# APPENDIX D DRAFT SPORTBIKE TT TECHNICAL REGULATIONS 2026

For TT 2026, Supertwin machines will be allowed to compete in the Sportbike Class. Sportbike and Supertwin machines competing must comply with the Regulations outlined below. These are as follows and are correct at the time publication but are subject to any amendments made by race direction or the race organisers which will be issued by means of a TT 2026 Bulletin.

For clarity, specific technical regulations for Supertwin are annotated in italics/red text.

For the avoidance of doubt; competitors may use the Aprilia RS 660 and Yamaha YZF R7 in either the Sportbike specification or the Supertwin specification.

Note: If the Aprilia RS 660 / Yamaha YZF R7 is intended for competition under Sportbike technical regulations, then all technical regulations for Sportbike must apply. Equally, the same applies if the Aprilia RS 660 / Yamaha YZF R7 is intended for competition under Supertwin Regulations.

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

## **SPORTBIKE MACHINES:**

If a change to a part or system is not specifically allowed in any of the following articles, then it is forbidden.

MCRCB Sportbike class motorcycles require the relevant FIM or MCRCB homologation (see Homologation procedure). All machines must be normally aspirated. All motorcycles must comply in every respect with all the requirements for road racing as specified in these Technical Regulations.

Once a motorcycle has obtained the homologation, it may be used for racing in the corresponding class for a maximum period stated in the homologation conditions. Or until such time that the homologated motorcycle is disqualified by new rules or changes in the technical specifications of the corresponding class.

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

## **SUPERTWIN MACHINES:**

Any four-stroke twin cylinder motorcycle available for sale to the public for road use with a water-cooled engine of up to 700cc may be used provided it adheres to the following regulations.

Eligible machines must be or have been available for sale to the public and be homologated / Type approved (or the equivalent single vehicle approval for low volume manufacturers) for road use from 2011 or later.

This class is for serial production machines only. One off or prototype machines are not permitted. For the avoidance of doubt and in the context of these regulations the term "serial production" is defined as a series of numbered motorcycles either mass produced,

or low volume / hand built and identified with a Vehicle Identification Number (V.I.N.). The minimum number of machines produced by the manufacturer, in order to be eligible is 30 (thirty) units.

Once a motorcycle make and model is accepted by the race organiser at point of entry to the event, it is deemed to be compliant with the above eligibility regulations and is considered to be a matter of fact and as such cannot be challenged.

Eligible machines for Supertwins TT 2026:

Make and Model	Capacity Bore and Stroke (mm)
Kawasaki Ninja 650	649cc (83.0 x 60.0)
Kawasaki Z650	649cc (83.0 x 60.0)
Kawasaki ER-6F	649cc (83.0 x 60.0)
Yamaha MT-07	689cc (80.0 x 68.6)
Yamaha R-7	689cc (80.0 x 68.6)
Patton S1-R 650	649cc (83.0 x 60.0)
Suzuki SV650	645cc (81.0 x 62.6)
Aprilia RS660	659cc (81.0 x 63.9)

## 1. MOTORCYCLE SPECIFICATIONS

All parts and systems not specifically mentioned in the following articles must remain as originally produced by the manufacturer for the homologated motorcycle.

# 2. ENGINE CONFIGURATIONS AND DISPLACEMENT CAPACITIES

TT Sportbike Class Motorcycles must be able to achieve approximately 70kW (95PS): They must be equipped with a Ride by Wire throttle system (OEM or as part of a compulsory kit). If approved these machines will have their full specification published in the MCRCB Authorised Parts List.

# 3. MINIMUM WEIGHT

# **SPORTBIKE**

Brand	Minimum Weight
Aprilia RS 660	158 kg
CF Moto 675SR-R	160 kg
Kawasaki Ninja 650	156 kg
Kawasaki ZX4R (&RR)	tbc
Kove 450RR Pro	141 kg
Suzuki GSX-8R	169 kg
Triumph Daytona 660	165 kg
Yamaha YZF-R7	158 kg

# **SUPERTWIN**

Brand	Minimum Weight
Kawasaki Ninja 650	150 kg
Kawasaki Z650	150 kg
Kawasaki ER-6F	150 kg
Yamaha MT-07	150 kg
Yamaha YZF – R7	150 kg
Patton S1-R 650	150 kg
Suzuki SV 650	150 kg
Aprilia RS660	150 kg

- 3.1 At any time during the event, the weight of the whole machine (including the fuel tank and its contents) must not be less than the minimum weight.
- 3.2 There is no tolerance on the minimum weight of the motorcycle.
- 3.3 In the post-race inspection, the checked machines will be weighed in the condition they were at the end of the race.
- 3.4 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.

