

# MOTOR CYCLE UNION OF IRELAND

## STANDING REGULATIONS FOR ROAD RACES AND SHORT CIRCUITS AND PRE 1973 CLASSIC RACING

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(ICC Dec 2019)

## CHAPTER 1

### STANDING REGULATIONS FOR ROAD RACES AND SHORT CIRCUITS

#### 1. ANNOUNCEMENT ON OFFICIAL DOCUMENTS.

All Supplementary Regulations, Programmes, Announcements, Entry Forms or other official communications relating to any competition shall give a description of the Competition, whether it is International, National, Restricted or Closed, and shall be conspicuously marked with the words: "Held under the "General Competition Rules and Standing Regulations of the MCUI.", and the Centre concerned (if applicable). In the case of any documents relating to an International Competition, the words shall be: "Held under the International Sporting Code of the F.I.M. and the General Competition Rules, and Standing Regulations of the MCUI", and the Centre concerned (if applicable).

#### 2. SUPPLEMENTARY REGULATIONS.

The Supplementary Regulations shall contain the following information together with any other information which the promoters wish to convey to entrants or competitors.

- (a) Name of Promoters.
- (b) Name and Title of competition.
- (c) Name of Centre issuing the Permit, and permit number.
- (d) Stewards of the meeting and appointing authority.
- (e) Clerk of the Course and Licence number.
- (f) Secretary of the meeting, with official address.
- (g) Date and Venue of the Competition.
- (h) Statement that Competition is held under the rules set out in 1
- (i) Type of competition.
- (j) Persons eligible to compete.
- (k) Type of vehicle eligible to compete.
- (l) Awards.
- (m) Address to which entries are to be sent.
- (n) Date and time of closing of entry list.
- (o) Amount of entry fee, and other charges.
- (p) Maximum and minimum number of entries acceptable.
- (q) Right of refusal of entry.
- (r) Time limit for drivers finishing after the winner.
- (s) Statement regarding issue and wearing of identity discs.
- (t) Statement as to type of insurance affected by promoter for drivers. Where handicap races are run, either separately, or in conjunction with scratch races, the Supplementary Regulations shall contain the following clause:  
**DETERMINATION OF PLACING ON HANDICAP.** In determining placings on handicap, every driver who is still riding when flagged off the course at the completion of the race, i.e. when the first driver has completed the race distance will, for the purposes of handicap, be regarded as a finisher, provided he has completed not less than 3/4 of the full distance. If the number of laps then covered by the driver is less than full distance, the time taken by him to cover his last completed lap will be added to the time for his completed laps, in respect of each uncompleted lap, and the sum of these rules will be regarded, as the driver's time for the purpose of computing his handicap position only. In addition the type of handicap and method of notification to the driver must be clearly stated.

#### THE COURSE

The following particulars shall be stated in the Supplementary Regulations or the final instructions.

- (a) Length of course.
- (b) Nature of course, and direction of racing.
- (c) Method of warming up.
- (d) Method of starting.
- (e) Order of starting.
- (f) Maximum number of starters permitted.
- (g) Method of practising.
- (h) Method of driver rescue.
- (i) Arrangements for refuelling, if any.

**3. ELIGIBILITY.** For national competitions, entrants, drivers and passengers must hold a valid National or International Competition Licences issued by the MCUI or any other FMN. Entrants, drivers and passengers must hold International Licences for International events.

Riders not holding an MCUI Licence must carry proof of Insurance and a written Start Permission document issued by their FMN.

Any further eligibility requirements will be set out in the Supplementary Regulations for the event and, if applicable, any championship regulations for which the event is a counting round. (ICC Jan. 2009)

#### **4. ENTRIES.**

A closing date will be set for receipt of entries, which shall, in the case of National Road Races, be not less than 14 days before the start of practice. Entries accepted after the closing date may incur a late entry fee at the total discretion of the Promoting Club.

Entry forms accompanied by the correct fees as laid down in the Supplementary Regulations, complete in every detail, and signed by the driver and entrants (if any) shall be forwarded to the Secretary of the Meeting by this date. Current competition licence numbers for the driver and entrant must be stated, the statement applied for" not being acceptable. (ICC December 2015)

#### **5. MEDICAL EXAMINATIONS.**

Every entrant must furnish to the promoters a Medical Certificate in respect of each and every driver nominated by him, or in respect of himself, if the driver.

This certificate shall be on the prescribed form, and furnished at the entrant's expense.

No driver will be allowed to start in a competition unless this certificate has been produced. Notwithstanding anything contained in the above, the promoters have the

right to call upon any driver to be examined by a doctor appointed by them, and at their expense at any time during a competition.

