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RACE REGULATIONS

**RACE WEEK 14th - 21st MAY 2011**

**RACE DAY**

**SATURDAY 21st MAY 2011**

10.00 am - 7.00 pm

**PRACTICE:**

Tuesday 17th May  
5.00 pm - 9.30 pm

Thursday 19th May  
9.30am - 3.00pm

**VENUE:**

Portstewart, Coleraine,  
Portrush,  
Northern Ireland.



**Promoter:**  
**COLERAINE & DISTRICT  
MOTOR CLUB LTD.**



[www.northwest200.org](http://www.northwest200.org)

# 2011 International North West 200 Motor Cycle Road Race

## SUPPLEMENTARY REGULATIONS

OFFICIAL PERMIT issued by M.C.U.I. (U.C.) Ltd. : 001/11  
F.I.M. Permit No. I.M.N. : 191/014

**TECHNICAL DIRECTOR :** MERVYN WHYTE MBE

**RACE OFFICE:** NW200, Unit 10, Sandel Village, Knocklynn Road, Coleraine BT52 1WW

### NW200 MANAGEMENT TEAM:

**Clerk of Course:** Stanleigh Murray  
**Course Manager:** John Adams and Terry Butcher  
**Paddock Manager:** Jim Fleming  
**Safety Manager:** Jonathan Gates  
**General Manager:** John Wilson  
**Finance Manager:** Alan Toms  
**Communications Manager:** John Crichton  
**Chief Marshal:** Cathal Cuning  
**Course Hardware Manager:** Kevin Hegarty

## STEWARDS

M.C.U.I. (U.C.) LTD : KEN TURNER  
M.C.U.I. (U.C.) LTD : JOHN ATCHESON  
M.C.U.I. : LESTER FERGUSON  
A.C.U. : TBA

### REPRESENTING COLERAINE & DISTRICT MOTOR CLUB LTD

TREVOR BROWN, EVAN FREEMAN, KEN LYONS

**TECHNICAL STEWARD :** HOWARD ANDERSON, COLIN HURST AND TEAM

**RIDER CO-ORDINATOR:** ROGER MARSHAL  
PHILLIP McCALLEN

## *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 21st May 2011. The starting time will be 11.00 am. Roads close at 10.00 am.
2. 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***

3. 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 8.96 miles.**

## ***RACES TO BE RUN***

4. **SUPERBIKE RACES** Two Races for Superbike machines from over 700cc-1200cc (see Superbike Regulations) (Superbike Race 1 (6 Laps) N.W. 200 Superbike Race (6 Laps)  
**SUPERSPORT RACES** Two Races for Supersport machines over 400cc-600cc four stroke 4 cyl. engines (per these Regs) or not exceeding 750cc twin cyl. machines (6 laps each race).  
**SUPERSTOCK RACE** One Race for machines over 700 -1200cc (6 laps)

**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. In this case practice times for the single machine will count for both the superbike and superstock classes when set in a combined Superbike/Superstock practice session.

## ***ELIGIBILITY***

5. **RIDERS** : In order to be eligible to enter this event all riders must be in possession of a 2011 FIM International Non Championship licence for Road Racing. M.C.U.I. Riders need a "SUPERALICENCE".  
**ENTRANTS** : Entrants must be in possession of a 2011 International Entrants Licence for Road Race.  
**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.

**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.

**MACHINES** : Every motorcycle entered must conform to the requirements of the FIM Technical Code, group A1 solos.

**BODYWORK / FAIRING** : 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 subsump fitted between the crankcase and the lower fairing is permitted and minimum modifications with relation to the profile of the lower fairing are allowed, only to fulfil this rule. The lower fairing should incorporate a maximum of two holes 25mm. These holes must remain closed in dry conditions and must be only opened in wet race conditions, as declared by the Clerk of the Course. 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.**

**SUPERBIKE CLASS** : Over 700 - 1200cc. The upper limit for a rotary engined machine will be 1200cc

**SUPERSPORT CLASS** : For machines complying with the Supersport 600 Regulations as specified in these regulations. Over 400-600 four stroke, and not exceeding 750cc twin cylinder machines.

**SUPERSTOCK CLASS** : 600 - 1200cc 4 cylinder 600 - 750cc 4 stroke 2 cylinder.

## **A MAXIMUM OF 65 RIDERS WILL BE ALLOWED TO START THE RACE**

**ALLOCATION WILL BE AS FOLLOWS : THE FIRST 25 WHO FINISHED IN THE SAME CLASS THE PREVIOUS YEAR WILL BE GIVEN AUTOMATIC ENTRY.**

**THE CLUB WILL SELECT UP TO 10 ENTRIES.**

**THE REMAINING 30 PLACES WILL BE DRAWN FROM A BALLOT WITH 15 OF THOSE PLACES GOING TO NEWCOMERS.**

## ***ENTRIES***

6. Applications for entry must be made on the official entry form and returned NOT LATER THAN TUESDAY, 5th APRIL, 2011. ENTRIES RECEIVED AFTER THIS DATE WILL BE RETURNED.