- 3.5 During the practice/qualifying sessions competitors may be asked to submit their motorcycle to weight control which the competitor and his team must comply with.
- 3.6 The use of ballast is allowed in order to stay over the minimum weight limit. This must be securely mounted to the main body of the chassis and be declared at technical inspection.

## 4. TYRES

- 4.1 For the avoidance of doubt Slick tyres may be used on ALL solo classes at the TT but are not mandatory.
- 4.2 Tyres may be replaced from those fitted to the homologated motorcycles.
- 4.3 Any suitable tyre may be used and must be less than three years old since the date of manufacture as determined by the manufacturer's production date stamp on the tyres side wall.
- 4.4 A tyre that falls outside the three-year age limit may only be used providing that the tyre has been supplied, and fitted, at the event by one of the events approved on site tyre suppliers and has an official event date control decal affixed to its sidewall, adjacent to the manufacturers date stamp at time of fitting. There are no controlled tyre regulations for the TT.
- 4.5 Tyre warmers must be used.
- 4.6 Any tread pattern must be made exclusively by the manufacturer when producing the tyre.
- 4.7 Additional tread grooves, cuts etc. are allowed provided that they are made by a tyre manufacturer or by a person duly authorised by the tyre manufacturer. Such modified tyres must bear the distinguishing mark or stamp of the manufacturer. This stamp must be placed near to the manufacturer's mark.
- 4.8 Tyre pressures must remain within the tyre manufacturers recommended range.
- 4.9 The tyre direction (where applicable) and the date of manufacture should be highlighted in tyre paint or other such marking as to be clearly visible.

#### 5. CONTROLS

- 5.1 Footrest and foot controls may be replaced or relocated.
- 5.2 Handlebars, hand controls and cables may be altered or replaced. Engine starter switch and kill switch must be located on the handlebars and must be operational at technical checks.
- 5.3 The engine kill switch must be able to be operated by the rider whilst holding the handlebars in a normal riding position. In the event of a dispute the decision of the Technical Director or his appointed deputy will be final.

# 6 BODYWORK, TANK, FAIRING AND SEAT UNIT

- 6.1 Fairing, mudguards and seat unit may be altered or replaced.
- 6.2 Windscreen, if fitted, may be replaced with transparent material only.
- 6.3 The original instruments and fairing brackets may be removed, replaced or added to.
- 6.4 The petrol tank capacity may be no greater than 20 litres. The unleaded baffle in the tank may be removed and the filler replaced. Fuel tank materials may be changed but must be metal (steel / aluminium / titanium). The use of carbon composite or plastic fuel tanks are not permitted unless they are as fitted to the standard motorcycle and remain unmodified. The fuel tank breather must vent via a non-return valve into a catch tank with a minimum capacity 250cc. This must be visible so it can be checked at technical checks.
- 6.5 The lower fairing must 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.

# 7. BATTERY

The size and type of the battery may be changed and relocated.

# 8. ENGINE

# SPORTBIKE:

For the Sportbike category all engine parts must remain as homologated unless specified in the MCRCB Authorised parts list, where the list will take precedence over the following. Engine Kits are compulsory where listed.

## **SUPERTWIN:**

- 8.1 Engine type must be by the original manufacturer, substituting with an alternative brand is not permitted.
- 8.2 Bore and Stroke must remain as per the standard machine.
- 8.3 Original OEM cylinder head, pistons, valves, cylinders may be modified, polished or lightened. Gas flow modifications normally associated with individual tuning is permitted.
  - 8.3.1 Pistons and associated parts (i.e. piston rings, piston pin, piston circlips may be modified or replaced. The use of anti-friction/anti-wear coatings is permitted. Std bore size must be retained.
  - 8.3.2 Intake and exhaust valves must be the original OEM parts. However, they may be modified. The valve head must be the same diameter or smaller than the standard OEM valve. Oversize valves are not permitted.
  - 8.3.3 Valve Springs are free and may be modified or replaced.
  - 8.3..4 Valve Spring retainers and cotters are free and may be modified or replaced.
  - 8.3.5 Valve spring seats are free and may be modified or replaced.
  - 8.3.6 Valve lash caps (buckets) may be modified. The use of anti-friction/anti wear coatings is permitted.
  - 8.3.7 Cylinders may be modified (i.e. machining gasket faces to adjust deck hight/squish etc) but the cylinder bore size must remain standard.
- 8.4 Compression ratio of the engine may be changed.
- 8.5 Pistons may be replaced.
- 8.6 Conrods may be modified or replaced but the material must remain the same type as found on the standard machine (steel rods can only be replaced by steel rods) and the rods must be the same weight or heavier than standard.
- 8.7 Crankshaft may be modified or changed but must be no lighter than that used on the standard machine.
- 8.8 Camshaft timing may be changed by the slotting of cam sprockets. Cam lift and dwell is free. The thermostat may be removed from the housing to aid cooling, if required.

