



## **2017 RACE REGULATIONS**

### **RACE DAYS:**

**Saturday 13<sup>th</sup> May**

**9.15 am – 9.00 pm**

**Thursday 11<sup>th</sup> May**

**5.15 pm – 9.00 pm**

### **PRACTICE DAYS:**

**Tuesday 9<sup>th</sup> May**

**9.15 am – 3.00 pm**

**Thursday 11<sup>th</sup> May**

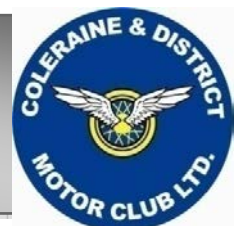
**9.15 am – 3.00 pm**

**VENUE: Portstewart, Coleraine & Portrush, Northern Ireland**



**Promoter:**

**Coleraine & District Motor Club Ltd**



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## 2017 International North West 200 Motor Cycle Road Race

### Supplementary Regulations

Official Permit issued by M.C.U.I. (U.C.) Ltd.: **001/17**

F.I.M. Permit No. **I.M.N 191/30**

<b>Event Director:</b>	Mervyn Whyte MBE
<b>Race Office:</b>	NW200, 48 Cloyfin Road, Coleraine, BT52 2NY
<b>Clerk of Course:</b>	Stanleigh Murray
<b>Event &amp; Operations Manager:</b>	Fergus Mackay
<b>Stewards</b>	
M.C.U.I. (U.C.) LTD:	David McAllister
M.C.U.I. (U.C.) LTD:	Ken Turner
M.C.I:	Thomas Bertram

### Representing Coleraine & District Motor Club Ltd

Evan Freeman, Kevin Hegarty, William Munnis

**Technical Stewards:** Howard Anderson, Colin Hurst and MCUI Team

**Rider Co-ordinator:** Steve Plater

### NAME OF EVENT

1. The Race is that known as the International North West “200”, and is promoted by Coleraine and District Motor Club Ltd., hereinafter called “the Promoters”. It will be held on the Portstewart, Coleraine, Portrush Circuit, on Saturday 13th May 2017. The starting time will be approximately 10.15 am. Roads close at 9.15 am. Racing will also take place on Thursday 11<sup>th</sup> May. Roads close at 5.15pm to 9.00pm. ***The road closing order now allows for flexibility to move practice or race days should there be adverse weather.***

The Race will be run under the International Competition Rules of the F.I.M. and the General Competition Rules of the Motor Cycle Union of Ireland and under permit and by virtue of an order of the Department for Regional Development, N. Ireland, and the Supplementary Regulations hereinafter contained.

## THE COURSE

2. The Course starts on the Portrush/Portstewart Road between Quarry Hill and Primrose Corner. Riders push on towards Portstewart, where they negotiate a hairpin bend at the York, along the Station Road, Cromore Road, turning left onto the link road to the roundabout, then along the Coleraine/Portrush Road to a left hand turn at the Metropole Corner and then along the Coast Road to the finish. **Length 8.970 miles/14.436 kilometers.**

## RACES TO BE RUN

Superbike Races	Two races for Superbike machines. 4 stroke 3 & 4 cylinder over 750cc to 1000cc 4 stroke 2 cylinders over 850cc to 1200cc 7 laps each race – see FIM Superbike Regulations.
Supersport Races	Two races for Supersport machines. Over 400cc – 600cc 4 cylinder 4 stroke machines. Over 500cc – 675cc 3 cylinder 4 stroke machines. Over 600cc – 750cc 2 cylinder 4 stroke machines. 6 laps each race – See FIM Superport Regulations.
Superstock Races	Two races for Superstock machines. 3 / 4 cylinder and over 750cc 2 cylinder 4 stroke machines. 6 laps each race – See FIM Superstock Regulations.
Supertwin Races	Two races for Supertwin machines. 4 laps each race – See Supertwin Regulations.

### **Note – Machine model must be on the FIM Homologation list for 2017**

Please note: Competitors using a Superstock machine for the Superstock race plus the two Superbike races must confirm at signing on that they are using a machine conforming to Superstock regulations as a dual entry in both the Superstock and Superbike classes.

## RIDER ELIGIBILITY

3. Riders: In order to be eligible to enter this event all riders must be in possession of a 2017 FIM International Non Championship licence for Road Racing. MCUI riders require a 'Super A Licence'.

## 4. REFUSAL OF ENTRIES

The promoters reserve the right to refuse any entry, or the nomination of any rider without assigning any reason for such refusal.

## ENTRY INFORMATION

5. Applications for entry must be made on the official entry form and *Returned not later than Thursday 23rd March 2017*. **Entries received after this date will not be included.**

Entry forms can be downloaded from [www.northwest200.org](http://www.northwest200.org)

**Return Entries to:** North West 200, 48 Cloyfin Road, Coleraine, BT52 2NY

Tel: (+44) 028 7035 5800 or email: [info@northwest200.org](mailto:info@northwest200.org)

The promoters will select from the applications received, up to 60 solo entries, for each race. Unless 30 applications are received for any one race, that race may be cancelled.

A maximum of 60 riders will be allowed to start the race and allocation will be as follows:  
The first 25 who finished in the same class the previous year will be given automatic entry.  
A further remaining 20 places will be drawn from a ballot with up to 15 places going to new comers.

No entry fees are required.

Applicants will be advised as soon as possible in writing after the closing date of 24<sup>th</sup> March 2017, whether they have been accepted or not.

All overseas entries (including ACU/SACU) will only be permitted to start on production of Start Permission from their own FMN prior to the start of the event.

*Newcomers are only eligible to compete in a maximum of three races per day and regulars a maximum of five races per day.*

## TRANSPONDER TIMING SYSTEMS - Transponders are compulsory.

6. Each competitor must have a separate transponder fitted to each machine. Two machines used in one practice session must have separate transponders. It is the responsibility of each competitor to provide and properly fit a fully charged transponder to his/her machine(s) at his/her own expense. The transponder identification number (usually a seven digit number) must be included on the entry form so that the database can be set up in advance of the event.

A Mylaps transponder timing system is in use. Compatible transponders are:

- Mylaps X2 Car/Bike transponder (with red band)
- Mylaps Car/Bike transponder (coloured red)
- Mylaps TranX260

## **INSURANCE: ACCIDENT & REPATRIATION**

7. During the meeting and official practice, the minimum compulsory insurance cover for all drivers, other than MCUI licence holders, according to the FIM Code are as follows:

In case of Permanent Disability	EUR 50,000
In case of Death	EUR 25,000
For Medical Treatment	EUR 10,000
Repatriation	EUR 4,000

The competitor must have written Start Permission from their FMN to this effect.

For MCUI licence holders, personal accident cover for the following minimum benefit is required:

Death	£10,000
Permanent Total Disability	£20,000

These insurance benefits can be effected in the Race Office at signing on.

Any enquiries should be directed to:

**Alan Carlisle**

**Willis Ltd**

**Floor 3 Centrepoint**

**24 Ormeau Avenue**

**Belfast**

**BT2 8HS**

**Tel: 028 9089 5229 Mob: 0779 865 5944**

**Email: [alan.carlisle@willistowerswatson.com](mailto:alan.carlisle@willistowerswatson.com)**

**Web: [www.willis.com](http://www.willis.com)**

**SIGNING ON / BRIEFING – Compulsory to all competitors**

8. **All competitors** must sign on at the Race Office at the following times:

**Regulars** Monday 8<sup>th</sup> May: 1100 – 1630 hrs

**Newcomers** Monday 8<sup>th</sup> May: 1000 – 1200 hrs

A declaration must be signed by each competitor, confirming that they have not sustained injury or consulted with a doctor regarding any injury or illness since the issue of their 2017 International Licence. This declaration will also confirm that the competitor is fully acquainted with all regulations and instructions issued.

A rider with concussion must therefore be removed from competition from the rest of the event and not permitted to return to competition for a minimum period stated below:

<b>Age</b>	<b>Minimum Period of Exclusion from Racing</b>
20 years and over	Excluded immediately for 48 hours, with a further minimum 7 days suspension  From competition (i.e minimum 9 days)
16 – 19 years	12 Days
15 years and under	23 Days

Newcomers are required to wear an orange bib throughout both practice days. The bibs are to be collected from the Race Office when signing on, at a cost of £6.00. The £6.00 will be refunded after the practice sessions if the bib is returned. There is no requirement to wear the Newcomers bib during racing on Thursday evening or Saturday.

**TEAM/COMPETITORS BRIEFINGS: Compulsory**

All competitors / team managers must attend a briefing prior to team/competitor being permitted to commence practice as detailed below.

<b>Briefing Date:</b>	Monday 8 <sup>th</sup> May
<b>Briefing Location:</b>	Hospitality Marquee, Paddock
<b>Newcomers:</b>	1200hrs, followed by coach tour of the circuit with experienced instructors.
<b>Team Managers:</b>	1530hrs.
<b>Regulars:</b>	1600hrs.

**Passes Please note:** Competitors will be provided with two passes.  
Team Managers will be assigned the remainder of passes (4)

## COMPETITOR/TEAM COMPLIANCE

Random alcohol testing will be carried out with 0.10g/l tolerance (reading g10).

Drug testing may also be carried out.

No motorcycles may be ridden through the paddock or tunnel area. Anyone found not obeying this may be excluded from the event.

The Paddock operates a one way system and all vehicles exiting the paddock should depart through the gate below the bungalow.

## SCRUTINEERING OF RACE CLOTHING & HELMETS

All race clothing and helmets are required to be inspected at scrutineering. Any helmet that has been involved in an accident will be permanently marked and cannot be used.

## TECHNICAL INSPECTION

<b>9. NUMBER PLATES:</b>	SUPERBIKE:	White background with Black numbers
	SUPERSPORT:	White background with Blue numbers or Blue background with White numbers
	SUPERSTOCK:	Red background with White numbers
	SUPERTWIN:	Green background with White numbers

Each machine must display one front and two side number plates for practice and races.

## PRE-RACE EXAMINATION

All machines bearing the correct number plates must pass through the scrutineering bay for inspection/approval prior to practice, during the times listed. Machines will not be approved if their appearance is not appropriate to the status of the event.

Please note technical inspection cards **MUST** be signed in **PRINT** form by the competitor / authorised team member and the relevant scrutineer.

## PRE-RACE EXAMINATION TIMES

Competitors must ensure that their machines are presented;

Tuesday 9<sup>th</sup>, Thursday 11<sup>th</sup> & Saturday 13<sup>th</sup> May: 0715 – 0900 hours

Competitors must report to the scrutineering marquee between the times stated below.

### **Tuesday 9<sup>th</sup> May 0715 – 0900**

0715 – 0730	Newcomers Only
0730 - 0755	Superport Machines
0755 - 0820	Superbike Machines
0820 – 0840	Supertwin Machines
0840 – 0900	Superstock Machines



**Thursday 11<sup>th</sup> May 0730 – 0900**

0730 – 0750	Supertwin Machines
0750 – 0810	Superstock Machines
0810 – 0835	Supersport Machines
0835 – 0900	Superbike Machines

**Saturday 13<sup>th</sup> May 0730 – 0900**

0730 – 0755	Supersport Machines
0755 – 0820	Superbike Machines
0820 – 0840	Supertwin Machines
0840 – 0900	Superstock Machines

Scrutineering will finish 15 minutes prior to the start of practice and 30 minutes prior to racing, there will be no exceptions. Machines must be ready to race. All oil drain plugs must be lock-wired in position and oil pipes secured and wire locked to their machines. The completed pre-race examination forms must be handed over to the scrutineers.