**RETURN ENTRIES TO :  
NORTH WEST 200, RACE OFFICE  
UNIT 10, SANDEL VILLAGE  
KNOCKLYNN ROAD, COLERAINE BT52 1WW, N. IRELAND**

**TEL/FAX: 0044 2870 355800**

**E-MAIL: [info@northwest200.org](mailto:info@northwest200.org)**

The Promoters will select from the applications received up to 65 solo entries, for each race. Unless 30 applications are received for any one race, that race may be cancelled.

All entries must be accompanied by an entry fee of £100 or €110 per race. No refunds will be issued after the 14th May 2011. **ENTRIES RECEIVED WITHOUT THE REQUIRED ENTRY FEE WILL NOT BE ACCEPTED, NO CORRESPONDENCE ENTERED INTO.**

**Applicants will be advised as soon as possible after the closing date of entries, whether or not they have been accepted.**

<b>All Overseas entries (including ACU/SACU) will only be permitted to start on production of a Start Permission from their own FMN.</b>
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COMPETITORS WHO, WITHOUT GOOD REASON, WITHDRAW FROM A RACE AFTER 14th MAY OR WHO DO NOT PRACTICE, WILL BE LIABLE TO A FINE OF £500.

## ***TRANSPONDER TIMING SYSTEM***

7. **Transponders are compulsory**

**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.**

### **RECOMMENDED TRANSPONDER**

The recommended transponder is an AMB TranX 260. These are available in two forms; direct powered which are connected to a fused 12V supply from the vehicle; or battery rechargeable, which is the normal type fitted to motorcycles.

The battery rechargeable transponders are a self-contained unit, the rechargeable battery being contained within the transponder casing. They are supplied with a 240V mains charger and a 12V cigarette lighter charger. To prolong battery life it is recommended that the transponder is given a full unbroken 24-hour charge from the transponder being fully discharged. In this case the transponder should be 'active' for a minimum of three days.

After a full charge, the light on the transponder face should flash green for a minimum of three times. The number of flashes indicates the approximate number of days charge remaining in the battery. When the transponder is going flat, the light will flash red. In its fully discharged state the light will not flash at all.

## **TRANSPONDER MOUNTING**

Ideally the transponder should be located as close to the track surface as possible, oriented vertically. There should be no carbon fibre and no metal between the transponder and the track, as this can interfere with the signal from the transponder. Despite these mounting recommendations, transponders have generally been found to function well when fitted to the upper region of one fork leg. The transponder is held in a mounting bracket by an R clip, the mounting bracket is usually fixed to the machine using cable ties or any such other secure method.

Several factors, however, can effect the transponder signal strength, such as level of charge; the angle the transponder is fitted at, even weather conditions. It is the responsibility of each competitor to co-operate with the timekeepers and other race officials, as necessary, to ensure that a good signal is being received by the decoding equipment.

The transponder is the official method of timing in association with a light beam at the finish line. Therefore, positioning of the transponder to ensure a good signal will take priority over any other lap-timing device fitted to a machine.

## **TRANSPONDER IDENTIFICATION**

Each transponder has a unique signal and a unique identification number. The identification number of the transponder fitted to each machine must be the same as the identification number declared on the entry form for the machine and class. Any changes to transponder identification number must be notified to the timekeepers before the start of practice or race.

## ***INSURANCE: ACCIDENTS AND REPATRIATION***

8. During the meeting and official practice, the minimum compulsory insurance coverages for all drivers, other than MCUI licence holders, according to Article 110.2 of 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

They 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:

### **WILLIS LTD**

**Contact: Alan Carlisle**

**78-86 Dublin Road,**

**Belfast, BT2 7BY**

**Tel: 028 9089 5229 Mob: 077 9865 5944**

**email: carlislea@willis.com**

## ***SIGNING ON / BRIEFING***

9. All competitors must sign-on at the Race Office, at the following time :

**TUESDAY 17th MAY : 0900 HOURS TO 1400 HOURS**

A declaration must be signed by each competitor, confirming that they have not sustained any injury or consulted with a doctor regarding any injury or illness since the issue of their 2011 International Licence. This declaration will also confirm that the competitor is fully acquainted with all regulations and instructions issued.

Newcomers are required to wear an orange jacket throughout practice. These are to be collected from the Race Office when signing-on, at a cost of £6.00. The £6.00 will be refunded after practice if jacket is returned.

**COMPETITORS BRIEFING : All competitors (with the exception of Newcomers who must attend a briefing as detailed below), must attend a briefing prior to being permitted to commence practice. The briefing will take place in the hospitality marquee at the following times :**

**TUESDAY 17th MAY : 1545 HOURS AND WEDNESDAY 18th MAY, AT 1330 HOURS.**

**ALL NEWCOMERS MUST ATTEND A BRIEFING ON TUESDAY AND WEDNESDAY AT 1330 HOURS IN THE HOSPITALITY MARQUEE. THIS WILL BE FOR NEWCOMERS ONLY. FOLLOWING THIS BRIEFING A COACH WILL LEAVE THE GRANDSTAND AREA FOR A TOUR OF THE CIRCUIT WITH EXPERIENCED INSTRUCTORS.**

**BRIEFING FOR REGULARS AND NEWCOMERS ARE COMPULSORY**

All race clothing and helmets are required to be inspected at scrutineering.