Camshaft timing is free. Camshaft sprockets may be modified or replaced to aid adjustment of the camshaft timing.

Camshaft lift and duration (dwell) is free. The camshaft may be modified or replaced. The use of anti-friction/anti wear coatings is permitted.

# 9 IGNITION SYSTEM / FUEL SYSTEM

# **SPORTBIKE**

- 9.1 The original homologated fuel injection system must be used without any modification.
- 9.2 The fuel injectors must be stock and unaltered from the original specification and manufacture.
- 9.3 Butterflies cannot be changed or modified

## **SUPERTWIN**

- 9.4 The ECU must remain as fitted to the homologated machine or a machine of similar type and construction from a previous model and from the same manufacturer.

  However, it is permitted to use a secondary fuel and/or ignition module such as a Power Commander / Bazzaz etc "Flashing the standard ECU is also allowed.
- 9.5 The use of a secondary closed loop self-mapping devise such as "Auto Tune" is permitted.
- 9.6 The use of an aftermarket ECU (e.g. Motec, IgniTech etc) is not permitted.
- 9.7 RPM Limits:
  - 9.7.1 650cc machines 11,000 RPM
  - 9.7.2 651cc to 700cc machines\* 11.000 RPM
  - 9.7.3 \*The Aprilia RS660 to have a RPM limit of 11,500RPM.
- 9.8 Machines may be selected for mandatory Dyno Testing for verification of RPM limit.

# 10 SUPERTWIN - THROTTLE BODIES

- 10.1 For machines under 651cc, the throttle bodies and injectors can be changed, bored out, polished and modified. The use of multiple injectors per cylinder is allowed.
- 10.2 The Aprilia RS660 throttle bodies and injectors must remain as homologated. No modifications are permitted with the exception of removal or fixing the position of any secondary butterflies only.
- 10.3 The Yamaha MT-07/R7 is permitted to modify/bore out standard throttle bodies. Injectors may be changed. Dual injectors are not permitted.

# 10.4 Bell mouths may be modified, removed or changed.

# 10.5 Air boxes may be modified or replaced.

## 11. ENGINE CRASH COVERS

- 11.1 All lateral covers/engine cases containing oil and which could be in contact with the ground during an incident must be protected by a second cover made from metal such as aluminium alloy, stainless steel, steel or titanium. Composite covers are not permitted.
- 11.2 The secondary cover must cover a minimum of one third of the original cover. The Technical Directors decision on suitability is final.
- 11.3 Plates or crash bars from aluminium or steel are also permitted in addition to those covers outlined above. All covers must be designed to be resistant against sudden shocks, abrasions and crash damage.
- 11.4 FIM or MCRCB approved covers will be permitted without regard of the material or dimensions.
- 11.5 Covers must be fixed properly and securely with a minimum of three (3) case cover screws that also mount the original covers/engine cases to the crankcase.
- 11.6 The Technical Director has the authority to refuse any cover not complying with the above.

# 12. TRANSMISSION / GEARBOX

# SPORTBIKE:

- Must be the originally fitted and homologated parts (including but not limited to shafts, selector mechanism, gears and primary gears) with the following exceptions:
  - a. Undercutting and re-shimming are allowed
  - b. The positive neutral selector mechanism may be removed.
  - c. Shift star/indexer, spring, roller and detent may be replaced or modified but must function as originally designed.

- d. Countershaft sprocket, rear wheel sprocket, chain pitch and size may be changed.
- e. The front sprocket cover may be modified or eliminated.
- f. Chain guard as long as it is not incorporated in the rear fender may be removed.
- g. A support may be added to the gearbox shift shaft to reduce flex, this may be a separate part or integrated into a cover.