**POST RACE EXAMINATION**

The top 3 placed machines will be checked and a further 3 machines picked at random to have a verification check.

**VERIFICATION OF THE MACHINES**

Every motorcycle entered must conform to the requirements of the FIM Technical Code.

The promoters reserve the right to examine any motorcycle that has started in a practice or race, and for this purpose to retain it in official custody. Any necessary dismantling of motorcycles required shall be carried out under instructions by an accredited representative of the competitor / entrant.

The Promoters may also require any motorcycle to be stripped, examined and retained for as long as is deemed necessary following an accident, in either practice or races.

Any competing motorcycle left unattended in the pit or scrutineering area after taking part in a race may be taken charge of by the Promoters, who disclaim all responsibility for any competing motorcycle. All costs relating to the verification of machines are to be met by the competitor / entrant.

**CHANGE OF RIDER**

The same rider shall take part in the entire race. If before the race the entrant desires to change the rider, he shall make application to the Clerk of Course in writing not less than one hour before the race is due to start. Every rider shall be fully qualified, as laid down in these Regulations. In the event of a change of rider the replacement rider will be allocated a new riding number.

## **CHANGE OF MOTORCYCLE**

An entrant wishing to change the make or type of motorcycle, after entries have closed must apply to the Race Office for approval by the Clerk of Course, not later than 1400 hours on the day preceding the race. The competitor must have qualified on the make, type and capacity of the machine to be raced.

## **BODYWORK/FAIRINGS**

For all 4 stroke machines 400cc and over the following rule will apply:

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 motorcycle, (minimum 5 litres). The inside of the lower fairing must be fitted with an oil absorbent and fire retardant material. Alternatively, a sub sump fitted between the crankcase and the lower fairing is permitted and minimum modifications with relation to the profile of the lower fairing is permitted and minimum modifications with relation to the profile of the lower fairing are allowed, only to fulfil this rule. For safety reasons it is compulsory to use a chain guard fitted in such a way as to prevent trapping between the lower chain run and the final drive sprocket at the rear wheel.

## **FUEL**

Fuel for all practices and races must conform to FIM requirement which are as follows:

Fuel for all practices and races only **UNLEADED** fuel with a maximum lead content of 5.0mg/l and a max RON number of 102 and a max MON number of 90 (see F.I.M. Technical regulation 2.7.1.2 fuel specification)

These regulations strictly prohibit the use of 'Bluegas', power boosters, octane boosters and the like off. No additions are allowed to the fuel with the exception of water or standard lubricants sold to the public.

**The responsibility for providing fuel for practice and races rests with the competitor.**

In the practice or races, no fuel shall be carried on the motorcycle or by the rider otherwise than in the tank(s) securely fitted to the motorcycle for the purpose. No smoking or open flames in are permitted in the areas of fuel storage or during refuelling.

The promoters reserve the right at any time before, during or immediately after racing to take samples of the fuel used. Fuel is required to be stored in a well ventilated area. Only approved fuel storage containers to be used

## **REFUELLING**

Refuelling during the progress of any race must be carried out at the competitors designated pit. It is forbidden to open tank filler caps until the machine is stationary at its allocated pit and the engine is switched off. Penalty may be exclusion. Suitable and correct fire extinguishers to be used at all times.

## **FIRE EXTINGUISHERS**

All competitors' vehicles must carry a fire extinguisher with a current and valid inspection certificate. The recommended type is a 2kg extinguisher which must bear a current inspection stamp.

## FLAG SIGNALS

10. The following flag signals may be authorised by the Promoters during practice or races and must be immediately obeyed by competitors. Only authorised officials are permitted to use flags. No other flag signals of any kind are permitted. Only the Clerk of Course can authorize a race to be stopped.

The Clerk of Course may exclude a competitor, who breaks the rules, from the meeting or refer the matter to the Stewards of the meeting.

**National Flag:** Starting Flag

**Red Flag:** The use of the RED FLAG/RED LIGHTS indicates that racing or practice has been stopped.

**Overtaking is forbidden.** *Riders must slow down and may be instructed to return to the starting grid or paddock, as decided by the Clerk of Course (COC). A rider may raise his/her hand to acknowledge a red flag.*

*At the time when a red flag is displayed, competitors who are not actively competing in the race will not be classified in the results.*

**YELLOW FLAG held motionless or Steady Yellow Light.** The yellow flag held motionless or a steady yellow light is a direct instruction to the rider to **slow down. Overtaking is forbidden.** Should a rider inadvertently gain a position (i.e. A preceding rider slows at a faster rate), once it is safe to do so, (s) he should return to the original position and may raise his/her hand to indicate same.

**YELLOW FLAG waved or a flashing yellow light** is a direct instruction to the rider **Slow Down and Prepare to stop, Overtaking is forbidden.** Should a rider inadvertently gain a position (i.e. A preceding rider slows at a faster rate), once it is safe to do so, (s) he should return to the original position and may raise his/her hand to indicate same.

**WHITE FLAG:** Slow moving vehicle on track - no overtaking

**YELLOW FLAG with Red Stripes:** Deterioration of adhesion of the track. Warning of slippery surface.

**BLACK FLAG.** Informs the driver of the motorcycle, the number on a signalling board of which is shown, that he/she must stop with the utmost care and attention. The rider must report to COC.

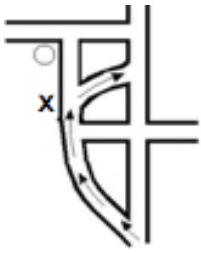
**YELLOW FLAG WITH DIAGONAL BLACK CROSS:** Last Lap Flag.

**BLACK AND WHITE CHEQUERED FLAG:** Waved at finish line to indicate finish of race or practice session

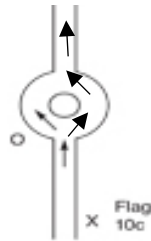
**BLACK FLAG WITH ORANGE CIRCLE AND RIDER'S NUMBER:** will be operated at 4 points on the course.

**GREEN FLAG:** The track is clear. This flag will be shown waved by the starter to signal the start of the sighting lap. This flag will be shown motionless at each flag marshal post for the first lap of each practice session and sighting lap

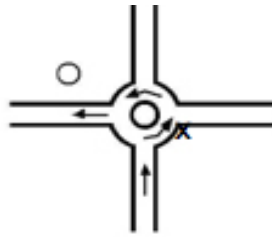
**1. START**



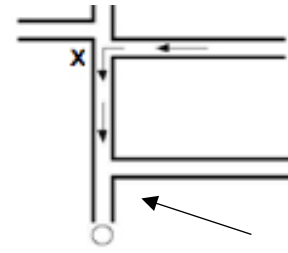
**2. MILL ROAD ROUNDABOUT**



**3. BALLYALLY ROUNDABOUT**



**4. METROPOLE**



If you are 'black-flagged' at X, proceed to O, stop machine here, where machine will be checked. If you are allowed to proceed, you will be credited with your previous lap time.

**11. OVERTSHOOTING AT THE CHICANES**

If you overshoot at either Mathers, Magherabuoy or Juniper chicanes, you **MUST** proceed to the end, stop and put your foot in the stop box. Under **NO** circumstances must you turn and rejoin the course where you left it.

*Please note a **penalty of 10 seconds** will be added to your time if you do not stop and place your foot in the stop.*

**PULLING INTO PITS**

If you are pulling into the pits keep to the right hand side on the approach to the finish chicane and proceed down into the pits, stopping at the stop box before entering pit lane.

When leaving the pits proceed to the marshal at the end of the pit lane who will permit you to rejoin the course when safe to do so.

**OVERTSHOOTING FINISH CHICANE ON LAST LAP**

If you should overshoot the entrance to the finish chicane on the **last lap**, proceed to the red flag and stop. 10 seconds will be added to your last lap time.

**FAILURE TO OBSERVE ANY OF THE ABOVE MAY RESULT IN EXCLUSION FROM THE RESULTS OR PRACTICE TIME**

**ANY COMPETITOR WHO JUMPS THE START OF THE RACE OR MOVES FORWARD FROM THE STARTING BOX WILL BE PENALISED MINIMUM OF 5 SECONDS IF CLERK OF COURSE DEEMS AN ADVANTAGE GAINED.**

## WET AND DRY RACES

12. All races will be categorised as either “Wet” or “Dry”. If the race is categorised as “Wet” a wet race board will be displayed on the grid. If no board is displayed the race will automatically be classified as “Dry”. The purpose of the classification is to indicate to riders the consequences of varying climatic conditions during a race.

**“DRY” RACE:** A race classified as “Dry” will be interrupted by the Clerk of Course if he considers climatic conditions affecting the surface of the track make it likely that competitors may wish to change tyres.

**“WET” RACE:** A race classified as “Wet” usually commencing in varying or wet conditions **will not be stopped for climatic reasons, unless deemed by the Event Director/Clerk of Course** and competitors who wish to change tyres must enter the pit stop area and do so during the actual race.

In all cases where the first race is stopped for climatic reasons, then the restart will automatically be a “Wet” race.

## OFFICIAL PRACTICE

### 13. GENERAL

The practice sessions will be strictly adhered to, and only in exceptional circumstances will the Clerk of the Course consider any alteration.

The roads will be closed for official practice on TUESDAY 9<sup>th</sup> and THURSDAY 11<sup>th</sup> May 2017, from 0915 until 1500 hrs by virtue of an Order of the Department for Regional Development for Northern Ireland.

**ALL COMPETITORS UNDER PENALTY OR EXCLUSION FROM THE RACE, MUST NOT TAKE PART IN OFFICIAL PRACTISE. UNDER NO CIRCUMSTANCES MAY A COMPETITOR MAKE USE OF A MACHINE WHICH IS NOT THE MACHINE DECLARED ON ENTRY FORM FOR THAT COMPETITOR WITHOUT FIRST OBTAINING THE SANCTION OF THE CLERK OF THE COURSE.**

**IT IS COMPULSORY FOR ALL COMPETITORS TO PRACTICE BOTH DAYS TUESDAY 9<sup>TH</sup> & THURSDAY 11<sup>TH</sup> May.**

**INFORMATION REGARDING RETIREMENTS DURING PRACTICE WILL BE AVAILABLE FROM THE MONITORS AT START AREA.**

## QUALIFICATION

14. Practicing, which will be regulated and supervised by the Promoters, will take place on Tuesday 9<sup>TH</sup> May and Thursday 11<sup>th</sup> May 09.15 to 1500hrs.

**PLEASE NOTE:** Each competitor will be required to complete not less than two laps of the course at a minimum average speed equal to at least 85% of the average speed attained by the fastest six riders in that class.

**IN ADDITION A COMPETITOR ENTERING FOR THE FIRST TIME IN CURRENT PRACTISING PERIODS **MUST COMPLETE 6 LAPS**, TWO OF WHICH MUST BE AT THE STIPULATED**

### **QUALIFYING SPEED BEFORE COMPETITOR SHALL BE PERMITTED TO START.**

Competitors failing to attain qualifying speeds will only be permitted to take part in the race at the discretion of the Stewards, who will consider any appeal made to them. A rider has the right to appeal to the Stewards of the meeting, through the Clerk of the Course, against any decision regarding eligibility to partake. Any driver taking part in practice on a machine other than his actual race machine must obtain permission from the Clerk of the Course. Penalty for failure to do so may be exclusion from the race.