Any helmet which has been involved in an accident will be permanently marked and cannot be used.

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

**All riders are required to have a minimum of 5 laps practice.**

All riders to have a minimum of 1 warm up lap.

No rider is permitted to enter more than 5 races per day.

Newcomers are only eligible to compete in a maximum of three races.

**NO MOTORCYCLES TO BE RIDDEN THROUGH THE PADDOCK AREA. ANYONE CAUGHT MAY BE EXCLUDED FROM THE EVENT.**

***TECHNICAL INSPECTION***

10. **NUMBER PLATES :**
- |                     |   |
|---------------------|---|
| <b>SUPERBIKE :</b>  | White plates with Black numbers                                     |
| <b>SUPERSPORT:</b>  | White plates with Blue numbers<br>or Blue plates with White numbers |
| <b>SUPERSTOCK :</b> | Red plates with White numbers                                       |

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

**PRE-PRACTICE 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.

**PRE-RACE EXAMINATION:** Competitors must ensure that their machines are presented at times listed:

**SATURDAY 21st MAY : 0730 - 0930 HOURS**

**TUESDAY 17th MAY : 1230 - 1600 HOURS**

**THURSDAY 19th MAY : 0730 - 0900 HOURS**

**RIDERS MUST REPORT TO THE SCRUTINEERING MARQUEE BETWEEN THE TIMES STATED.**

**PADDOCK - THE MAIN ROAD THROUGH THE PADDOCK WILL BE A ONE WAY SYSTEM  
ALL VEHICLES EXITING THE PADDOCK SHOULD DEPART THROUGH THE GATE BELOW  
THE BUNGALOW**

All scrutineering will finish 60 minutes prior to the start of practice or 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 6 placed machines in each race will have a verification check.

**VERIFICATION OF THE MACHINES :** 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 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 the 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.

**FUEL** : Fuel for all practices and races must conform to FIM requirements which are as follows :

For all races only **UNLEADED** fuel with a maximum lead content of 0.005g/l and maximum of MON number 90 may be used (see 21.0 1.2 of F.I.M. Technical Rules for fuel specification)

These regulations strictly prohibit the use of “Bluegas”, power boosters, octane boosters and the like. 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.**

The Shipping Co. have stated that fuel may only be carried in the tanks of machines. Cans/barrels will not be allowed. Spot checks will be carried out and anyone found in contravention of this ruling will not be permitted passage to the races.

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/no open flames in the areas of fuel storage and during refuelling.

The Promoters reserve the right at any time before, during or immediately after racing to take samples of the fuels 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 competitor’s 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: FUEL STORAGE:** All competitor’s vehicles must carry a fire extinguisher with a current inspection certificate. The recommended type is a 2kg extinguisher, similar to that used in Taxis and **MUST** bear a current Inspection Stamp.

Only approved fuel storage containers to be used and must be stored in a well ventilated area, no smoking or naked flames in the area of fuel storage and during refuelling.

## ***FLAG SIGNALS***

11. 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 the Course can authorise a race to be stopped.

The penalty for ignoring Flags is exclusion from the Event

**NATIONAL FLAG:** Starting Flag.

**RED FLAG** : The use of the RED FLAG indicates that racing or practice has been Stopped. Overtaking is forbidden. Riders shall slow down and may be instructed to return to the starting grid or paddock, as decided by the Clerk of the 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. Is a direct **Instruction to the rider to slow down, overtaking is forbidden.**

**YELLOW FLAG** waved. Is a direct **Instruction to the rider to slow down, and prepare to stop. Overtaking is forbidden**

**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

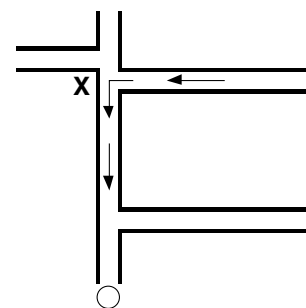
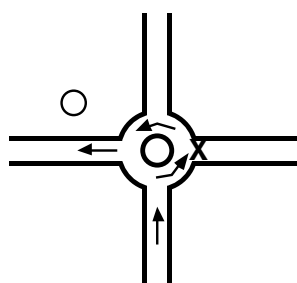
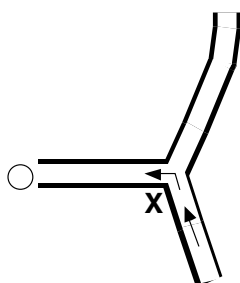
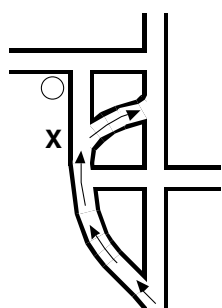
**BLACK FLAG WITH ORANGE CIRCLE AND RIDER'S NUMBER** : will be operated at 4 points on the course.

**1. START**

**2. YORK CORNER**

**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.

### ***OVERSHOOTING AT THE CHICANES***

If you overshoot at either chicane, you **MUST** proceed to the end, where a marshal will permit you to rejoin the course when safe to do so.

Under **NO** circumstances must you turn and rejoin the course where you left it.

### ***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.

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.