#### SUPERTWIN:

- h. Gearbox may be changed or modified. The number of gears must remain as found on the standard machine.
- i. Additions to the gearbox or selector mechanism, such as quick shift systems are permitted.
- j. Clutch springs; friction and drive plates may be replaced.
- k. The use of slipper clutch assemblies is permitted.
- Front and rear external drive sprockets, chain pitch, width and length can be changed.

# 13. **CLUTCH**

- 13.1 Clutch system (wet or dry type) and the method of operation (by cable or hydraulic) must remain as homologated.
- 13.2 Friction and drive discs may be changed.
- 13.3 Clutch springs may be changed.
- 13.4 The clutch basket (outer) must be the originally fitted and homologated part.
- 13.5 The original clutch inner assembly may be modified or replaced by an aftermarket clutch, also including back torque limiting capabilities (slipper type).
- 13.6 No power source (i.e. hydraulic or electric) can be used for gear selection, if not installed in the homologated model for road use. Human power is excluded from the ban.

#### 14. OIL PUMPS AND OIL LINES

- 14.1 Must be the originally fitted and homologated parts with no modification allowed.
- 14.2 Oil lines may be modified or replaced. Oil lines containing positive pressure, if replaced, must be of braided reinforced construction with swaged or threaded connectors.
- 14.3 All oil related fittings must be lockwired.
- 14.4 External oil filters must be secured using a suitable hose clamp (jubilee type) and secured with lock wire in such a way as to prevent it from undoing. **Oil filters with drilled HEX or HEX heads are not to be used.**

# 15. COOLING SYSTEM

- 15.1 The only liquid engine coolants permitted will be water.
- 15.2 An additional water radiator may be fitted but the appearance of the front, the rear and the profile of the motorcycle must not be changed. Extra mounting brackets to accommodate the additional radiator are permitted.
- 15.3 Alternatively, but not in addition to 14.2, an oil cooler may be fitted. The retail price limit (excluding taxes) of complete system including all hoses and fittings must be €1350. The oil feed may be provided by:
  - a. An oil coupling already present
  - b. A heat exchanger (oil/water) may be replaced with an oilcooler adaptor plate
  - c. An adaptor plate may be fitted behind the oil filter
  - d. Protective meshes may be added in front of the oil and/or water radiator(s).
  - e. The cooling system hoses and catch tanks may be changed. The reservoir/overflow/expansion bottle must be fitted. It can have a small vent hole.
  - f. Radiator fan and wiring may be changed, modified or removed. Thermal switches, unused temperature sensors and thermostat may be removed.
  - g. Radiator Cap is free

#### **16. AIRBOX**

- 16.1 The airbox must be the originally fitted and homologated part with no modification allowed.
- 16.2 The air filter element may be replaced but must be fitted in the original location.
- 16.3 The airbox drains must be sealed.

- 16.4 All motorcycles must have a closed breather system. All oil breather lines must be connected, may pass through an oil catch tank and must exclusively discharge in the airbox. Only the original breather vents may be used.
- 16.5 No heat protection may be attached to the airbox.

# 17. FUEL SUPPLY

- 17.1 Fuel pump and fuel pressure regulator must be the originally fitted and homologated parts with no modification allowed.
- 17.2 The fuel pressure must be as homologated.
- 17.3 Fuel lines from the fuel tank to the injectors (fuel hoses, delivery pipe assembly, joints, clamps, fuel canister) may be replaced and must be located in such a way that they are protected from crash damage.
- 17.4 Fuel level sensors may be removed or fixed in position.
- 17.5 Quick connectors or dry break connectors may be used.
- 17.6 Fuel vent lines may be replaced.
- 17.7 Fuel for all practices and races must comply with the ACU Specification as outlined in Section 1 of these Regulations.

# **18 EXHAUST SYSTEM**

18.1 Exhaust pipe and silencers may be altered or replaced from those fitted to the homologated motorcycle. The number of final exit(s) to the exhaust may be altered from that of the homologated machine.

## 19 ELECTRICS AND ELECTRONICS

- 19.1 The engine must start using the standard on board electric start.
- 19.2 The alternator may be modified or changed.
- 19.3 The original wiring harness may be modified or replaced.

- 19.4 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.
- **19.5** Data logging is permitted with no restriction on the number of logged channels. Telemetry (ie. ship to shore communications) is not permitted.