**Please Note:** If either practice session/class are pronounced wet then qualifying will revert to selecting alternatively i.e Tuesday Dry 1st, Thursday Wet 2nd, 3rd Dry, 4th Wet etc

### **FALLEN RIDERS**

Once a rider has fallen from their machine they are not permitted to remount or continue racing or qualifying. The machine has to be checked and passed by a Scrutineer before the rider can continue in the meeting.

Please note - In the event of an incident machines involved in the incident should not be ridden back to the Paddock - No exceptions. Should this happen a penalty will occur.

### **RACE PROCEDURE**

15. In exceptional circumstances, the start of any race may be officially delayed, reduced in the number of laps and if necessary postponed.

**Any riding deemed to be aggressive, will be dealt with severely by the organisers and could mean exclusion from the event!!**

### **START PRELIMINARIES**

After all riders return from their sighting lap a three minute countdown to the start of the race will begin. The start of the race is signalled by use of a start light system. Classes will be started in two or three groups at 30 second intervals. (The number of groups depends on the number of starters).

### **START PROCEDURE**

All races will be clutch start. Lights will be used to start each race. Procedure as follows:

The starter after showing the 30 second board will move off the grid. As soon as the starter has exited the grid the block of five red lights will come on, within two to five seconds the block of red lights will go out. This signifies the start of the race. In case of start light failure the national flag will be used.

### **PIT / GRID AREA**

**Each competitor is permitted up to three attendants and one time keeper.** Attendants must at all times obey official instructions. If an attendant fails to obey such instructions or commits any breach of regulations, his competitor may be held responsible and penalized.

**Only a maximum of three team personnel are allowed onto the grid once competitors return to the grid after their sighting lap.**

Attendants must remain in the pit allotted to them, except when their competitor is at the pit, when they both may assist and carry out replacement repairs, only using the spares previously deposited in the pit. The time keeper must only signal from the signalling bay beyond the start line on the right hand side.

Access to the signalling bay is via the rear of the grandstand situated on the coast side.

### **PIT AREA**

One attendant must remain in the pit area at all times, whilst their rider is competing, to receive messages. Footwear worn by attendants must not carry any studs, steel tips, etc.

If electrically operated equipment is required in the pit area, it must be spark proof and intrinsically safe in every respect. Spare batteries must be protected.

Smoking is strictly forbidden in the Paddock and Pit Lane areas.

All classes will have one sighting lap. It is mandatory for all competitors to complete the sighting lap.

### **PIT STOPS DURING RACING**

All competitors must stop at the entrance to the pit lane before proceeding to their pit, and must place a foot on the ground. After stopping, competitors must then proceed with caution, giving right of way to competitors leaving their pits.

### **PROTESTS**

16. Protests may be made and must be in accordance with the FIM Code, and accompanied by a fee of £100. In addition if it involves the dismantling of an engine, then a deposit of £250 is required. In the event of the protest being UPHeld the deposit will be returned. If the protest is unsuccessful, the deposit will be awarded to the winning party and will be the only cost claimable. For the purpose of this regulation “the time of publication of results” will be deemed to be 30 minutes after the first competitor to finish the race.

All protests must be submitted and signed only by the person directly concerned. Each protest must refer to a single subject only and must be presented within 30 minutes of the finish of the race. During a meeting, protests must be submitted according to the provisions of the Supplementary Regulations and handed to the official in charge (Clerk of Course).

### **GARLANDING CEREMONY**

17. Riders finishing first, second and third in each race will be required to take part in a short ceremony to be held at the Rostrum to acclaim and garland the winners.

### **RESULTS**

18. The Promoters shall make such public announcements of the progress of each rider during the race as may be practicable, and shall announce provisional results immediately the race has finished. A report of the final results of the Race will be published. Any protest against any irregularity or mistake occurring during the Race shall be lodged within 30 minutes of the finish of the race.

### **VIDEO RECORDING OF RACES BY RIDERS**

19. **Only competitors authorised by the Clerk of the Course will be permitted to film from on board cameras.**

**Applications must be made in writing to the Clerk of the Course.**

Where such approval is granted, the installation of the camera and associated equipment is further subject to approval of the Chief Scrutineer.

### **VEHICLE RECOVERY SERVICE**

20. A recovery service will operate after completion of practice and each race. Any machines collected will be returned to the bottom paddock gate (Portstewart side of the bungalow). The Promoters will not accept any responsibility for any damage to any machine.

### **MACHINES WILL NOT BE COLLECTED BETWEEN PRACTICE SESSIONS: ONLY COMPETITORS**

### **ACCEPTANCE OF RECORDS**

21. Entrants and competitors must accept the official records of the Promoters, which may be published as the Promoters think fit, and also agree not to publish, or allow to be published, on their behalf, any inaccurate, misleading or premature advertisement in connection with these races.

### **GENERAL**

22. Every entrant and every driver by being entered thereby acknowledges that he is bound by the I.S.C. of the F.I.M. and G.C.R. and standing regulations of the M.C.U.I. and these Supplementary Regulations, to all of which he undertakes to submit, and renounces any right to have recourse to arbitration or tribunal not provided for in the said rules or regulations.

### **INTERPRETATION OF REGULATIONS**

23. The interpretation of these regulations, and of any to be hereafter published or issued and the infliction of any penalties for breach of the same, shall rest entirely with the Stewards of the Meeting. If any dispute shall arise in connection with the said regulations, or in connection with the race, the decision of the Stewards of the Meeting shall be final and binding, except so far as is otherwise provided under the International Sporting Code of the FIM and the General Competition Rules of the Motor Cycle Union of Ireland.

### **BREACH OF REGULATIONS**

24. The Clerk of Course subject to confirmation by the Stewards, is empowered to levy a fine and/or impose a time penalty, where applicable, for breaches of the regulations, where no other penalty is specified.

### **POSTPONEMENTS**

25. The Promoters have the right to postpone the race or practice, should any circumstances arise which, in their opinion; render such a course necessary or desirable.

### **LIABILITY FOR DAMAGE TO MOTOR CYCLE**

It is one of the conditions upon which entries for the race and/or practice will be accepted by the Promoters that the Promoters will not be responsible for any damage that may be done to or by any motorcycle entered for the race and/or practice, or for the theft of the motorcycle or any of its accessories or appurtenances during the said periods

### **LIABILITY FOR DAMAGE BY ENTRANT**

26. The entrant of any motorcycle in the race and/or practice may be held liable for any damage caused by him or his driver, servant, agent or representative during the course of or in connection with the race and/or practice.



### **INSTRUCTIONS TO COMPETITORS**

27. The Promoters may issue mandatory instructions to competitors. These instructions shall, however, amplify only, and shall not modify, these Supplementary Regulations.

An official notice board shall be displayed at the “Sign On” Area and within the Paddock. Every competitor shall be deemed to have made himself cognisant with any notice displayed thereof and if applicable such notices shall have the force of these regulations and shall be binding upon all competitors.

### **INDEMNIFICATION OF THE FIM, M.C.U.I. AND PROMOTERS**

28. An entrant by entering and a rider or mechanic by taking part in these races agree to save harmless and keep indemnified the FIM, M.C.U.I. and Promoters and their respective officials, servants, representatives and agents, or any person concerned with the conduct, promotion or management of the event including other entrants, riders or mechanics, from and against all actions, costs and expenses, claims and demands in respect of death, injury, loss or damage to the person or property of the entrant, rider or mechanic, as the case may be, howsoever caused or arising out of, in connection with the entrant’s and/or rider’s and/or mechanic’s participating in this meeting, notwithstanding that the same may have been contributed to or occasioned by the negligence of the aforesaid FIM, M.C.U.I. and Promoters, their officials, servants, representatives or agents or other person concerned with the event.

### **RETAILING**

29. Teams and Competitors are not permitted to retail any goods or services within the Paddock area during the North West 200 Race week; this includes merchandise of any kind UNLESS permission is sought from the Event Director.

### **PRIVATE CARS & VEHICLE PARKING**

30. Private cars & vehicles are not permitted into any area of the Paddock other than the Teams and Competitors Car Park. This car park is situated behind the competitors paddock and can be accessed via the laneway that runs parallel with the paddock. The vehicle (s) must display a team and Competitors Car park vehicle pass to gain access to this area.

### **FIRE POINTS / HYDRANTS**

31. Fire Points / Hydrants are located within the Paddock area. All team personnel must be familiar with their location.

### **GENERATORS**

32. Generators must be placed in a safe working area. All cables used for generators or the electric supply, must be covered by the proprietors cable protector at all times. The use of generator should be kept to a minimum during night time hours.

33. **ELECTRICAL SUPPLY**

Under no circumstances should anyone interfere with the electric supply from the power boxes within the Paddock.

If an electric supply fails please contact the Paddock Manager, Jim Fleming on 07730957100 or [jfleming.northwest200@gmail.com](mailto:jfleming.northwest200@gmail.com) Equipment which is installed or used outside should be of suitable weatherproof construction and needs to be protected from mechanical damage e.g. cables which are likely to be driven over by vehicles. A minimum standard of at least IP55 is required.

### **RUBBISH REMOVAL**

34. All Competitors and Teams are responsible for removal of rubbish, old tyres etc. Bins are provided for disposal of bin bags.

### **PADDOCK TRAFFIC**

35. A one way traffic system will be in operation within the Paddock. All vehicles exiting paddock should depart through the gate at the bungalow.  
It has been designed for the smooth and safe transition of all vehicle movements. A 5mph speed limit exists at all times. At no time should any vehicle block an entrance or exit.  
No race machinery to be rode through the paddock.  
Anyone found not obeying these rules may be excluded or have their rider excluded from the event.

Signed for and on behalf of by order of Coleraine & District Motor Club Ltd:

Event Director  
Mr. Mervyn Whyte MBE NW200  
48 Cloyfin Road  
Coleraine  
Co. L/Derry  
BT52 2NY

Telephone: 028 7035 4499  
Email: [mervyn@northwest200.org](mailto:mervyn@northwest200.org)

## **Supertwin Technical Regulations**

**Everything that is not authorised and prescribed in this rule is strictly forbidden.**

Any four-stroke twin cylinder motorcycle originally sold for road use with a water cooled engine of up to 650cc may be used provided it adheres to the following regulations. Eligible machines must be from models homologated 2007 or later.

### **REAR SAFETY LIGHT:**

**All motorcycles must have a Functioning Red Light mounted at the rear of the seat to be used during wet races or in low visibility conditions as declared by Clerk of Course.**

**The rear safety light must comply with the following;**

- a) The lighting direction must be parallel to the centre line of the motor cycle (running direction) and must be clearly visible from the rear, at least 15 degrees to both the right and left sides of the centre line of the motorcycle.
- b) It must be safely mounted on the very end of the seat/rear bodywork and approximately on the centre line of the motorcycle. In case of dispute over the mounting position of or visibility of the Rear Safety Light, the decision of the Technical Steward or Scrutineer will be final.
- c) The power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
- d) The light must be able to be switched on and off.

### **HANDLE BAR LEVERS:**

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

#### **1. Frame and Swing Arm:**

- 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 frames attachment & instrument brackets. Rear sub frame may be replaced or modified. Swing arm may be replaced from a model of the same Manufacturer, provided the original attachment to frame and rear suspension remains as homologated. No bracing or strengthening is allowed.