### ***OVERSHOOTING 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 RUNS FORWARD FROM THE STARTING BOX WILL BE PENALISED 30 SECONDS. A CAMERA WILL BE POSITIONED ON THE START GRID.**

## **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/Technical Director 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 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 and THURSDAY, 17th and 19th May 2011, from 17.00hrs until 21.30hrs on Tuesday & 09.30 until 15.00hrs on Thursday, by virtue of an Order of the Department for Regional Development for Northern Ireland.

All competitors must be in the Paddock at, or before 15.00hrs, after which no competitor will be allowed to enter. This will be the only practice recognised by the Promoters, but competitors may familiarise themselves with the Course at such speed as is not dangerous to the public, and provided their machines comply with the Road Traffic Regulations in regard to licensing and insurance. Any driver convicted of speeding or reckless driving on the course will be excluded from the race.

**ALL COMPETITORS UNDER PENALTY OR EXCLUSION FROM THE RACE, MUST TAKE PART IN OFFICIAL PRACTISING. 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 NIGHTS.**

**INFORMATION REGARDING RETIREMENTS DURING PRACTICE WILL BE AVAILABLE FROM THE START LINE.**

**MACHINES ON THE PUBLIC HIGHWAY :** No racing machines shall be driven on the public highway.

## **QUALIFICATION**

14. Practising, which will be regulated and supervised by the Promoters, will take place on Tuesday 17th May at 17.00 to 21.30 and Thursday 19th May 09.30 to 15.00hrs. **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 HE 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 Clerk of the Course, who will consider any appeal made to him. A driver 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.

## ***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.

### **START PRELIMINARIES**

**FIRST SIGNAL : 30 MINUTES BEFORE START :** Competitors proceed to assembly area and may start engines for warm up period.

**SECOND SIGNAL : 15 MINUTES BEFORE START :** Competitors take up grid positions for one warm up lap.

**THIRD SIGNAL :** After all riders return from their warm up 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 groups at 30 second intervals.

**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.

**PIT 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 penalised.

Attendants must remain in the pit allotted to them, except when their competitor is at the pit, when they both may assist or carry out replacement repairs, only using the spares previously deposited in the pit. The time keeper must only signal from an area beyond the start line (Lay-by on right-hand side of track).

One attendant must remain in the pit 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 sparkproof and intrinsically safe in every respect. Spare batteries must be protected.

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

All classes will have one warm up lap.

**PIT STOPS DURING RACING :** All competitors must stop at the entrance to their 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 an 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 in front of the Grandstand 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 on the evening of the Race. 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 main paddock gate. 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, riders and passengers 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. 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 Jury, 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 sine die should any circumstances arise which, in their opinion, render such a course necessary or desirable.

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

26. 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***

27. 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***

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

During the Meeting the Clerk of Course will establish headquarters at the Starting Area.

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***

29. 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***

30. 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.

## ***PRIVATE CARS***

31. Private cars are not permitted into any area of the Paddock other than the Teams and Competitors Car Parks. The vehicle must display a team and Competitors Car park vehicle pass to gain access to this area.

## ***FIRE POINTS / HYDRANTS***

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

## ***GENERATORS***

- 33 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.

## ***ELECTRICAL SUPPLY***

- 34 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.

## ***RUBBISH REMOVAL***

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

## ***GENERAL***

- 36 A one way traffic system will be in operation within the Paddock. It has been designed for the smooth and safe transition of all vehicle movements. A 5 mph speed limit exists at all times. At no time should any vehicle block an entrance or exit.

**SIGNED FOR AND ON BEHALF OF BY ORDER OF COLERAINE & DISTRICT MOTOR CLUB LTD :**

**TECHNICAL DIRECTOR:  
MR. MERVYN WHYTE MBE  
NW200, UNIT 10,  
SANDEL VILLAGE, KNOCKLYNN ROAD  
COLERAINE, BT52 1WW**

2011 INTERNATIONAL

NORTH WEST 200 PRIZE FUND

	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
Supersport Race 1	2000	1750	1500	1000	750	500	400	300	200	100
Supersport Race 2	3000	2250	1750	1500	1000	750	500	400	300	200
Superstock	2500	2000	1500	1000	750	500	400	300	200	100
Superbike Race 1	3000	2000	1500	1000	750	500	400	300	200	100
Superbike Race 2	6000	4000	2500	2000	1000	750	500	400	300	200

# 2011 SUPERSPORT REGULATIONS

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**

## 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 161 kg

675 cc three cylinders 161 kg

750 cc two cylinders 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 with a tolerance of 1 kg.
- In the final inspection at the end of the race, the checked machines will be weighed in the condition they were at the end of the race.
- 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.

## 4. Induction Tract Restriction

Carburation instruments must remain as homologated.

## 5. Fuel

All Supersport engines must function on normal unleaded fuel with a maximum lead content of 0.005g/l (unleaded) and a maximum MON of 90 (see Technical Regulations Art. 2.5 for full fuel specifications).

## **6. 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 must remain as originally produced by the manufacturer for the homologated machine.
- 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.

## **7. 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.
- After market damper kits or valves may be installed.
- Fork Springs may be replaced.
- Fork Caps may be modified or replaced to allow external adjustment.
- The fork tubes (stanchions, fork pipes) 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 after market 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 after market or prototype electronically controlled suspension can be used.