# 20 **GENERATOR, ALTERNATOR, ELECTRIC STARTER**

- 20.1 The generator (ACG) must be the originally fitted and homologated part with no modification allowed.
- 20.2 The alternator must be fitted in its original position and without offsetting.
- 20.3 The electric starter must operate normally and always be able to start the engine during the event.

# 21 FRAME AND SWING ARM

- 21.1 Frame must remain as originally produced by the manufacturer for the homologated machine. Surplus attachment brackets may be removed and replaced with those more suitable for race fairings, sub frame attachment, instrument brackets and rear sub frame may be removed, replaced, or modified.
- 21.2 Swing arm may be replaced by another provided it is from the same manufacturer and provided the original attachment to frame and rear suspension remains the same as the standard motorcycle. No bracing or strengthening is allowed. Chain adjusters / rear axle blocks may be modified or replaced.

For clarity and the avoidance of doubt:

Chain adjusters/rear axle blocks refer to the removable parts of the chain adjustment and axle assembly.

The swinging arm, in the area where the rear wheel axel is assembled is not considered to be a chain adjuster or rear axle block and as such may not be modified or replaced.

For clarity and the avoidance of doubt:

Any rear suspension linkage and/or tie rods (if fitted) are free, but their attachment points located on the main body of the swinging arm and main body of the chassis must remain as found on the standard machine.

Any removable footrest / auxiliary brackets that the swing arm pivot axle passes through are not considered to be part of the main frame and as such may be modified or replaced but their attachment points to the main frame must remain as found on the standard machine.

## 22 **SUSPENSION**

- 22.1 Participants in the Sportbike class must only use units from the MCRCB Authorised Parts List. The retail price limits (excluding taxes) are:
  - a. Fork: For the fork kit, including all parts such as but not limited to cartridge, adjusters, fork caps, blanking inserts, seals, bushes but excepting oil, springs and fitting the price limit is €1250 (£1085 GBP) 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 €1500 (£1300 GBP) excluding tax
  - 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 Authorised suspension products. The suspension manufacturers cannot demand a service contract for a customer or participant in order to obtain a suspension product.
  - f. No aftermarket or prototype electronically-controlled suspensions maybe used. If electronically controlled suspension is originally fitted to the machine it must be replaced by conventional parts.
  - g. Electronically controlled steering damper cannot be used if not installed in the homologated model for road use. If an electronics model is fitted to the homologated machine then it can be used however, it must be completely standard (any mechanical or electronic part must remain as homologated

#### 23 FRONT FORKS

#### **SPORTBIKE**

- 23.1 Forks must be the originally fitted and homologated parts with the following modifications allowed.
  - a. Only aftermarket damper kits or valves from the MCRCB Authorised Parts List may be installed.
  - b. Kits must be of an open cartridge design (no sealed/through rod/pressurised systems).
  - c. Fork springs may be modified or replaced.
  - d. 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.
  - e. The fork stroke will be a maximum of 125mm to the bump stop plus a maximum of 5mm bump stop stroke.
  - f. The fork kit manufacturer will be wholly responsible for ensuring the safe operation of the fork.
  - g. Dust seals may be modified, changed or removed if the fork is totally oilsealed.
  - h. The triple clamp assembly with fixed offset (Upper clamp, lower clamp and stem) must be the manufacturer designated assembly and listed on the MCRCB Authorised Parts list. The price limit for the complete assembly is €850 (£745GBP). No other options are allowed.
  - i. A steering damper may be added or replaced with an aftermarket damper.
  - j. The steering damper cannot act as a steering lock limiting device.

# **SUPERTWIN**

- k. Forks may be changed or modified.
- I. Fork yokes / triple clamp may be changed.
- m. Original internal parts of the fork may be modified or replaced.

- n. Aftermarket damper kits or valves may be installed.
- o. Fork springs may be replaced.
- p. Fork caps may be modified or replaced beyond the homologated standard to allow external adjustments.
- g. The use of carbon fibre for structural elements of the fork is not permitted.
- r. Steering damper may be added or changed. The addition of steering damper mounting lugs to the chassis by welding is permitted.