#### **2. Suspension:**

- Forks may be changed or modified. Fork yokes/triple clamp may be changed. Original internal parts of the fork may be modified or replaced. Aftermarket damper kits or valves may be installed. Fork springs may be replaced. Fork caps may be modified or replaced beyond the homologated standard to allow external adjustments. Steering damper may be added or changed.
- Rear suspension unit can be changed or modified, but the original attachment to the frame and swing arm must remain as homologated.

### 3. Brakes:

- Front and rear brake discs may be changed. Only ferrous materials are allowed for brake discs.
- Front and rear brake calipers may be changed. Front and rear brake pads may be changed.
- Front and rear master cylinders may be changed.
- 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).

### 4. Wheels and Tyres:

- Wheels may be replaced. Magnesium, Carbon fibre or composite wheels are not permitted. All tyres must be moulded treaded type. Slick or cut tyres are not permitted.
- Tyres - After consultation with the MCUI Technical Committee regarding the 2017 tyre regulations for race classes that call for a treaded tyre that state *“All tyres must be moulded treaded type. Slick or cut tyres are not permitted.”* Michelin Tyre PLC are in agreement with the MCUI that while the Power Supermoto tyres are clearly a treaded tyre, and are not a cut slick, they do not comply with the FIM stated definition of treaded dry weather tyres which reads: *“Tyres V or Z rating must be used. Only tyres on general sale to the public as road legal fitments will be permitted. The depth of the tyre tread must be at least 2.5 mm, over the whole tyre tread (pattern) width, at pre-race control. The tyre must have an “E” mark and/or DOT (American Department of Transportation) approval and the DOT number must appear on the tyre sidewall.”*

While fully accepting that the current Power Supermoto tyres do not qualify for use in such cases, in the interests of clarity for competitors, officials and manufacturers, Michelin would like to request that at the first opportunity the regulations are amended to give the full and clear FIM definition for dry weather tyres. Michelin would also like to point out that they do now have a fully compliant tyre suitable for short circuit and road circuit racing which includes sizes previously only available in a Power Supermoto tyre. The Michelin Power RS tyres are a new range of tyres for 2017 which are available now. Michelin would like to thank the MCUI for involvement in this discussion, and look forward to a continued good working relationship through 2017 and beyond. **Dated 28/02/2017**

### 5. Controls:

- Footrest and foot controls may be replaced or relocated but brackets must be mounted to the frame at the original mounting points.
- 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.

### 6. Bodywork, tank, fairing and seat unit:

- Fairing, mudguards and seat unit may be altered or replaced.
- Windscreen, if fitted, may be replaced with transparent material only.
- The original instruments and fairing brackets may be removed, replaced or added to.
- The petrol 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, the fuel tank breather must vent via a non-return valve into a catch tank with a minimum capacity of 250cc. This must be visible so it can be checked at Technical checks
- The position of the tank mounting points on the frame must remain as standard. 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.

#### 7. **Battery:**

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

#### 8. **Engine:**

- Bore and Stroke must remain as per the standard machine
- Original OEM cylinder head, rods, pistons, valves, cylinders may be modified, polished or lightened. Gas flow modifications normally associated with individual tuning is permitted. Compression ratio of the engine maybe changed. Capacity must not exceed 650cc. Pistons may be replaced. Con rods may be modified or replaced but the material must be as homologated and the rods must be the same weight or heavier than standard. Crankshaft must remain as homologated. Camshaft timing may be changed by the slotting of cam sprockets or by pressing on at a different timing. Cam lift and dwell is free. Throttle bodies may be changed, bored out or polished Engine fuel/ignition ECU must remain as per the homologate machine. The addition of a fueling only “power commander type device plugged into the existing wiring loom is permitted. The maximum rpm of the stock machine must be retained. Machines will be tested on the Dyno during practice and selected machines post-race.
- 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 material, such as aluminum alloy, stainless steel, steel, titanium or composite materials.
- Plates or crash bars made from aluminum or steel are also permitted all these covers must be fixed properly and securely

#### 9. **Transmission:**

- Gearbox may be changed or modified
- Additions to the gearbox or selector mechanism, such as quick shift systems are permitted.
- Clutch springs, friction and drive plates may be replaced.
- The use of slipper clutches is permitted.
- Front and rear external drive sprockets, chain pitch, width and length can be changed.
- Secondary covers are required to be fitted over the crank cases.

#### 10. **Electrics:**

- The alternator, starting system, starter crank gear and starter shaft may not be altered, replaced or removed from those fitted to the homologated motorcycle. The engine must start using the standard onboard electric start.
- The original wiring harness may be modified.

#### 11. **Exhaust System:**

- 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.

#### 12. **Fasteners:**

- Standard fasteners may be replaced with fasteners of any material and design. The strength and design must be equal to or exceed the strength of the standard fastener it is replacing for structural applications. The use of titanium in the swing arm spindles and the wheel spindles is forbidden. For wheel spindles the use of light alloys is also forbidden. The use of titanium alloy nuts and bolts is allowed. Aluminum fasteners may only be used in non-structural locations.

#### 13. **The following items MUST BE Removed:**

- Headlamp, rear lamp and turn signal indicators. Rear view mirrors, horn, license plate bracket, tool box, helmet hooks, luggage carrier hooks, passenger foot rests, passenger grab rails, safety bars, center and side stands must be removed

**14. The following items MAY BE Removed:**

- Instruments, instrument brackets and associated cables, horn, license plate brackets, tool kits, tachometer, speedometer and wheel spacers, radiator fan and wiring, passenger foot rests, passenger grab rails and upper chain guard.

**15. Chain Guards:**

- A guard must be fitted in such a way as to prevent trapping between the lower drive chain run and the final drive sprocket at the rear wheel.

**16. Fuel:**

- Only unleaded fuel as specified in the 2017 North West 200 regulations is permitted. The use of fuel additives is strictly prohibited.

**17. Radiator and Oil Cooler:**

- The original radiator and oil cooler may be replaced. An oil cooler can be added if not fitted. The use of coolants is prohibited, water only to be used.

## **FIM SUPERSPORT TECHNICAL RULES**

**Everything that is not authorised and prescribed in this rule is strictly forbidden.**

These regulations apply to SUPERSPORT MACHINES, run under FIM Rules. Supersport motorcycles require an FIM homologation. All motorcycles must comply in every respect with all the requirements for Road Racing as specified in the Technical Regulations.

The appearance from front, rear and the profile of Supersport 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 guards is excluded from this rule.

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

### **REAR SAFETY LIGHT:**

**All motorcycles must have a Functioning Red Light mounted at the rear of the seat to be used during wet races or in low visibility conditions as declared by Clerk of Course.**

### **The rear safety light must comply with the following;**

- a) The lighting direction must be parallel to the centre line of the motor cycle (running direction) and must be clearly visible from the rear, at least 15 degrees to both the right and left sides of the centre line of the motorcycle.
- b) It must be safely mounted on the very end of the seat/rear bodywork and approximately on the centre line of the motorcycle. In case of dispute over the mounting position of or visibility of the Rear Safety Light, the decision of the Technical Steward or Scrutineer will be final.
- c) 10-15W The power output/luminosity must be equivalent to approximately (incandescent) or 3-5W (led).
- d) The light must be able to be switched on and off.

### **HANDLE BAR LEVERS:**

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

#### **1. Supersport Class:**

400cc - 600cc 4 stroke 4 cylinder 600cc - 750cc 4 stroke 2 cylinder 600cc - 675cc 4 stroke 3 cylinder

## 2. Minimum Weights:

- The minimum weights will be:
 

600 cc four cylinders	<input type="checkbox"/>	161 kg
675 cc three cylinders	<input type="checkbox"/>	161 kg
750 cc two cylinders	<input type="checkbox"/>	161 kg
- At any time of the event, the weight of the whole machine (including the tank and its contents) must not be less than the minimum weight. There is no tolerance on minimum weight of a motorcycle.
- 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.
- During the practice and qualifying sessions every rider may be asked to submit his motorcycle to a weight control in any case the rider and team must comply with this request.
- The use of ballast is allowed to stay over the minimum weight limit and may be required due to a handicap system. The use of ballast and weight handicap must be declared to the Chief technical officer at the preliminary checks

## 3. Number Plate Colours:

- The background colours and figures for Supersport are white background with blue numbers. With the RAL colour table values being blue 5010 and white being 9010.
- In case of a dispute concerning the legibility of numbers, the decision of the Technical Steward will be final. The allocated number for the rider must appear three times on the machine. The number on the front may be affixed only once, either in the centre of the fairing or to one side. The two side numbers must be located on the left and right sides of the seat on the fairing or lower rear portion of the lower fairing.

## 4. Fuel:

- All Supersport engines must function on normal unleaded fuel with a maximum lead content of 5.0mg/l and a maximum RON number of 102 and a max MON of 90 (see Technical Regulations 2.7.1.2 for full fuel specifications).

## 5. Frame Body and Rear Sub Frame:

- Frame must remain as originally produced by the manufacturer for the homologated machine.
- Nothing can be added or removed from the frame body.
- All motorcycles must display a 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 may be changed or altered, but the type of material must remain as homologate or of higher specific weight.
- 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.
- The sides of the frame body may be covered by a protective part made of a composite material.
- These protectors must fit the form of the frame.



## 6. Front Forks

- Forks must remain as originally produced by the manufacturer for the homologated machine.
- Standard original internal parts of the forks may be modified or changed.
- After market damper kits or valves may be installed.
- Fork Springs may be replaced or modified.
- Fork Caps may be modified or replaced to allow external adjustment.
- The fork tubes (stanchions, fork pipes) surface may be changed or modified. Additional surface treatments are allowed.
- 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 aftermarket damper.
- The steering damper cannot act as a steering lock limiting device.
- Dust seal can be modified, changed or removed if the fork is totally oil sealed.
- No aftermarket or prototype electronically controlled suspension can be used.

## 7. Rear Fork (Swing Arm):

- Rear fork must remain as originally produced by the manufacturer for the homologated machine. A chain guard must be fitted in such a way as to reduce the possibility that any part of the rider's body should become trapped between the power chain and the rear wheel sprocket.
- Rear fork pivot bolt must remain as originally produced by the manufacturer for the homologated machine.
- Rear axle adjuster (chain adjuster) can be modified or changed.
- Rear wheel stand brackets may be added to the rear fork by welding or by bolts. An anchorage system or point(s) to keep the original rear caliper in place may be added to the rear fork.

## 8. Rear Suspension Unit:

- Rear suspension unit may be changed or modified. The original attachments of the frame and rear fork must be as homologated.
- Rear suspension unit spring(s) may be changed. No aftermarket or prototype electronically-controlled suspension unit maybe used. If original electronic unit is used, it must be completely standard (any mechanical or electronic part must remain as homologated). The original electronic system must work properly in the event of an electric/electronic failure otherwise it cannot be homologated for FIM competitions.
- Rear suspension linkage must remain as originally produced by the manufacturer for the homologated machine.

## 9. 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
- Front and rear wheel axles must remain as originally produced by the manufacturer for the homologated machine
- Wheel diameter and rim width must remain as originally homologated.

