assist inspection for up to 3 fork sets and 3 shock absorbers per event.

Dust seals may be modified, changed or removed if the fork remains totally oil-sealed.

MECHANICAL FORKS: Original internal parts of the homologated forks may be modified or changed. After market damper kits or valves may be installed. The original surface finish of the fork tubes (stanchions, fork pipes) may be changed. Additional surface treatments are allowed.

ELECTRONIC SUSPENSION: No aftermarket or prototype electronically controlled suspension parts may be used. Electronic suspension may be used if such suspension is already present on the production model of the homologated motorcycle, and it must remain completely standard (all mechanical and electronic parts must remain as homologated) with the exception of shims and springs. The original suspension system must work safely in the event of an electronic failure. The electronic front suspension may be replaced with a mechanical system from a similar homologated model from the same manufacturer.

1.10.9.4 Rear Fork (Swing arm)

The rear fork must remain as originally produced by the manufacturer for the homologated motorcycle.

A chain guard must be fitted in such a way to reduce the possibility that any part of the riders' body may become trapped between the lower chain run and the rear wheel sprocket.

Rear swing arm pivot position must remain in the homologated position (as supplied on the production machine)

If the standard machine has inserts then the orientation/position of the

original inserts may be changed but the inserts cannot be replaced or modified.

Rear fork pivot bolt must remain as originally produced by the manufacturer for the homologated motorcycle.

Rear wheel stand brackets may be added to the rear fork by welding or by bolts. Brackets must have rounded edges (with a large radius). Fastening screws must be recessed. An anchorage system or point(s) to keep the original rear brake caliper in place may be added to the rear swing-arm**.**

The sides of the swing arm may be protected by a thin vinyl cover only, no composite or structural covers are allowed.

Aftermarket rear chain adjusters may be used for the sole purposes of adjusting the chain only, not for performance gains of any kind.

1.10.9.5 Rear Suspension Unit

Rear suspension unit (shock absorber) may be modified or replaced, but the original attachments to the frame and rear fork (swing arm) must be as homologated.

All the rear suspension linkage parts must remain as originally produced by the manufacturer for the homologated motorcycle.

MECHANICAL SUSPENSION: Rear suspension unit and spring may be changed.

ELECTRONIC SUSPENSION: No aftermarket or prototype electronically controlled suspension parts may be used. Electronic suspension may be used if such suspension is already present on the production model of the homologated motorcycle, and it must remain completely standard (all mechanical and electronic parts must remain as homologated) with the exception of shims and springs). The original suspension system must work properly safely in the event of an electronic failure. The electronic shock absorber can be replaced with a mechanical one.

1.10.9.6 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.

If the original design included a cushion drive for the rear wheel, it must remain as originally produced for the homologated machine.

No modifications of the wheel-axles or any fixing and mounting points for

front and rear brake caliper are authorised. Spacers can be modified.

Modifications to keep spacers in place are permitted.

Wheel diameter and rim width must remain as originally homologated. Any inner tube (if fitted) or inflation valves may be used.

Wheel balance weights may be discarded, changed or added to.

Carbon wheels are permitted if fitted as a homologated part to the homologated machine. The CTO reserves the rights to impound any wheels that have knowingly been involved in a crash.

1.10.9.7 Brakes

Brake discs can be replaced by aftermarket discs which comply to the following rules:

Brake discs and carrier must retain the same material as the homologated disc and carrier.

A 'wave' type disc can be replaced with a round disc.

The outside and inner diameter of the brake disc must remain the same as on the homologated disc.

In order to reduce the transfer of heat to the hydraulic fluid it is permitted to add metallic shims, heatsink or spacers to the calipers, between the pads and the calipers, these may be positively retained by clipping to the brake pad or to the brake caliper piston. They must be metallic (excluding titanium) and must be from the MCRCB authorised parts list.
and/or to replace light alloy pistons with steel pistons made by the same manufacturer of the caliper. If the caliper manufacturer makes available a replacement piston - specific to the caliper and on the MCRCB authorised parts list it may replace the original pistons.

The thickness of the brake disc may be increased by 20% and must continue to fit into the homologated brake caliper without any modification. The number of floaters is free.

The fixing of the carrier on the wheel must remain the same as on the homologated disc.

Anti lock systems (ABS) can be disconnected and the ABS ECU can be dismantled.

The ABS pump may be removed.

The ABS rotor wheel can be deleted, modified or replaced.

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

In order to reduce the transfer of heat to the hydraulic fluid it is permitted to add metallic shims to the calipers, between the pads and the calipers, and/or to replace light alloy pistons with steel pistons made by the same manufacturer of the caliper.

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

The front and rear master cylinder must remain as originally produced by the manufacturers for the homologated machine.

Front and rear brake fluid reservoirs may 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 authorised.

Front and rear brake pads may be changed. Brake pad locking pins may be modified for quick change types.

Additional air scoops or ducts are not allowed.

Motorcycles must be equipped with brake lever protection, intended to protect the handlebar brake lever from being accidentally activated in case of collision with another motorcycle.

1.10.9.8 Handlebars and Hand Controls

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

Handlebars and hand controls may be relocated.

Throttle controls must be self closing when not held by the hand.

Throttle assembly and associated cables may be modified or replaced but the connection to the throttle body and to the throttle controls must remain as homologated.

Clutch and brake lever may be exchanged by an aftermarket copy. An adjuster to the brake lever is allowed for the 1000cc/1200cc class only.

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

1.10.9.9 Footrest/Foot Controls

Footrest/foot controls may be relocated but brackets must be mounted to the frame at the original mounting points. Their two original mounting points of fixture (on foot controls and on the shift shaft) must remain as original National Superstock class only: You may reposition the rear brake control lever to the handle bar.