# 24 REAR SUSPENSION UNIT

# **SPORTBIKE**

- 24.1 Rear suspension unit (shock absorber) may be replaced with a unit from the MCRCB Authorised Parts List.
- 24.2 The original attachment points to the frame and rear fork (or linkage) must be as homologated.
- 24.3 The rear suspension linkage must be the manufacturer designated assembly and listed on the MCRCB Aurthorised Parts list. The linkage must have fixed geometry (non-adjustable). The price limit for the complete assembly is €550 (£485 GBP). No other options are allowed.
- 24.4 Removable top shock mounts must remain as homologated. A nut may be made captive on the top shock mount and shim spacers may be fitted behind it.

#### **SUPERTWIN**

Rear suspension unit can be changed or modified, but the original attachment to the frame and swing arm must remain as found on the standard machine.

# 25. WHEELS

### **SPORTBIKE**

- 25.1 Wheels must be the originally fitted and homologated parts with no modification allowed.
- 25.2 The wheels may be overpainted but the original finish cannot be removed.
- 25.3 A non-slip coating / treatment may be applied to the bead area of the rim.

- 25.4 If the original design included a cushion drive for the rear wheel, it must be the originally fitted and homologated parts with no modification allowed.
- 25.5 Wheel axles must be as homologated with no modification allowed. Axle cones are not allowed.
- 25.6 Axle nut may be replaced and be captive.
- 25.7 Wheel spacers can be modified or replaced.
- 25.8 Bearing spacers are free.
- 25.9 Wheel balance weights may be discarded, changed or added to.
- 25.10 Angled aluminium or steel inflation valves are compulsory.
- 25.11 The only allowed rim sizes are:

Wheels Size	
Front	3.5"
Rear	5.5"

In the case the machine is not fitted with the aforementioned sizes, a single alternative wheel will be agreed between the manufacture and the Technical Director. The inertia must be within 10% of the originally fitted wheel. The inertia must be within the range of homologated wheels in the other machines.

## **SUPERTWIN**

- 25.12 Wheels may be replaced. Carbon fibre or composite wheels are not permitted.
- 25.13 Wheel rim diameter and width are free.

# 26 BRAKES

# **SPORTBIKE**

- 26.1 Front and rear brake discs may be replaced with aftermarket brake discs that must fit the original calliper and mounting. The maximum outside diameter is 320mm. However, the offset, wheel mounting and the ventilation system must remain the same as on the homologated motorcycle. Internally ventilated discs are not allowed if not present on the homologated motorcycle.
- 26.2 The maximum thickness of the brake disc is 5.5mm

- 26.3 Only Steel (max. carbon content 2.1 wt%) is allowed for replacement brake discs.
- 26.4 Front brake callipers as well as all the mounting points and mounting hardware (mount, carrier, hanger) must be the originally fitted and homologated parts with no modification allowed. Spacers may be fitted between the caliper and fork lower to fit larger diameter discs. Caliper bolts must have correct length shanks.
- 26.5 Rear brake calipers must be the originally fitted and homologated parts with no modification allowed. The mounting points and carrier/hanger must remain as homologated but threaded holes may be made in the carrier/hanger to make the hanger captive connected to the chain adjusters.
- 26.6 In order to reduce the transfer of heat to the hydraulic fluid it is permitted to replace light alloy pistons with steel pistons kits made by the same manufacturer of the calliper and listed on the MCRCB Authorised Parts List.
- 26.7 The front brake master cylinder can be the originally fitted and homologated part with no modification allowed or may be replaced with a unit from the MCRCB Authorised Parts List. The retail price limit for the front master cylinder (including lever) is €250.
- 26.8 The brake lever design is free.
- 26.9 Front and rear hydraulic brake lines may be changed. The brake fluid reservoir may replaced and/or repositioned. Quick connectors may be used but only between the master cylinder and the brake hose split.
- 26.10 The split of the front brake lines for both front brake callipers must be made above the lower edge of the fork bridge (lower triple clamp). Brake line hose fittings (including banjo bolts) can only be Steel.
- 26.11 Front and rear brake pads may be changed. Brake pad locking pins may be modified for quick change type.
- 26.12 Additional air ducts are not allowed.
- 26.13 The ABS System must be removed.
- 26.14 Motorcycles must be equipped with brake lever protection, intended to protect handlebar brake lever from being accidentally activated in case of collision with another motorcycle. Composite guards are not permitted. Guards from the MCRCB Authorised Parts List will be permitted without regard to the material. The Technical Director has the right to refuse any guard not satisfying this safety purpose.