## **8. 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.
- An anchorage system or point(s) to keep the original rear calliper in place may be added to the rear fork.

## **9. 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 may be 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.

## 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
- 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.

## 11. Brakes

Front and rear brake discs may be changed but must fit the original calliper 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 callipers 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 callipers 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.

## 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 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.

## 13. 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 metallic footrests must have an end (plug) which is permanently fixed, made of plastic, Teflon or an equivalent type material (minimum radius 8mm).<sup>17</sup>

#### **14. 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.
- Electric starter switch and engine stop switch must be located on the handle bars.

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

- a) Fairing, front mudguards and body work must appear to be as originally produced by the manufacturer for the homologated machine.
- b) 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.
- c) Size and dimensions must be the same as the original parts without any addition or subtractions of design elements.
- d) Wind screen may be replaced with transparent material only.
- e) The original combination instrument/fairing brackets may be replaced. All other fairing brackets may be altered or replaced.
- f) The original air ducts running between the fairing and the air box may be altered or replaced.
- g) 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%.
- h) 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 ltrs). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing.
- i) The lower fairing must incorporate a hole of 25 mm in the bottom of the front lower area. This hole must remain closed in dry conditions and must be only opened in wet race conditions as declared by the Race Director.
- j) 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.
- k) Front mudguard must appear as originally supplied by the manufacturer for the homologated machine.
- l) Front mudguard may be replaced with cosmetic duplicates of the original parts. The use of carbon fibre or Kevlar composites is allowed.
- m) Front mudguard may be spaced upward for increased tyre clearance.
- n) 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.
- o) Rear mudguards fixed on the swing-arm which incorporate the chain guard may be modified to accommodate larger diameter rear sprockets.
- p) 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).

#### **17. 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.

## **18. 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 solo seat then must incorporate the rear number plates.
- 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.

## **19. Wiring Harness**

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

## **20. Battery**

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

## **21. 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.

## **22. 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.

## **23. Carburation Instruments / Fuel injection system**

Carburation instruments refer to throttle bodies and variable length intake tract devices.

Carburation instruments must be standard units as on the homologated model.

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 homologated 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.

Only systems homologated on the original motorcycles are allowed.

## **25. 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.  
No modifications of fuel pump are allowed. Original pressure regulator may be modified or changed.

## **26. Cylinder Head**

Cylinder head must be as homologated

The following modifications are allowed: -

1. Grinding of the cylinder head surface on the side of the gasket.
2. Modification of the inlet and exhaust ports by taking off or adding material (welding is forbidden)
3. Original homologated valve guides may be cut or modified, but only on the intake or exhaust port side.
4. Polishing of the combustion chamber.
5. Original valve seats must be used, but modifications are allowed to the shape.
6. 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 may be altered or replaced and the material may be changed, but maximum diameter and minimum weight must remain as homologated. The use of titanium valves is permitted if the homologated machines are equipped with such kind of valves.

Valve springs can be changed.

The valve spring retainers may be replaced or modified but their weight must be the same of higher than the original ones.

## **27. 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.

## **28. Cam Sprockets**

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

## **29. Crankshaft**

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

## **30. 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.
- The internal parts of the water pump may be changed or modified. The drive ratio may be changed. The external appearance must remain as homologated.20

### **31 Connecting Rods**

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

### **32. Pistons**

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

### **33. Piston Rings**

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

### **34. Piston Pins and Clips**

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

### **35. 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.

### **36. 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®, aluminium 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.

Holes may be added in dry clutch covers to allow additional cooling.

The countershaft cover may be removed.

The addition of a crankcase protector at the countershaft is allowed.

Vacuum pumps are not allowed if not installed in the original engine.

### **37. 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.

### **38. 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.

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

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

### **40. Generator**

- Generator may be modified, removed or replaced.
- 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.

### **41. 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.

### **42. Fasteners**

- Standard fasteners may be replaced with fasteners of any material and design.
- Aluminium 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.

### **43. 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 plugcap 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

#### **44. 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)

#### **45. 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 airbox.

#### **46. 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).

#### **47. 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

# 2011 SUPERSTOCK REGULATIONS

## 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 2011 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.

### 52.7.1 Classes

- Over 600cc up to 1000cc 4-stroke 4 cylinders maximum
  - Over 750cc up to 1000cc 4-stroke 3 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.

### 52.7.2 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 12 KG.
  - In the final inspection at the end of the race, the checked machines will be weighed in the condition they were at the end of the race.
  - 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.
  - A 1% tolerance in the weight of the machine will be allowed after 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).

### 52.7.3 Number and Background Colours

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

### 52.7.4 Carburation Instruments

- Carburation instruments must remain as homologated.

### 52.7.5 Fuel

- All Superstock engines must function on normal unleaded fuel with a maximum lead content of 0.005 g/l (unleaded) and a maximum MON of 90 (see fuel regulations for full specification). 24

### 52.7.6 Machine Specifications

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

### **52.7.6.1 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 must remain as originally produced by the manufacturer for the homologated machine.
- 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.

### **52.7.6.2 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.

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 after-market damper.

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

### **52.7.6.3 Rear Fork (Swing arm)**

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

### **52.7.6.4 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 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.