## 10. Brakes:

- Front and rear brake discs may be changed but must fit the original caliper and mounting.
- However, the outside diameter, the ventilation system must remain as originally produced by the manufacturer for the homologated machine.
- Internally ventilated discs are not allowed if not homologated on the original model.
- The brake disc carriers may be changed, but must retain the same off set and same type of mounting to the wheels.
- Replacement brake discs must be of ferrous material.
- Front and rear brake calipers as well as all the mounting points and mounting hardware (mount, carrier, hanger) must remain as originally produced by the manufacturer for the homologated machine (see Art. 2.5.10.3)
- The front master cylinder must remain as originally produced by the manufacturer for the homologated machine, hand lever excluded.
- Rear master cylinder must remain as originally produced by the manufacturer for the homologated machine
- Front and rear hydraulic brake lines may be changed. The brake fluid reservoir may be replaced and/or repositioned. Quick connectors may be used. The split of the front brake lines for both front brake calipers must be made above the lower edge of fork bridge (lower triple clamp).
- Front and rear brake pads may be changed. Brake pad locking pins may be modified for quick change type. Additional air ducts are not allowed.
- ABS may be used only if installed on the homologated model for road use, however it must be completely standard

## 11. Tyres:

- Tyres V or Z rating must be used. Only tyres on general sale to the public as road legal fitments will be permitted. The depth of the tyre tread must be at least 2.5 mm, over the whole tyre tread (pattern) width, at pre-race control.
- The tyre must have an “E” mark and/or DOT (American Department of Transportation) approval and the DOT number must appear on the tyre sidewall.
- Only when a race or practice has been declared “wet” the use of a special tyre, commonly known as a “full wet” tyre, is allowed. These tyres do not need to carry the “DOT” or “E” mark and must be marked “NOT FOR HIGHWAY USE”. Wet tyres must be a fully moulded tyre. No hand cutting is allowed on moulded tyres. The use of hand cut tyres is not allowed.

## 12. Foot Rest / Foot Controls:

- Foot rest/foot controls may be relocated but brackets must be mounted to the frame at the original mounting points.
- 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 8mm solid spherical radius.
- 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.

## 13. Handle Bars and Hand Controls:

- Handle bars and hand controls may be replaced (does not include brake master cylinder).
- Handle bars and hand controls may be relocated. Throttle control must be self-closing when not held by the hand.
- Electric starter switch and engine stop switch must be located on the handle bars. A functional Ignition kill switch or button mounted on the right hand handlebar that is capable of stopping a running engine must be fitted and be **RED**.

#### 14. Fairing / Body Work:

- Fairing, front mudguards and body work must appear to be as originally produced by the manufacturer for the homologated machine.
- Fairing and body work may be replaced with cosmetic duplicates of the original parts. The material may be changed. The use of carbon fibre or Kevlar® materials is not allowed in fairing, fuel tank cover, seat, seat base and associated body work construction.
- Size and dimensions must be the same as the original parts without any addition or subtractions of design elements.
- Wind screen may be replaced with transparent material only.
- The original combination instrument/fairing brackets may be replaced. All other fairing brackets may be altered or replaced.
- The original air ducts running between the fairing and the air box may be altered or replaced.
- The original air ducts into the airbox may be altered or replaced. Original openings for cooling in the lateral fairing/bodywork. Sections may be partially closed only to accommodate sponsors' logos/lettering. Such modification shall be made using wire mesh or perforated plate. The material is free but the distance between all opening centres, circle centres and their diameters must be constant. Holes or perforations must have an open area ratio > 60%.
- 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 liters). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing
- Minimal changes are allowed to permit the use of an elevator (stand) for wheel changes and to add a small plastic protective cone to the frame or engine.
- Front mudguard must appear as originally supplied by the manufacturer for the homologated machine.
- Front mudguard may be replaced with cosmetic duplicates of the original parts. The use of carbon fibre or Kevlar composites is allowed.
- Front mudguard may be spaced upward for increased tyre clearance
- Rear mudguard fixed on the swing-arm may be replaced with cosmetic duplicates of the original parts. The use of carbon fibre or Kevlar composites is allowed.
- Rear mudguards fixed on the swing-arm which incorporate the chain guard may be modified to accommodate larger diameter rear sprockets.
- The existing rear mudguard under the seat may be removed. A mudguard may be fitted directly onto the swing-arm (it may not cover more than 120 degrees of the wheel).

#### 15. Fuel Tank:

- Fuel tank must remain as originally produced by the manufacturer for the homologated machine.
- Fuel tank must contain fire retardant material (open celled mesh i.e. explososafe)
- 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 suitable material.
- 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.

**16. Seat:**

- 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 use of carbon fibre or carbon composite materials is allowed.
- 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 in principal to the homologated shape.
- The seat / rear cowl replacement must allow for proper number display.
- All exposed edges must be rounded.
- Holes may be drilled in the seat or cowl to allow additional cooling. Holes bigger than 10mm must be covered with metal gauze or fine mesh. Paint to match surrounding material.

**17. Wiring Harness:**

- The wiring harness may be altered or replaced. Additional wiring harnesses may be added. Cutting of the wiring harness is allowed.

**18. Battery:**

- The size and type of battery may be changed and relocated. Additional batteries may be added.

**19. Radiator and Oil Coolers:**

- The radiator may be changed only if it fits in the standard location and does not require any modifications to the frame or to the fairings outer appearance.
- Modifications to the existing oil cooler are allowed only if it does not require any modifications to the main frame or to the fairings outer appearance. A heat exchange (oil/water) can be exchanged by an oil cooler.
- Additional oil coolers are not allowed.
- Radiator fan and wiring may be changed, modified or removed.

**20. Air Box:**

- The air box must remain as originally produced by the manufacturer on homologated machine.
- The air filter element may be removed, or replaced.
- The air box drains must be sealed.
- All 4 stroke motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the air box.
- The original air ducts running from the fairing to the box may be altered or replaced.
- The original air ducts to the air box may be altered or replaced.

## 21. Fuel injection system:

- Fuel injection systems refer to throttle bodies and variable length intake tract devices, fuel pump and fuel pressure regulator.
- The original homologated fuel injection system must be used without any modifications.
- Throttle bodies intake insulators may be modified.
- The injectors must be standard units as on the homologated motorcycle.
- Bell mouths, including their fixing points, may be altered or replaced from those fitted by the manufacturer on the homologate machine.
- Butterfly cannot be changed or modified.
- Air or air-fuel mixture can enter or exit to/from the combustion chamber only passing through the original throttle body butterflies.
- Variable intake tracts devices cannot be added if they are not present on the homologate motorcycle.
- Vacuum slides may be fixed in the open position.
- Secondary throttle valves and shafts may be removed or fixed in the open position and all electronics may be disconnected or removed.

## 22. Fuel Supply

- Fuel lines may be replaced from the fuel petcock (excluded) to the delivery pipe assy (excluded). Quick connectors or dry brake quick connectors may be used.
- Fuel vent lines may be replaced.
- Fuel filters may be added.
- Fuel pump pressure regulator must remain the same as on the homologated motorcycle. The fuel pressure must be as homologated.

## 23. Cylinder Head:

- Cylinder head must be as homologated
- The following modifications are allowed: -
- Grinding of the cylinder head surface on the side of the gasket.
- Modification of the inlet and exhaust ports by taking off or adding material (welding is forbidden)
- Original homologated valve guides may be cut or modified, but only on the intake or exhaust port side.
- Polishing of the combustion chamber.
- Original valve seats must be used, but modifications are allowed to the shape.
- Compression ratio is free, but the combustion chamber can be modified only by taking material off.
- It is forbidden to add any material to the cylinder head unless as described above. The combustion chamber may be modified.
- Rocker arms (if any) must remain as homologated (materials and dimensions)
- Valves must be as homologated.
- Valve springs can be changed but the numbers must remain as homologated.
- The valve spring retainers may be replaced or modified but their weight must be the same or higher than the original ones.

## 24. Camshaft:

- The method of drive must remain as homologated.
- The duration is free but the lift must remain as homologated. - The cam chain or cam belt tensioning device(s) are free.
- At Technical checks: for direct cam drive systems, the cam lobe lift is measured for non-direct cam drive systems, the valve lift is measured.

**25. Cam Sprockets:**

- Cam sprockets or cam gears can be modified or replaced to allow the degreeing of camshafts.

**26. Crankshaft:**

- Crankshaft must remain as homologated without modification.
- Polishing and lightening is not allowed.
- Modifications of the flywheels are not allowed.

**27. Oil Pumps and Oil Lines and Water Pumps:**

- Modifications are allowed, but housing, mounting points and oil feed points must stay as original.
- 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.

**28. Connecting Rods:**

- Connecting rods must remain as homologated.
- Polishing and lightening is not allowed.

**29. Pistons:**

- Pistons must remain as homologated.
- Polishing and lightening is not allowed.

**30. Piston Rings:**

- Piston rings must remain as homologated. No modifications are allowed.

**31. Piston Pins and Clips:**

- Piston pins and clips must remain as homologated. No modifications are allowed.

**32. Cylinders:**

- Cylinders must remain as homologated.
- Only the following modifications to the cylinders are allowed. Cylinder head gasket surface may be machined to allow the adjustment of compression ratio or resurfacing to repair a warped cylinder surface deck.
- Homologated materials and castings for cylinders must be used. The surface finish of the cylinder bore must remain as homologated
- Cylinder capacity must remain at the homologated size.

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

- Crankcases must remain as homologated. No modifications are allowed (including painting, polishing and lightening).
- Other engine cases must be made of the homologated material with exclusion of lateral side covers.
- Lateral (side) covers may be altered, modified or replaced. If 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.
- Engine case guards in the form of strengthened engine side covers may be installed. These covers must be no lighter in weight than the standard part.
- 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 composite materials, type carbon or Kevlar®, aluminum or steel plates and/ or bars are also permitted. All these devices must be designed to be resistant against sudden shocks and must be fixed properly and securely **and cover a minimum of one third of the original cover**
- Vacuum pumps are not allowed if not installed in the original engine

### 34. Transmission / Gearbox:

- All transmission/ gearbox ratios are free.
- Primary gears must remain as homologated.
- Countershaft sprocket, rear wheel sprocket, chain pitch and size can be changed.
- Quick shift systems are allowed
- Chain guard as long as it is not incorporated in the rear fender may be removed.

### 35. Clutch:

- Clutch type (wet or dry) and the way of operation (by cable or hydraulic) must remain as homologated.
- Friction and drive discs may be changed. Clutch springs may be changed.
- The clutch basket (outer) may be reinforced.
- The original clutch assembly may be modified for back torque limiting capabilities (slipper type).
- It is allowed to change to an aftermarket clutch with back torque limiting capabilities (slipper type).
- The use of electro-mechanical or electro-hydraulic actuating systems are not allowed.

### 36. Ignition / Engine Control System:

- Ignition / engine control system (CDI) may be modified or changed.
- Spark plugs and plug wires may be replaced.

### 37. Generator:

- Generator **must remain as homologated**
- The electric starter must operate normally at pre and post-race inspections. The engine must start and run when the electric starter has stopped its procedure.

### 38. Exhaust System:

- Exhaust pipes and silencers may be modified or changed. Catalytic converters must be removed.
- The noise limit for Supersports will be 107 dB/A (with 3 DB/A tolerance after the race).
- Wrapping of exhaust systems is not allowed except in the area of the rider's foot or an area in contact with the fairing for protection from heat. - The number of exhaust (final) exists must remain as homologated.

**39. Fasteners:**

- Standard fasteners may be replaced with fasteners of any material and design.
- Aluminum fasteners may only be used in non-structural locations.
- Titanium 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.
- 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.
- 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.