#### **SUPERTWIN**

- 26.15 Front and rear brake discs may be changed. Only ferrous materials are allowed for brake discs.
- 26.16 Front Brake and rear brake calipers maybe changed or modified.
- 26.17 Front and rear brake pads may be changed.
- 26.18 Front and rear master cylinders may be changed.
- 26.19 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 (bottom yoke).
- 26.20 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.
- 26.21 Any handbrake (scooter type) must be protected with a lever guard of the same type used for the front brake.

# 27 HANDLEBARS AND HAND CONTROLS

- 27.1 Handlebars may be replaced.
- 27.2 Handlebars and hand controls may be replaced and relocated.
- 27.3 Throttle controls must be self-closing when not held by the hand.
- 27.4 Only the Grip/Gas sensor listed in the MCRCB Authorised Parts list may be used.
- 27.5 Clutch assembly and brake lever may be replaced with an after-market model. An adjuster to the brake lever is allowed.
- 27.6 Switches may be changed but the electric starter switch and engine stop switch must be located on the handlebars.
- 27.7 Motorcycles must be equipped with a functional ignition kill switch or button mounted on the right hand handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine. The button or switch must be red.

#### 28 FOOT REST AND FOOT CONTROLS

- 28.1 Foot rests, hangers/brackets and hardware may be replaced and relocated but the hangers/brackets must be mounted to their original frame mounting points.
- 28.2 Foot controls; gear shift must remain operated manually by foot.
- 28.3 Foot rests may be rigidly mounted or a folding type which must incorporate a device to return hem to the normal position.
- 28.4 The end of the foot rest must have at least an 8 mm solid spherical radius.
- 28.5 Non folding footrests must have an end (plug) which is permanently fixed, made of aluminium, plastic, Teflon® or an equivalent type material (minimum radius 8mm). The plug surface must be designed to reach the widest possible area. The Technical Director has the right to refuse any plug not satisfying this safety purpose.

## 29 **FUEL TANK**

- 29.1 Fuel tank must be the originally fitted and homologated parts with no modification allowed.
- 29.2 All fuel tanks must be completely filled with fire retardant material (opencelled mesh, i.e. "Explosafe?").
- 29.3 Fuel tanks with tank breather pipes must be fitted with non-return valves that discharge into a catch tank with a minimum volume of 250 cc made of a suitable material.
- 29.4 Fuel caps may be changed. Fuel caps when closed, must be leak proof. Additionally, they must be securely locked to prevent accidental opening at any time.
- 29.5 If the tank has a filler 'neck' (tube) inside the tank that restricts its complete filling, then the neck may be removed or have vent holes drilled through it.
- 29.6 A rider spacer/pad may be fitted to the rear of the tank with non-permanent adhesive. It may be constructed of foam padding or composite material.
- 29.7 The tank may not have a cover fitted over it unless the homologated machine also features a full cover.
- 29.8 The sides of the fuel tank may be protected with a cover made of a composite material. These covers must fit the shape of the fuel tank.

29.9 Fuel tank cannot have heat reflective sheet attached to its bottom surface.

# 30 FAIRING / BODYWORK

- 30.1 Fairing, mudguards and body work must conform in principle to the homologated shape as originally produced by the manufacturer. The use of carbon fibre or Kevlar® materials is not allowed in fairing, fuel tank cover, seat, seat base and associated bodywork construction. Specific reinforcements in Kevlar® or carbon are allowed locally around holes and stressed areas. Headlights must be included even when considered external.
- 30.2 For all bodywork paint and decal design is free.
- 30.3 The fairing has a tolerance of +/-8mm from the original homologated road fairing, respecting the design and features of the homologated fairing and any articles below. The overall width of the frontal area may be +5mm maximum. In case modifications to the design are necessary to fit the purpose of racing then this must be agreed between the Manufacturer and the Technical Director and will apply to ALL machines of that model. In all cases the decision of the Technical Director is final.
- 30.4 Wind screen may be replaced.
- 30.5 Fairing brackets may be altered or replaced.
- 30.6 If fitted the ram-air intake must maintain the originally homologated shape and dimensions.
- 30.7 The original air ducts running between the fairing and the airbox may replaced by exact cosmetic replicas of the original parts If the part serves another function (ie Dash Mounting) then the airflow passage must retain the homologated internal shape and the part must be listed in the MCRCB Authorised Parts List. The material is free.
- 30.8. No ducting may be added to direct airflow towards the airbox if not fitted on the original machine. No other part may be modified to perform this purpose.
- 30.9 Particle grilles or "wire-meshes" originally installed in the openings for the air ducts may be removed. Flap valves systems may be removed. Air ducts cannot be added if they are not present on the original machine.
- 30.10 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 (min. 5 litres). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing.