### **52.7.6.5 Wheels**

- Wheels must remain as originally produced by the manufacturer at the time of sale into the dealer/distributor network for the homologated machine.
- The speedometer drive may be removed and replaced with a spacer.
- 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 calliper are authorised.
- Spacers can be modified. Modifications to keep spacers in place are permitted.
- Wheel diameter and rim width must remain as originally homologated.

### **52.7.6.6 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 calliper 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 calliper (mount, carrier, hanger) must remain as originally produced by the manufacturer for the homologated machine.

The rear brake calliper bracket may be mounted 'fixed' on the swing-arm, but the bracket must maintain the same mounting (fixing) points for the calliper 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 calliper 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 callipers 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.

### **52.7.6.7 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.

#### **52.7.6.8 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).
- A foot operated quick shifter is not authorised.

#### **52.7.6.9 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 and engine stop switch must be located on the handle bars.

#### **52.7.6.10 Fairing/Body Work**

- a) 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.
- b) Overall size and dimensions must be the same as the original part.
- c) 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.
- d) Motorcycles that were not originally equipped with streamlining are not allowed to add streamlining in any form, with the exception of a lower fairing device, as described in (h). This device cannot exceed above a line drawn horizontally from wheel axle to wheel axle.
- e) The original combination instrument/fairing brackets may be replaced, but the use of titanium and carbon (or similar composite materials) is forbidden. All other fairing brackets may be altered or replaced.
- f) The original air ducts running between the fairing and the air box may be altered or replaced. Carbon fibre composites and other exotic materials are forbidden. Particle grills or "wire-meshes" originally installed in the openings for the air ducts may be taken away.
- g) The lower fairing has to be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (minimum 5 litres). The lower edge of the openings in the fairing must be positioned at least 50 mm above the bottom of the fairing. 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%.
- h) The lower fairing must incorporate an opening of Ø 25 mm diameter in the front lower area. This hole must remain closed in dry conditions and must be only opened in wet race conditions as declared by the Race Director.
- i) Front mudguards may be replaced with a cosmetic duplicate of the original parts and may be spaced upward for increased tyre clearance.

- j) Rear mudguard fixed on the swing arm may be modified, deleted or changed.
- k) Motorcycles may be equipped with inner ducts to improve the air stream towards the radiator but the appearance of the front, the rear and the profile of the motorcycle must not be changed.

### **57.03.11 Fuel Tank**

- No modifications are allowed except the following:
- Fuel tank filler cap may be altered or replaced by a 'screw-on' type cap.
- 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.
- All fuel tanks must be completely filled with a fire retardant material (open celled mesh, i.e. explososafe).

### **52.7.6.12 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.

### **52.7.6.13 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.

### **52.7.6.14 Battery**

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

### **52.7.6.15 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.

### **52.7.6.16 Air Box**

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

#### **52.7.6.18 Carburation Instruments / Fuel Injection System**

Carburation instruments refer to throttle bodies and variable length intake tract devices.

Carburation instruments must remain as homologated.

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

The injectors must remain standard units as on the homologated motorcycle.

#### **52.7.6.19 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.

#### **52.7.6.20 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, springs and retainers must be as originally produced by the manufacturer for the homologated machine.
- Valve springs shims are not allowed.

#### **52.7.6.21 Camshaft**

- No modifications are allowed.

#### **52.7.6.22 Cam Sprockets**

- No modifications are allowed.

#### **52.7.6.23 Crankshaft**

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

#### **52.7.6.24 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.

#### **52.7.6.25 Connecting Rods**

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

#### **52.7.6.26 Pistons**

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

#### **52.7.6.27 Piston Rings**

- No modifications are allowed.

#### **52.7.6.28 Piston Pins and Clips**

- No modifications are allowed.

#### **52.7.6.29 Cylinders**

- No modifications are allowed.

### **52.7.6.30 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, aluminium 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. No damaged cases will be permitted unless approved by the Chief Technical Officer.

### **52.7.6.31 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.

### **52.7.6.32 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.

### **52.7.6.33 Ignition / Engine Control System**

The engine control unit (ECU) must be either :

- a) As Homologated and inner software may be changed.
- b) 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.
- c) 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.

### **52.7.6.34 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.

### **52.7.6.35 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.

### **52.7.6.36 Fasteners**

- Standard fasteners may be replaced with fasteners of any material and design but titanium fasteners may not be used. The strength and design must be equal to or exceed the strength of the standard fastener it is replacing.
- Fasteners may be drilled for safety wire, but intentional weight saving modifications are not allowed.
- Fairing/body work fasteners may be changed to the quick disconnect type.
- Aluminium fasteners may only be used in non-structural locations.<sup>30</sup>

### **52.7.7 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.

### **52.7.8 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.

### **52.7.9 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.

### **52.7.10 Additional Equipment**

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

### **52.7.11 Additional Equipment**

- 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

# 2011 FIM SUPERBIKE TECHNICAL SPECIFICATIONS

Rules 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.

## 2.4.1 Engine configurations and displacement capacities

The following Engine configurations compose the Superbike class.