**40. The following items MAY BE altered or replaced from those fitted to the homologated motorcycle:**

- Any type of lubrications, brake or suspension fluid may be used.
- Any type of spark plug and plug cap may be used.
- Any inner tube (if fitted) or inflation valves may be used.
- Instrument and instrument brackets and associated cables.
- Wheel balance weights may be discarded, changed or added to.
- Bearings (ball, roller, taper, plain, etc.) of any type or brand may be used.
- Gaskets and gasket materials
- Painted external surface finishes and decals

**41. The following items may be removed:**

- Speedometer and related wheel spacers
- Bolt on accessories on a rear sub frame
- Emission control items (anti-pollution) in and around the airbox and engine (oxygen sensor, air injection devices)

**42. 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.
- 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).
- Where breather or overflow pipes are fitted they must discharge via existing outlets.
- The original closed system must be retained, no direct atmospheric emissions permitted.
- All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the air box.

**43. The following items must be removed:**

- Headlamp and rear lamp.
- Turn signals indicators (when not incorporated in the fairing) openings must be covered with a suitable material.
- Rear view mirrors
- Horn
- Licence plate bracket
- Tool box
- Helmet hooks and luggage carrier hooks
- Passenger footrests
- Passenger grab rails
- Safety bars, centre and side stand must be removed (fixed brackets must remain).



**44. Additional Equipment:**

- Additional equipment not on the original homologated motorcycle may be added (i.e. data acquisition, computers, recording equipment, etc.)
- Telemetry is not allowed

**45. Additional Equipment**

- Additional equipment not on the original homologated motorcycle may be added (i.e. data acquisition, computers, recording equipment, etc.)
- Telemetry is not allowed

## **FIM SUPERSTOCK TECHNICAL RULES**

**Everything that is not authorised and prescribed in this rule is strictly forbidden.**

- As the name Superstock implies, the machines used are allowed limited modifications. Most modifications that are allowed are only allowed for safety reasons.
- All machines must be homologated by the FIM for the 2017 Superstock class.
- All machines must comply with all requirements of Road Racing as specified in the FIM regulations.
- 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 is excluded from this rule.

### **REAR SAFETY LIGHT:**

**All motorcycles must have a Functioning Red Light mounted at the rear of the seat to be used during wet races or in low visibility conditions as declared by Clerk of Course.**

**The rear safety light must comply with the following;**

- a) The lighting direction must be parallel to the centre line of the motor cycle (running direction) and must be clearly visible from the rear, at least 15 degrees to both the right and left sides of the centre line of the motorcycle.
- b) It must be safely mounted on the very end of the seat/rear bodywork and approximately on the centre line of the motorcycle. In case of dispute over the mounting position or visibility of the Rear Safety Light, the decision of the Technical Steward or Scrutineer will be final.
- c) The power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
- d) The light must be able to be switched on and off.

### **HANDLE BAR LEVERS:**

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

#### **1. Classes:**

- Over 750cc up to 1000cc 4-stroke 3 & 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.

#### **2. 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 prescribed levels). To confirm the dry weight a minimum of three motorcycles are weighed and compared.
- The result is rounded off to the nearest digit.
- The minimum weight value is determined by the dry weight value (in Kg.) minus 8% but in any case the minimum weight cannot be less than **170kg**
- 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 the time of the event, the weight of the whole machine (including the tank) 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 in the pit lane. (This will be done in such a way to disturb the rider or team as little as possible, but in any case the rider and team must comply with these checks).

### 3. Number and Background Colours:

- The number and background, including the number and the colours must conform to the MCRCB General Technical Regulations.

### 4. Fuel:

- All Superstock engines must function on normal unleaded fuel with a maximum lead content of 5.0mg/l and a maximum RON of 102 and a maximum MON of 90 (see F.I.M. Technical Regulations 2.7.1.2 fuel specification).

### 5. Machine Specifications:

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

### 6. Frame Body and Rear Sub Frame:

- 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 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.
- Rear sub frame may be changed or altered but the type of material must be as homologated or be of a higher specific weight..
- 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 the sub frame is not allowed.

### 7. Front Forks:

- Forks 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.
- No aftermarket or prototype electronically-controlled suspension parts may be used. If original electronic suspensions are used, they must be completely standard (any mechanical or electronic part must remain as homologated).
- The original electronic system must work properly in the event of an electric/electronic failure otherwise it may not be homologated for FIM competitions.
- Electronic forks may have their complete internal parts removed and be replaced with a conventional damping system and then will be considered as a mechanical fork
- The fork caps may be modified or changed to add spring preload/compression adjusters Dust seals may be modified, changed or removed providing the fork remains totally oil-sealed.
- Any quality and quantity of oil may 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 aftermarket damper. The steering damper cannot act as a steering lock limiting device.

#### **8. 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 brackets may be added to the rear forks. Brackets must have rounded edges (with a mushroom shape). Fastening screws must be recessed.
- For safety reasons, it is compulsory to use a chain guard fitted in such a way as to prevent trapping between the lower chain run and the final driven sprocket at the rear wheel.

#### **9. 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 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.
- No aftermarket or prototype electronically controlled suspensions can be used. If original electronic suspensions are used, they must be completely standard (any mechanical or electronic part must remain as homologated). The original electronic system must work properly in the event of an electric/electronic failure otherwise it cannot be homologated for FIM competitions.

#### **10. 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.

#### **11. Brakes:**

- Brake disks can be replaced by aftermarket discs which comply to following rules :
- Brake discs and carrier must retain the same material as the homologated disc and carrier. The outside and inner diameter of the brake disc must not be larger than the same on the homologated disc.
- The thickness of the brake disc may be increased and it must 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 like on the homologated disc. Anti-lock system (ABS) can be disconnected and its ECU can be dismantled.
- The ABS rotor wheel can be deleted, modified or replaced.
- 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 swing-arm, 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 authorised. The swing-arm may be modified for this reason to aid the location of the rear brake caliper bracket, by welding, drilling or by using a helicoil.
- The front and rear master cylinder must remain as originally produced by the manufacturer for the homologated machine. Front and rear brake fluid reservoir 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. Additional air scoops or ducts are not allowed.

#### **12. Tyres:**

- Tyres V or Z rating must be used. Only tyres on general sale to the public as road legal fitments will be permitted. The depth of tyre treads must be at least 2.5mm, over the whole tyre tread (pattern) width, at pre- race control.
- The tyre must have an “E” mark or DOT (American Department of Transportation) approval and the DOT number must appear on the tyre wall.
- The use of full wet tyres is allowed only when a race or practice has been declared “wet”, the use of a special tyre, commonly known as a “full wet” tyre, is allowed. These tyres do not need to carry the “E” or “DOT” mark. Hand-cut slicks are not allowed.
- The use of tyre warmers is allowed.

### **13. Footrest/Foot Controls:**

- Footrests/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 be maintained.
- 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 metallic footrests must have an end (plug) which is permanently fixed, made of plastic, Teflon® or an equivalent type material (minimum radius 8mm).

### **14. Handlebars and Hand Controls:**

- Handle bars may be replaced (does not include brake master cylinder). Handle bars 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 after-market model. An adjuster to the brake lever is allowed.
- Switches may be changed but electric starter switch the engine stop switch must be mounted on the right hand handle bar and be RED

### **15. Fairing/Body Work:**

- Fairing 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 or carbon composite materials is not allowed. Specific reinforcements in kevlar or carbon are authorized locally around holes and stressed areas.
- Overall size and dimensions must be the same as the original part.
- Wind screen may be replaced with a duplicate of transparent material. The height of the windscreen is free, within a tolerance of +/- 15 mm regarding to the vertical distance from/to the upper fork bridge.
- 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 liters). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing

### **Continued - Fairing/Body Work:**

- 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 must act as an oil contain that can hold at least half the total oil and coolant capacity. This device cannot exceed above a line drawn horizontally from wheel axle to wheel axle.
- 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.
- 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 taken away.
- Front mudguard may be replaced with a cosmetic duplicate and may be spaced up. Rear mudguard fixed on to the swing arm may be altered, changed or removed.

### **16. Fuel Tank**

- The unleaded filter baffle may be removed from the fuel tank.
- It is permitted to modify the standard manufacturers tank provided a silhouette of the tank remains as homologated and the capacity does not exceed 24 litres.
- Fuel tank filler cap may be changed and be leak proof, additionally they must be securely locked to prevent accidental opening at any time.
- Fuel tank valve petcock must remain as originally produced by the manufacturer for the homologated machine.
- 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.

### **17. Seat**

- 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 appearance from both front rear and profile must conform to the homologated shape.
- The seat/rear cowl replacement must allow for proper number display.
- All exposed edges must be rounded.

### **18. Wiring Harness**

- The original wire-loom may be modified as indicated here after :
- The wiring loom may be replaced by the ‘kit’ wire harness loom, as supplied for
- The ECU Kit model, produced or approved by the Manufacturer of the motorcycle. The wiring loom and the key/ignition lock may be relocated or replaced.
- Cutting of the wiring harness is not allowed

### **19. Battery**

- The battery may be replaced. If replaced, its nominal capacity must be equal to or higher than the homologated type.

## 20. Radiator, cooling system and oil coolers

- Protective meshes may be added in front of the oil and/or water radiator(s).
- The radiator tubes to and from the engine may be changed, but the system must be maintained. Tanks may be changed but must be fixed in a secure way.
- Radiator fan and wiring may be removed. Thermal switches, water temperature sensor and thermostat may be removed inside the cooling system.
- Radiator cap is free.
- 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.

## 21. 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 removed or replaced.
- All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the air box.
- No heat protection may be attached to the airbox

## 22. Fuel Injection System

- Fuel injection systems refer to throttle bodies, fuel injectors, variable length intake tract devices, fuel pump and fuel pressure regulator
- The original homologated fuel injection system must be used without any modification.
- The fuel injectors must be stock and unaltered from the original specification and manufacture.
- Air Funnels must remain as originally produced by the manufacturer for the homologated motorcycle.
- Butterfly valves cannot be changed or modified.
- Variable intake tract devices cannot be added if they are not present on the homologated motorcycle and they must remain identical and operate in the same way as the homologated system. All the parts of the variable intake tract device must remain exactly as homologated
- Air and air/fuel mixture can go to the combustion chamber exclusively through the throttle body butterflies.
- Electronically controlled throttle valves, known as “ride-by-wire”, may only be used if the homologated model is equipped with the same system. Software may be modified but all the safety systems and procedures designed by the original manufacturer must be maintained.

## 23. Fuel Supply

- 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.



#### **24. Cylinder Head**

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

#### **25. Camshaft**

- No modifications are allowed.

#### **26. Cam Sprockets**

- Sprockets may be slotting to allowed the adjustment of cam timing

#### **27. Crankshaft**

- No modifications are allowed (including polishing and lightening).

#### **28. 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.

#### **29. Connecting Rods**

- No modifications are allowed (including polishing and lightening).

#### **30. Pistons**

- No modifications are allowed (including polishing and lightening).

#### **31. Piston Rings**

- No modifications are allowed.

#### **32. Piston Pins and Clips**

- No modifications are allowed.

#### **33. Cylinders**

- No modifications are allowed.

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

- The original covers may be modified without 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 made of stainless steel or carbon Kevlar composites.
- Engine case guards in the form of strengthened engine side covers may be installed. These covers must be constructed of the same material and be no lighter in weight than the standard material.<sup>29</sup>
- 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 of composite material, type injection moulded long glass fibre nylon, carbon or Kevlar approved by the FIM or MCRCB, aluminum or steel plates and / or bars are also permitted. All these devices must be designed to be resistant against sudden shocks and fixed properly and securely and cover a minimum of one third of the original cover.