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

The end of the footrest must have an 8mm solid spherical radius.

Non-folding 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 widest possible area. The Chief Technical Officer has the right to refuse any plug not satisfying this safety aim.

1.10.9.10 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 (SAFETY).

All fuel tanks must be completely filled with a fire retardant material (open celled mesh i.e. “Explososafe ®”).

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 tank.

Fuel tanks with a 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.

The use of a single piece frp tank cover/air box cover/side trim, referred generally as a “tank cover” is permitted for 1000cc/1200cc class only.

From 2025: The use of a tank cover will not be allowed unless fitted originally by the manufacturer.

The device as 1.10 must comply with “The Appearance from front, rear and the profile of Superstock motorcycles must (except when otherwise stated) conform to the homologated shape (as originally produced by the manufacturer) – i.e.the profile, in principle, cannot deviate from the original profile by more than thickness of the frp moulded cover.

1.10.9.11 Fairing/Body Work

a) 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 machine, with slight differences due to the racing use (different attachment points, fairing bottom etc.). The materials may be changed. The use of carbon fibre or carbon composite materials is not allowed. The front of the fairing may be modified to accommodate a front number plate in compliance with MCRCB General Technical Regulations.
b) Overall size and dimensions must be the same as the original part.
c) Windscreens may be replaced with a duplicate of transparent material, but the overall size and dimensions must be the same as the original part.
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 (h). This device cannot exceed above a line drawn horizontally from axle to axle.
e) The original combination instrument/fairing brackets may be replaced, but the use of titanium and carbon (or similar composite materials) is forbidden. 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 of the air-ducts, may be taken away.
g) The lower fairing has to be constructed to hold, in case of engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (minimum 5 litres). The lower edge of the openings in the fairing must be positioned at least 50mm above the bottom of the fairing.
h) Front mudguards may be replaced with a cosmetic duplicates of the original parts and may be spaced upwards for increased tyre clearance.
i) Rear mudguards fixed on the swinging arm can be modified or changed but the original profile must be respected.
j) All exposed edges must be rounded.
k) Motorcycles can be equipped with inner ducts to improve the air stream towards the radiator but the appearance of the front, the rear and the profile of the motorcycle must not be changed.
l) Wings and Aerodynamic Aids
Wings and other aerodynamic aids will only be considered legal if originally fitted to the homologated road specification machine in all

of Europe, Japan and North America.

For race use the wings must follow the dimensions, profiles and positions of the homologated shapes exactly (+-1mm). For copies of the OEM parts the leading edges (including end plates) must have a minimum circumference of 4mm and must have a rounded end (8mm radius) or be enclosed/integrated into the fairing.

The OEM parts may be used "as is" with the exception that the wing root and 10mm from the end face may be modified to allow mounting to the (race) fairing. This may not be in the form of an extension and the size of the wing will be measured with reference to the face of the wing root.

The wing must be fitted in the same "relative" position (accepting the tolerance allowed for the fairing) and the angle of attack must be within +/-4° of the original angle of attack relative to the chassis.

For active or dynamic aerodynamic parts ONLY the standard homologated mechanism may be used. The range of movement must be the same as that used by the homolgated road machine in normal use - not the mechanical maximum.

1.10.9.12 **Seat**

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

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

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

The homologated seat locking system (with plates, pins, rubber pads etc.) may be removed

All exposed edges must be rounded.

1.10.9.13 **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 for safety wire, but intentional weight saving modifications are not allowed.

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

1.10.9.14 **Rain Light**

All motorcycles must have a functioning red light mounted at the rear of the machine to be used in rain or low visibility conditions as instructed by Race Control. The team must ensure that the light is switched on whenever a rain tyre is fitted on the motorcycle and/or when any practice or race is declared "wet" by Race Control.

Lights must comply with the following:

a) lighting direction must be parallel to the machine centre line (motorcycle running direction), and clearly visible from the rear at least 15 degrees to both left and right sides of the machine centre line.
b) mounted on the seat/rear bodywork approximately on the machine centre line, in a position approved by the Chief Technical Officer. In case of dispute over the mounting position or visibility, the decision of the Chief Technical Officer will be final.
c) power output/luminosity equivalent to approximately: 10 – 15W (incandescent) 0.6 – 1.8 W (LED).
d) the switch must be accessible.
e) rain light power supply may be separated from the motorcycle main wiring and battery.

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

A special one way valve can be fitted to the crankcase oil filler opening (to avoid oil spillage)

Any type of lubrication, brake or suspension fluid may be used.

Gasket and gasket materials (with the exception of the cylinder base gasket and head gasket).

Instrument bracket(s)

NB: Only the "dash" from the homolgated model or a dash as per the MCRCB approval list, designed for the specific motorcycle model can be used. Unless stated otherwise in these technical regulations.

Painted external surface finishes and decals.

Material for brackets connecting non-original parts to the frame (or engine) cannot be made from titanium or fibre reinforced composites (the only exception to this is the exhaust hanger which may be made from reinforced composites).

Tachometer – NB this must be working so that noise limits may be measured – (MCRCB Only)

1.10.11 The Following Items May Be Removed

Emission control items (anti-pollution) in or around the airbox and engine (02 sensors, air injection devices)

Chain guard as long as it is not incorporated in the rear fender. Bolt on accessories on a rear sub frame.

1.10.12 The following items MUST BE removed

- Headlamp and rear lamp.
- Turn signal indicators (when not incorporated in the fairing). Openings must be covered with a suitable material.
- Rear view mirrors.
- Horn.
- Licence plate bracket.
- Tool kit.
- 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).

1.10.13 The Following Items 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.

It is recommended that machines be equipped with a red light on the instrument panel. This light must flash in the event of oil pressure drop.

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 airbox.

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.