Engine configuration and displacements	Minimum weight	Diameter of restrictor
Over 750cc up to 1000cc 3 cylinders and 4 cylinders <i>** (1000cc 3 &amp; 4 cylinders)</i>	165 kg	n/a (*)
Over 850cc up to 1200cc 2 cylinders <i>** (1200cc 2 cylinders)</i>	165 kg	50 mm

(\*) n/a = not applicable

(\*\*) Reference used in the Articles hereunder

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

### 2.4.2.1 Minimum Weights

The minimum weight will be:

1000cc 3 & 1000cc 4 cylinders	165 kg
1200cc 2 cylinders	165 kg (**)

(\*\*) See handicap rule for further information.

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 with a tolerance of 1 kg.

#### 2.4.4 Carburation Instruments

- Carburation instruments refers to throttle bodies.
- The original homologated carburation instruments must be used un-modified.
- The use of optional homologated carburation instruments is not allowed.
- The fuel injectors may be replaced, however they must fit without modification to the homologated throttle body.
- The carburation instruments intake insulators may be modified.
- Bell mouths may be altered or replaced including their fixing points.
- Variable length intake tract devices that function while the engine is operating are not allowed, unless such a system is use on the homologated machine.
- Vacuum slides may be fixed in the open position
- Secondary throttle valves and shafts may be removed or fixed in the open position and the electronics may be disconnected or removed 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' systems, may be used exclusively if the homologated model is equipped with this system. Software may be modified but all safety systems and procedures designed by the original manufacturer must be maintained.

##### 2.4.4.3 Air restrictors for 1200 cc 2- cylinders

Definition: An air restrictor is a metallic device with a tract of constant controlled section and which is placed in the induction duct between the carburation instrument (throttle body) and the cylinder head. The length of the controlled tract must be at least 3 mm. No air and/or air fuel mixture to the engine must by-pass the restrictor. No carburation part (injector, needle, slide, etc) must extend through the restrictor.

Application: Only the 1200 cc 2 cylinders will be fitted with air restrictors. The initial air restrictor size to be installed is equivalent to a  $\varnothing$  50 mm circular area (1963,5 mm<sup>2</sup>). Air restrictor size will be adjusted (in steps equivalent to a change of 2 mm in diameter or equivalent circular area, upwards to  $\varnothing$  52 mm and then to no restrictor at all, downwards to a minimum of  $\varnothing$  46 mm), if needed during the Championship, as described below in Art. 2.4.4.4.

The Manufacturer must supply the FIM with 20 sets of plug-calibres (-gauges) to check the diameter of the air restrictor when using one of the prescribed sizes ( $\varnothing$  52,  $\varnothing$  50,  $\varnothing$  48,  $\varnothing$  46 mm).

A Manufacturer may have a non-circular air restrictor, provided that the area of this restrictor is equivalent to the area of a nominal circular restrictor. In this case, the Manufacturer must supply the FIM with 20 sets of plug-calibres (- gauges) for measuring the restrictor during the technical verifications.

The FIM may also request the Manufacturer to supply a cut section of the air restrictor(s) in each of the prescribed sizes.

#### 2.4.5 Fuel

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

## **2.4.6 Frame and Body**

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

### **2.4.6.1 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.

### **2.4.6.2 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 after market damper.

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

### **2.4.6.3 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.

#### **2.4.6.4 Rear Suspension Unit**

Rear suspension unit can be changed but a similar system must be used (i.e. dual or mono).

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 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).

#### **2.4.6.5 Wheels**

Wheels may be replaced and associated parts may be altered or replaced from those fitted to the homologated motorcycle.

Carbon fibre or carbon composite wheels are not allowed, unless the manufacturer has equipped the homologated production model with this type of wheel.

Bearings, seals and axles may be altered or replaced from those fitted to the homologated motorcycle.

The use of titanium and light alloys is forbidden for wheel spindles (axles).

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

Any inner tube (if fitted) or inflation valves may be used.

Wheel rims smaller than 16in. in diameter are not allowed.

Maximum front wheel rim width: 3.50 in or 3.75 in

Maximum rear wheel rim width: 6.25 in.

#### **2.4.6.6 Brakes**

- Front master cylinder may be altered or replaced from those fitted to the homologated motorcycle.
- Rear master cylinder may be altered or replaced from those fitted to the homologated motorcycle.
- Front callipers may be altered or replaced from those fitted to the homologated motorcycle.
- Rear callipers may be altered or replaced from those fitted to the homologated motorcycle.
- Brake pads or shoes may be altered or replaced from those fitted to the homologated motorcycle.
- Brake hoses and brake couplings may be altered or replaced from those fitted to the homologated motorcycle. The split of the front brake lines for both front brake callipers must be made above the lower fork bridge (lower triple clamp).
- Brake discs may be altered or replaced from those fitted to the homologated motorcycle. Only ferrous materials are allowed for brake discs. The use of exotic alloy materials for discs and brake callipers (i.e. aluminium beryllium, etc.) is not allowed.
- ABS (Antilock Brake System) may be used only if installed in the homologated model for road use. However, it must be completely standard (any mechanical or electronic part must remain as homologated, brake discs and master cylinder levers excluded), and only the software of the ABS may be modified.