### **35. Transmission/Gearbox**

- An external quick-shift system on the gear selector (including wire and potentiometer) may be added.
- Other modifications to gearbox or selector mechanism are not allowed. Countershaft sprocket, rear wheel sprocket, chain pitch and size may be changed.
- The sprocket cover may be modified or eliminated.

### **36. 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.

### **37. Ignition / Engine Control System**

- The engine control unit (ECU) must be either :
- As Homologated and inner software may be changed.
- Or the ECU kit model (produced and/or approved by the machine Manufacturer) may be used. A special connector may be used to connect ECU and the 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.
- In addition to option a) mentioned above, external ignition and/or injection module/s may be added to the standard production ECU, but their total retail price cannot be higher than the complete ECU kit.
- Central unit (ECU) may be relocated.
- Spark plugs may be replaced.

### **38. Generators**

- No modifications are allowed.
- The electric starter must operate normally at pre and post race inspections. The engine must start and run when the electric starter has stopped its procedure.

### **39. Exhaust System**

- Exhaust pipes and silencers may be changed or modified from those fitted to the homologated machines.
- The noise limit for Superstock machines will be 107 dB/A with a tolerance of +3dB/A after the race.
- The location, appearance and profile of the silencer(s) must remain as original.
- Wrapping of the exhaust system is not allowed.

### **40. 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, but intentional weight saving modifications are not allowed.
- Fairing/body work fasteners may be changed to the quick disconnect type.
- Aluminum fasteners may only be used in non-structural locations.

### **41. 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.
- Any type of spark plug may be used.
- Any inner tube (if fitted) or inflation valves may be used.
- Wheel balance weights may be discarded, changed or added to.
- Gasket and gasket materials (with the exception of the cylinder base gasket).
- Painted external surface finishes and decals.

### **42. The Following Items May Be Removed**

- Instrument and instrument bracket and associated cables.
- Tachometer.
- Speedometer.
- 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.

### **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.
- 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.
- 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.
- All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox.

### **Additional Equipment**

- Additional equipment not on the original homologated motorcycle may not be added. (i.e. data acquisition, computers, recording equipment etc.).
- The following items must be removed: - Headlamp and rear lamp
- Turn signal indicators (when not incorporated into the fairing) - Rear view mirrors
- Horn
- Licence plate bracket - Tool box
- Helmet hooks and luggage carrier hooks
- Passenger foot rests
- Passenger grab rails
- Safety bars, centre and side stands

## **FIM SUPERBIKE TECHNICAL RULES**

Rules are intended to give freedom to modify or replace some parts in the interest of safety.

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

Superbike motorcycles require an FIM homologation (see Art. 5.2.9). All motorcycles must comply in every respect with all the requirements for road racing as specified in the Technical Regulations, unless it is equipped as such on the homologated machine. The appearance from both front, rear and the profile of Superbike 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.

#### **1. Engine configurations and displacement capacities**

The following Engine configurations compose the Superbike class.

Over 750cc and up to 1000cc 3cylinder and 4 cylinder four stroke machines  
and over 850cc and up to 1200cc 2 cylinder four stroke machine

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

#### **2. Minimum Weights**

The minimum weight will be:

1000cc 3 & 1000CC 4 Cylinder	168kg
1200cc 2 Cylinders	168kg

- During the final inspection at the end of each race, the machines chosen will be weighed in the condition they finished the race.
- The established weight limit must be met in the condition the machine has finished the race; nothing can be added to the machine. This includes water, oil, or fuel.
- During the practice and qualifying sessions, riders may be asked to submit their motorcycle to a weight control. In all cases, the rider must comply with this request.
- At any time of the event, the weight of the whole machine (including the tank and its contents) must not be less than the minimum weight.

## REAR SAFETY LIGHT

All motorcycles must have a Functioning Red Light mounted at the rear of the seat to be used during wet races or in low visibility conditions as declared by Clerk of Course.

The rear safety light must comply with the following;

- a) The lighting direction must be parallel to the centre line of the motor cycle (running direction) and must be clearly visible from the rear, at least 15 degrees to both the right and left sides of the centre line of the motorcycle.
- b) It must be safely mounted on the very end of the seat/rear bodywork and approximately on the centre line of the motorcycle. In case of dispute over the mounting position of or visibility of the Rear Safety Light, the decision of the Technical Steward or Scrutineer will be final.
- c) The power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3- 5W (led).
- d) The light must be able to be switched on and off.

## HANDLE BAR LEVERS

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

### 3. Fuel

- All engines must function on normal unleaded fuel with a maximum lead content of 0.005g/l (Unleaded) and a maximum MON of 90 (see also Art. 2.10 for full fuel specifications).

### 4. Frame and Body

- The use of titanium in the construction of the front forks, the handlebars and the swing arm spindle is forbidden.

### 5. Frame Body and Rear Sub-Frame

- The main frame must remain as originally produced by the manufacturer for use on the homologated machine.
- The main frame may only be altered the addition of gussets or tubes. No gussets or tubes may be removed.
- Holes may be drilled on the frame only to fix approved components (i.e. fairing brackets, steering damper mount).
- The homologated dimensions and position of bearing seats in the steering head column, and the engine, swing arm, rear shock, and suspension linkage.
- Mounting points must remain as original.
- Steering angle changes are permitted by fitting inserts onto the bearing seat of the original steering head, but no part of the insert must protrude axially more than 3 mm. from the original steering head.

- All motorcycles must display a vehicle identification number on the main frame body (chassis number).
- Rear sub frame may be changed or altered, but the material must remain as homologated. The paint scheme is not restricted.

## **6. Front Forks**

- Front fork in whole or part may be changed but must be the same type homologated (leading link, telescopic, etc ).
- NB – Upside down is a type of telescopic.
- No after market or prototype electronically controlled suspensions can be used. If original electronic suspensions are used, they must be completely standard (any mechanical or electronic part must remain as homologated). The original electronic system must work properly in the event of an electric / electronic failure otherwise it cannot be homologated for FIM competitions
- The upper and lower fork clamps (triple camp, fork bridges) can be changed or modified.
- Steering damper may be added or replaced with an aftermarket damper. The steering damper cannot act as a steering lock limiting device.

## **7. Rear Fork (swing-arm)**

- The rear fork may be altered or replaced from those fitted to the homologated motorcycle. The use of carbon fibre or Kevlar materials is not allowed if not homologated on the original machine.
- A chain guard must be fitted in such a way to reduce the possibility that any part of the riders' body must become trapped between the lower chain run and the rear wheel sprocket.
- 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.

## **8. Rear Suspension Unit**

- Rear suspension unit can be changed but a similar system must be used (i.e. dual or mono).
- No aftermarket or prototype electronically controlled suspensions can be used. If original electronic suspensions are used, they must be completely standard (any mechanical or electronic part must remain as homologated). The original electronic system must work properly in the event of an electric / electronic failure otherwise it cannot be homologated for FIM competitions.
- The rear suspension linkage may be modified or replaced.
- The original fixing points on the frame (if any) must be used to mount the shock absorber, linkage and rod assembly fulcrum (pivot points)

## 9. Handle Bars and Hand Controls

- Handle bars, hand controls and cables may be altered or replaced from those fitted to the homologated motorcycle.
- Engine stop switch must be located on the handle bars and be **RED**

## 10. Fairing/Body Work

- Fairing, mudguards and body work must conform in principle to the homologated shape as originally produced by the manufacturer.
- Wind screen may be replaced.
- Original air ducts running between the fairing to the airbox may be altered or replaced from those fitted to the homologated motorcycle.
- 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.
- Minimal changes are allowed in the fairing to permit the use of an elevator (stand) for wheel changes and to add plastic protective cones to the frame or the engine.
- Holes may be drilled or cut in the fairing or bodywork to allow additional increased intake air to the oil cooler. Holes bigger than 10mm must be covered with a particle grill or fine wire mesh. Grill/mesh must be painted to match the surrounding material.
- Original openings for cooling in the lateral fairing/bodywork sections may be partially closed only to accommodate sponsors' logos/lettering. Such modification shall be made using wire mesh or perforated plate. The material is free but the distance between all opening centres, circle centres and their diameters must be constant. Holes or perforations must have an open area ratio > 60%.
- Front mudguard must conform in principle to the homologated shape originally produced by the manufacturer.
- Holes may be drilled in the front mudguard to allow additional cooling. Holes bigger than 10mm must be covered with metal gauze or fine mesh. Mesh must be painted to match the surrounding material.
- Rear mudguard may be added or removed.
- Material of construction of the front mudguard, rear mudguard and fairing may be altered or replaced from those fitted to the homologated motorcycle.



## 11. Fuel Tank

- Material of construction of the fuel tank may be altered or replaced from those fitted to the homologated motorcycle.
- All fuel tanks must be filled with fire retardant material, or be fitted with a fuel cell bladder. Fuel tanks made of composite materials (carbon fibre, aramid fibre, glass fibre, etc.) must have
- passed the FIM Fuel Tank Test Standards, or be lined with a fuel cell bladder.
- Fuel tanks without a fuel cell bladder must bear the label certifying conformity with FIM Fuel Tank Test Standards. Such labels must include the fuel tank manufacturer's name, date of tank manufacture, and name of testing laboratory.
- Each manufacturer is requested to inform the FIM/CCR Secretariat of its fuel tank model(s) which have passed the FIM test standards, together with a copy of the fuel tank label. Full details of the FIM Fuel Tank Test Standards and Procedures are available from the FIM (See 'Fuel Tank Test Standards' below).
- Fuel cell bladders must conform to or exceed the specification FIM/FCB- 2005. Full details of this standard are available from the FIM.
- The fuel tank must be fixed to the frame from the front and the rear with a crash proof assembly system. Bayonet style couplings cannot be used, nor may the tank be fixed to any parts of the streamlining (fairing) or any plastic part. The Chief Technical Officer has the right to refuse a motorcycle if he is of the opinion that the fuel tank fixation is not safe.
- The original tank may be modified to achieve the maximum capacity of 24 litres, provided the original profile is as homologated.
- The material of the fuel tank may be altered from the one of the tank fitted to the homologated model.
- A cross over line between each side of the tank is allowed (maximum inside diameter 10 mm). Fuel tanks with tank breather pipes must be fitted with non-return valves which discharge into a
- catch tank with a minimum volume of 250 cc made of a suitable material.
- Fuel tank filler caps may be altered or replaced from those fitted to the homologated motorcycle, and when closed, must be leak proof. Additionally, they must be secured to prevent accidental opening at any time.
- The same size fuel tank used in practice must be used during the entire event.

## 12. Fuel tank homologation

- Any fuel tanks, made of nonferrous materials (with the exception of aluminum) must be tested according to the test procedure prescribed by the FIM.
- Each manufacturer is responsible for testing its own fuel tank and will clarify the tank exceeds the FIM test standard, if it has passed the FIM test procedure for fuel tanks.
- Each manufacturer must affix a quality and test label on each fuel tank type that is produced for competition use. This quality and test label will be the recognition of a fuel tank model which has passed the FIM test procedure.
- All fuel tanks that are made to the same design, dimensions, number of fibre layers, grade of fibre, percentage of resin, etc, must be identified with the same quality and test label.
- The quality and test label will include the following information on each label affixed to each fuel tank: name of the fuel tank manufacturer, date of fabrication, code or part number, name of testing laboratory, fuel capacity.<sup>37</sup>
- Each manufacturer is requested to inform the FIM/CCR Secretariat of its fuel tank model(s) which have passed the FIM test procedure, with a copy of the quality and test label, according to point 5.
- Only fuel tanks that have passed the FIM test procedure will be accepted.