- 30.11 The lower fairing must not have a drain hole.
- 30.12 Minimal changes are allowed in the fairing to allow clearance for protective engine covers.
- 30.13 Motorcycles may be equipped with a radiator shroud 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.
- 30.14 Front mudguard must conform in principle to the homologated shape originally produced by the manufacturer. Front mudguards may be replaced and the use of carbon fibre or Kevlar® composites are allowed.
- 30.15 Front mudguard may be spaced upward for increased tyre clearance.
- 30.16 Rear hugger type mudguards fixed on the swing-arm may be replaced with a cosmetic duplicates of the original part. The use of carbon fibre or Kevlar® ~ composites are allowed.
- 30.17 The chain guard may be removed as long as it is not incorporated in the rear hugger. If the chain guard is incorporated in the hugger then the chain guard section may be removed or modified to accommodate larger diameter rear sprockets.
- 30.18 The chain guard may be removed as long as it is not incorporated in the rear fender.
- 30.19 The existing rear mudguard under the seat may be removed.
- 30.20 In the event that the proposed machine is not fitted with a fairing, then a fairing from the manufacturers range may be used by agreement with the Technical Director. A bellypan is compulsory.

# 31 **SEAT**

- 31.1. Seat, seat base and associated bodywork may be replaced. The appearance from front, rear and profile must conform in principle to the homologated shape.
- 31.2 The top portion of the rear body work around the seat may be modified to a solo seat.
- 31.3 Same materials as fairing must be used

31.4 All exposed edges must be rounded.

#### 32 **FASTENERS**

- 32.1 Standard fasteners may be replaced with fasteners of any material and design but titanium fasteners cannot be used. The strength and design must be equal to or exceed the strength of the standard fastener.
- 32.2 Special steel fasteners may be used in structural locations, but the strength and design must be equal to or exceed the strength of the standard fastener it is replacing.
- 32.3 Aluminium fasteners may only be used in non-structural locations.
- 32.4 Fasteners may be drilled for safety wire, but intentional weight-saving modifications are not allowed.
- 32.5 Thread repair using inserts of different material such as helicoils and timeserts.
- 32.6 Fairing/bodywork fasteners may be changed to the quick disconnect type

#### 33 **SAFETY LIGHTS**

- 33.1 A functioning red light must be fitted at the rear of all machines. It must be switched on at all times when the machine is on course. Lights must comply with the following:
  - 33.1.1 Safety Light must be of a robust quality and securely fitted in the approved position.
  - 33.1.2 Lighting direction must be parallel to the machine centre line (motorcycle running direction), and be clearly visible from the rear at least 15 degrees to both left and right sides of the machine centre line.
  - 33.1.3 Mounted on the seat, approximately on the machine centre line in a position approved by the Chief Technical Officer.
  - 33.1.4 Power output/luminosity equivalent to approximately; 10 15W (incandescent) 0.6-1.8W (LED).
  - The Safety light must be hard wired into the machines power supply and must turn on when the machine ignition is energised.
  - In case of a dispute over the mounting position, visibility or suitability of the safety light, the decision of the Technical Director will be final.
  - 33.1.7 Machines not showing a functioning safety light will be black flagged and will not be permitted to continue.
- 33.2 See Appendix G, Fig. 2

# 34 THE FOLLOWING ITEMS MAY BE ALTERED OR REPLACED FROM THOSE FITTED ON THE HOMOLOGATED MOTORCYCLE

- 34.1 Any type of lubrication, brake or suspension fluid.
- 34.2 Bearings (ball, roller, taper, plain, etc.) of any type or brand may be used.
- 34.3 Gaskets and gasket materials (excepting head and base gaskets see Authorised parts list).

# 35 THE FOLLOWING ITEMS MUST BE REMOVED

35.1	Headlamp
35.2	Rear lamp and turn signal indicators
35.3	Rear view mirrors
35.4	Horn
35.5	Licence plate bracket
35.6	Tool box
35.7	Helmet hooks and luggage carrier hooks
35.8	Passenger foot rests
35.9	Passenger grab rails
35.10	Safety bars
35.11	Centre and side stands.