#### **2.4.6.8 Foot Rest/Foot Controls**

Foot rest/foot controls may be relocated, but the original mounting points must be used.

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

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

Non folding footrests must have an end (plug) which is permanently fixed, made of aluminium, plastic, Teflon® or equivalent type of material (min. radius of 8mm). The plug surface must be designed to reach the widest possible area of the footrest. The Technical Director has the right to refuse any plug not satisfying this safety aim.

#### **2.4.6.9 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.

#### **2.4.6.10 Fairing/Body Work**

- a) Fairing, mudguards and body work must conform in principle to the homologated shape as originally produced by the manufacturer.
- b) Wind screen may be replaced.
- c) Original air ducts running between the fairing to the airbox may be altered or replaced from those fitted to the homologated motorcycle.
- d) 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.
- e) 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.
- f) 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%.
- g) Front mudguard must conform in principle to the homologated shape originally produced by the manufacturer.
- h) 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.
- i) Rear mudguard may be added or removed.
- j) Material of construction of the front mudguard, rear mudguard and fairing may be altered or replaced from those fitted to the homologated motorcycle.

#### **2.4.6.11 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.

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.

#### **Fuel tank homologation**

1. Any fuel tanks, made of nonferrous materials (with the exception of aluminium) must be tested according to the test procedure prescribed by the FIM.
2. 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.
3. 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.
4. 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.
5. 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>
6. 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.
7. Only fuel tanks that have passed the FIM test procedure will be accepted.

#### **2.4.6.12 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.

#### **2.4.6.13 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.

#### **2.4.6.14 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. Carburation 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.

#### **2.4.6.17 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 carburation 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.

#### **2.4.6.18 Engine**

The following engine components may not be altered from the homologated machine 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.

Material for the crankcase, cylinder, cylinder head and gear-box housing may only be added by welding or removed by machining.

The method of cam drive must remain as homologated..

After market or modified cam drive components are allowed, however the cam drive must be in the homologated location and the system must be 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).

All moving internal engine, gear-box and clutch parts may be altered or replaced including materials from those fitted on the homologated motorcycle (unless not allowed by the individual section covering the parts in question).

Polishing and lightening of engine parts is permitted, except for carburation instruments (unless not allowed by the individual section covering the parts in question).

- **For all configurations**

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.

#### **2.4.6.19 Cylinder Head**

The homologated cylinder head can be modified as follows:

Homologated materials and castings for the cylinder heads must be used. Material for these parts may only be added by welding or removed by machining. The homologated cylinder head cover may be modified.

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.

The compression ratio is free.

The combustion chamber may be modified.<sup>39</sup>

The valves may be altered or replaced from those fitted to the homologated motorcycle.

### **Valve train system**

After market or modified valves, springs, retainers and other valve train components are permitted.

The original number of valves must be maintained.

- a. Valve diameters, including stem, must remain as homologated.
- b. Valves must be made of the same basic material as the homologated valves.
- c. Valves must remain in the homologated location and at the same angle as the homologated valves, except for normal valve maintenance.
- d. Rocker arms (if any) must remain as homologated (material and dimensions).

#### **2.4.6.20 Camshaft**

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

#### **2.4.6.21 Cam Sprockets or Gears**

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

#### **2.4.6.22 Crankshaft**

The following modifications are allowed to the homologated crankshaft:

- a. Bearing surfaces may be polished or a surface treatment may be applied.
- b. 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.)
- c. Attachment of after market ignition components or sensors is permitted.
- d. Balance shaft may be removed.

#### **2.4.6.23 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.<sup>40</sup>

#### **2.4.6.24 Connecting Rods**

- 1000 cc 3 & 4 cylinders

Connecting rod may be altered or replaced from those fitted to the homologated motorcycle.

Carbon composite or carbon fibre materials are not allowed if not used in the homologated motorcycle.

- For 1200 cc 2 cylinders

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

#### **2.4.6.25 Pistons**

- 1000 cc 3 & 4 cylinders

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

- For 1200 cc 2 cylinders

Standard piston or the piston kit (\*) must be used.

(\*) The piston kit must have the same price as the standard one and must be listed in the current racing parts list of the Manufacturer and be on sale for customers. Within 90 days from the order, the customer must receive the kit piston set.

#### **2.4.6.26 Piston Rings**

Piston rings may be altered or replaced from those fitted to homologated machines

#### **2.4.6.27 Piston Pins and Clips**

Piston pins and clips may be altered or replaced from those fitted to homologated machines

#### **2.4.6.28 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.

#### **2.4.6.29 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.

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 aluminium or steel are also permitted. All these devices must be designed to be resistant against sudden shocks and fixed properly and securely.

#### **2.4.6.30 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.

#### **2.4.6.31 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.

#### **2.4.6.32 Ignition/Engine Control System**

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

#### **2.4.6.33 Generator, alternator, electric starter**

The generator, starting system electrical or manual including kick lever, pedal, starter crank gear and starter shaft may be altered, replaced or removed from those fitted to the homologated motorcycle.

#### **2.4.6.34 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

#### **2.4.7 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.42

#### **2.4.8 The Following items MAY BE removed**

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

#### **2.4.9 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).

#### **2.4.10 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.)

#### **2.4.11 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.