## 13. Seat

- Seat may be altered or replaced from those fitted to the homologated motorcycle. 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 in principle to the homologated shape.
- Holes may be drilled in the seat or rear cowl to allow additional cooling. Holes which are bigger than 10 mm must be covered with metal gauze or fine mesh. Mesh must be painted to match the surrounding material.
- Material of construction of the seat may be altered or replaced from those fitted to the homologated motorcycle.

## 14. Radiator/Oil Cooler

- The original radiator or oil cooler may be altered or replaced from those fitted to the homologated motorcycle.
- Additional radiators or oil coolers may be added.
- Radiator fan and wiring may be changed, modified or removed. Oil cooler must not be mounted on or above the rear mudguard.

## 15. Air Box

- The air box may be altered or replaced from those fitted to the homologated motorcycle (a special design for racing is allowed). If fuel injectors are attached to the cover of the air box, their position must remain as original.
- The air filter element may be removed.
- The air box must be completely closed around the induction bell mouth and all engine breather tubes. Carburetion instruments may be entirely within the airbox.
- The air box drains must be sealed.
- All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox.
- The breather system (airbox plus any breather oil collector box) must be capable in the event of drain pipe blockage, of retaining a minimum of 1000 cc of discharged fluid.

### **Only for motorcycles homologated after the 1st of January 2010:**

- The air box must remain as originally produced by the manufacturer on the homologated motorcycle.
- Air filters, internal flap type valve, sensors and vacuum fittings may be removed, modified, or replaced with aftermarket parts.
- Any holes in the air box to the outside atmosphere resulting from the removal of components must be completely sealed from incoming air.
- Ram air tubes or ducts running from the fairing to the air box may be modified, replaced or removed. If tubes/ducts are utilized, they must be attached to the original, unmodified air box inlets.
- All motorcycles must have a closed breather system.
- All the oil breather lines must be connected and discharge in the air box.

## 16. Fuel injection systems

- “Fuel injection systems” refers to throttle bodies, fuel injectors, variable length intake tract devices, fuel-pump and fuel pressure regulator.
- The original homologated fuel injection system must be used without any modification.
- The fuel injectors must be stock and unaltered from the original specification and manufacture
- Air funnels may be altered or replaced
- Primary throttle valves cannot be changed or modified.
- Secondary throttle valves and shafts may be removed or fixed in the open position and the electronics may be disconnected or removed.
- Variable intake tract devices cannot be added if they are not present on the homologated motorcycle and they must remain identical and operate in the same way as the homologated system. All the parts of the variable intake tract device must remain exactly as homologated (excepting the air funnels)
- Air and air/fuel mixture must go to the combustion chamber exclusively through the throttle body valves.

- Electronically controlled throttle valves, known as “ride-by-wire”, may be only used if the homologated model is equipped with the same system

## 17. Fuel Supply

- The engine control unit (ECU) may be modified or changed.
- The fuel pump and pressure regulator must remain the same as on the homologated model.
- The pressure tolerance at the technical control is +0.5 bar in respect to the maximum pressure of the homologated engine declared to the FIM by the Manufacturer.
- All motorcycles must have a standard device on the fuel line for fuel pressure checks according with FIM specifications.
- Fuel lines from fuel tank up to the injectors (fuel hoses, delivery pipe assembly, joints, clamps, fuel canister) may be replaced.
- The fuel line(s) going from the fuel tank to the carburetion instruments must be located in such a way that they are protected from possible crash damage.
- Fuel vent lines may be replaced. Fuel filters may be added.
- Fuel petcock may be altered or replaced from those fitted to the homologated motorcycle.

## 18. Engine

- The following engine specifications and components may not be altered from the homologated motorcycle except as noted
- The homologated engine design model cannot be changed.
- Homologated materials and castings for the crankcase, cylinder, cylinder head and gear-box housing must be used.
- The method of cam drive must remain as homologated.
- The method of valve retention must remain as the homologated model. No pneumatic valve retention devices are allowed unless fitted to the homologated model.
- The sequence in which the cylinders are ignited (i.e. 1-2-4-3), must remain as originally designed on the homologated model. Simultaneous firing of 2 cylinders is also forbidden if not adopted on the homologated motorcycle. Up to 5 degrees firing difference in 2 cylinders is regarded as “simultaneous” firing.

## 19. Cylinder Head

- The homologated cylinder head may be modified as follows:
- The cylinder head must begin as a finished production part using homologated materials and castings. Material may only be added by epoxy or removed by machining. No machining or modification is allowed in the cam box / valve mechanism area.
- The induction and exhaust system including the number of valves and or ports (intake and exhaust) must be as homologated.
- Porting and polishing of the cylinder head normally associated with individual tuning such as gas flowing of the cylinder head, including the combustion chamber is allowed. Epoxy may be used to shape the ports.
- The compression ratio is free.
- The combustion chamber may be modified.
- Valves must remain as homologated.

### Continued Cylinder Head

- Valve seats can be modified or replaced for repair. The material must remain as homologated.
- Valve guides must remain as homologated. Modifications in the port area are allowed by machining.
- Valve springs may be altered or replaced, their material must remain as homologated. An additional spring may be added or the spring may be removed.
- Valve spring retainers, collets, spring seats may be altered or replaced.
- Valves must remain in the homologated location and at the same angle as the homologated valves.
- Rocker arms (if any) must remain as homologated.
- The exhaust air bleed system must be blocked and the external fittings on the cam cover(s) may be replaced by plates.
- The shim buckets / tappets may be replaced but must be the same height, diameter, material type, surface finish and shim to top surface dimension as the homologated part. The weight must be equal to or greater than the homologated part
- The homologated cylinder head / cam cover may be replaced by a cosmetic replica of higher specific weight material (i.e. replace magnesium part with aluminum)

### 20. Camshaft

- Camshafts may be altered or replaced from those fitted to the homologated motorcycle.

### 21. Cam Sprockets or Gears

- Cam sprockets or cam gears may be altered or replaced to allow the degreasing of the cam shafts.

### 22. Crankshaft

- The following modifications are allowed to the homologated crankshaft:
- Bearing surfaces may be polished or a surface treatment may be applied.
- Balancing is allowed but only by the same method as the homologated crankshaft. (For example heavy metal i.e. Mallory metal inserts are not permitted unless they are originally specified in the homologated crankshaft.) +/- 5% of the homologated weight is allowed
- Attachment of aftermarket ignition components or sensors is permitted.
- Balance shaft. Must remain as homologated

### 23. Oil Pumps and Oil Lines

- Oil pump may be altered or replaced from those fitted to the homologated machine.
- Oil lines may be modified or replaced. Oil lines containing positive pressure, if replaced must be of metal reinforced construction with swaged or threaded connection.

#### **24. Connecting Rods**

- Connecting rod may be altered or replaced from those fitted to the homologated motorcycle. The weight must be the same or greater than the original homologated part.
- The material must be the same type as the homologated item (i.e. steel, titanium, alloy)
- If the original connecting rod is fitted with a little end insert then the replacement connecting rods may also have an insert of the same material as fitted in the original homologated connecting rod.
- The centre to centre (little end to big end) length of the rod must be the same as the original homologated item.
- Connecting rod bolts are free.

#### **25. Pistons**

- No modifications are allowed

#### **26. Piston Rings**

- No modifications are allowed

#### **27. Piston Pins and Clips**

- Piston pins no modifications are allowed

#### **28. Cylinders**

- Homologated materials and casting for the cylinder block must be used. The material for the cylinder block may only be added by welding and/or removed by machining. The sleeves or liner material may be changed and the surface finish is free. The original bore size must be retained.

#### **29. Crankcase/Gearbox housing and lateral covers**

- Homologated materials and castings for crankcase and gearbox housing must be used. Material for crankcase and gearbox housing may only be added by welding or removed by machining.
- Oil-pan (sump) may be altered or replaced.

#### **30. Crankcase/Gearbox housing and lateral covers continued**

- Vacuum pumps are not allowed if not installed on the homologated motorcycle
- Lateral (side) covers may be altered, modified or replaced. 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, and must have the same resistance to impact as the original.
- 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 composite materials, type carbon or Kevlar®.
- Plates and/or bars from aluminum or steel are also permitted. All these devices must be designed to be resistant against sudden shocks and fixed properly and securely.

### **31. Transmission/Gearbox**

- All transmission/gearbox ratios, shafts, drums, selector forks are free.
- Primary gear ratios are free.
- The number of gears must remain as homologated.<sup>41</sup>
- Additions to gearbox or selector mechanism, such as quick shift systems, are allowed.
- Countershaft sprocket, rear wheel sprocket, chain pitch and size can be changed.
- Any power source (i.e. hydraulic or electric) cannot be used for gear selection, if not installed in the homologated model for road use.
- Human power and so called quick shift systems are excluded from the ban.

### **32. Crankcase/Gearbox housing and lateral covers**

- Homologated materials and castings for crankcase and gearbox housing must be used. Material for crankcase and gearbox housing may only be added by welding or removed by machining.
- Oil-pan (sump) may be altered or replaced.
- Vacuum pumps are not allowed if not installed on the homologated motorcycle
- Lateral (side) covers may be altered, modified or replaced. 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, and must have the same resistance to impact as the original.
- 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 composite materials, type carbon or Kevlar®. Plates and/or bars from aluminum or steel are also permitted. All these devices must be designed to be resistant against sudden shocks and fixed properly and securely and cover a minimum of one third of the original cover

### **33. Clutch**

- Aftermarket or modified clutches are permitted. Back torque limiter is permitted.
- Any power source (i.e. hydraulic or electric) cannot be used for clutch operation, if not installed in the homologated model for road use.
- Human power is excluded from the ban
- Clutch system (wet or dry type) and method of operation (cable/hydraulic) must remain as homologated.

### **34. Ignition/Engine Control System**

- Ignition/engine control system (ECU) may be modified or changed.
- Spark plugs and plug caps and wires may be replaced.

**35. Generator, alternator, electric starter**

- Generators must be fitted and working
- The electric starter must operate normally and be able to start the engine at any point during the event.

**36. Exhaust System**

- Exhaust pipes, catalytic converters and silencers may be altered or replaced 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.
- For safety reasons, the exposed edge(s) of the exhaust pipe(s) outlet(s) 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 Superbikes will be 107 dB/A (with a 3dB/A tolerance after the race). There is also an equipment tolerance of 2dB/A, the maximum reading before race or practice is 109 dB/A and after race or Practice 112dB/A

**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.
- Gaskets and gasket material.
- Bearings (ball, roller, taper, plain, etc.) of any type or brand may be used.
- Fasteners (nuts, bolts, screws, etc.),
- External surface finishes and decals.

**38. The Following items MAY BE removed**

- Instrument and instrument bracket and associated cables.
- Speedometer and associated wheel spacers.
- Chain guard

**39. The Following Items MUST BE Removed**

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



**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 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.)

**41. Additional Equipment**

- Additional electronic hardware equipment not on the original homologated motorcycle may be added (e.g. data acquisition, computers, recording equipment).
- The addition of a device for infra-red (IR) transmission of a signal between the racing rider and his team, used exclusively for lap timing, is allowed. The addition of a GPS unit for lap- timing/scoring purposes is allowed.
- Telemetry is not allowed.