#### **6. CHANGE OF DRIVER, PASSENGER OR MOTORCYCLE**

- (1) It is not permitted to change a driver, passenger, make or capacity of motorcycle, after the start of and competition unless such change is authorised in the Supplementary Regulations.
- (2) Unless specifically prohibited, or otherwise provided for in the Supplementary Regulations, a change of driver, passenger, or the make or capacity of motorcycle may be considered by the Secretary of the Meeting after entries have closed, provided the entrant notifies him in writing at least twenty-four hours before the official starting time of the competition of some good and sufficient reason why,
  - (a) the entered driver, or passenger is unable to take part in any competition on that date, or,
  - (b) the entered motorcycle cannot be produced on that date.
- (3) If the composition of any team is affected by changes as authorised above, the entrant of that team, or his representative, may, up to the official starting time of the competition, replace the driver so affected, by any other entered driver otherwise eligible for the team, including the driver substituted for the original entry, provided always that the Supplementary Regulations do not otherwise provide for alterations for the composition of nominated teams.
- (4) A change of both driver and make of motorcycle is not permitted unless the authority granting the permit has specifically approved the Supplementary Regulations providing for such changes being made.
- (5) In the event of a change of rider, the replacement rider MUST be allocated a new number.

#### **7. LEGAL REQUIREMENTS.**

Every motorcycle which takes part in a competition on a public road, other than when a road is closed to traffic by virtue of a Road Closing Order, shall comply with all legal requirements.

#### **8. POSITIONS OF DRIVER AND PASSENGER.**

During a race drivers should adopt a position with their feet on the footrests. If a driver adopts any other position, and this is deemed dangerous, he/she must be excluded by the Clerk of the Course. During a race the passenger, if any, must be effectively and continuously carried on the vehicle in the place provided for him/her. He/she may, however leave his/her seat when starting or on the bends of the course and when the motorcycle is stationary. The penalty of a breach of this rule is exclusion.

Once a Rider has fallen from their machine they are not permitted remount and continue in that race or qualifying/ practice session. The machine must be rechecked and passed by a Scrutineer before the rider can continue in the meeting. (ICC Dec. 2014)

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**14. STARTERS ORDERS.** Only those drivers in the starting area, or on a grid, will be deemed to be under Starter's Orders. No other driver is subsequently permitted to start in a race.

**15. FLAG SIGNALS.** Flags will be used during practice, and the race itself, and will have the same meaning.

**Dimensions of Flags**

Signalling Flags	60cm x 80cm (Minimum)
Red Flag	80cm x 100cm

**16. FLAGS USED TO PROVIDE INFORMATION TO RIDERS – NO FLAG SIGNAL, ALL CLEAR.**

<b>Yellow Flag with Red Stripes</b>	<b>Warning of slippery surface.</b> (e.g. oil, rain, dirt, etc.) The adhesion on this section of the track could be affected by any reason. This flag is shown motionless at the marshals post
<b>White Flag</b>	Warning that a <b>non-competing</b> vehicle is on circuit. This could be for example an official vehicle such as a safety car, an ambulance, etc.
<b>Yellow Flag with Black Cross</b>	Last Lap flag, this flag is displayed to the rider from the start finish line and indicates that the rider is commencing his/her last racing lap of the circuit.

**17. FLAGS USED TO PROVIDE DIRECT INSTRUCTION TO RIDERS – NO SIGNAL, ALL CLEAR.**

<b>Yellow Flag – Held Motionless Or Steady Yellow Light</b>	The Yellow Flag held motionless is a direct instruction to the rider to <b>Slow Down. Overtaking is Forbidden.</b> Should a rider inadvertently gain a position (i.e. A preceding rider slows at a faster rate), once it is safe to do so, he or she should return to the original position and may raise his/her hand to indicate same.
<b>Yellow Flag – Waved Or Flashing Yellow Light</b>	The Yellow Flag waved is a direct instruction to the rider to <b>Slow Down and Prepare to stop, Overtaking is Forbidden</b> Should a rider inadvertently gain a position (i.e. A preceding rider slows at a faster rate), once it is safe to do so, he or she should return to the original position and may raise his/her hand to indicate same.
<b>* Red Flag Or Red Light</b>	The use of the red flag indicates that <b>Racing has been Stopped.</b> 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 Course (COC). A rider and may raise his/her hand to acknowledge a red flag.
<b>Black Flag</b>	The Black Flag will be displayed motionless with a board displaying a rider's race number (usually at start finish line). There is a <b>Serious Problem</b> and the rider must pull off the racing line and <b>stop in a safe position with the utmost care and attention.</b> The Rider must report to the COC.
<b>Chequered Flag</b>	When the leading rider has completed the required number of laps (s)he will be shown the chequered flag by an official standing at the start finish line. The chequered flag will continue to be shown to all subsequent riders. Once a rider receives the chequered flag (s)he must proceed safely to the paddock using the designated route.
<b>National Flag</b>	The national flag may be used to start the race, In the event of the national flag being used you will receive clear instruction from the race starter.
<b>Green Flag</b>	This flag will be shown motionless at each Flag Marshal Post for the first lap of each practice session and of the warm-up, for the sighting lap(s) and for the warm-up lap.

**\* RED FLAG or RED LIGHT:** To be shown on the authority of the Clerk of the Course at designated signalling posts when racing or practice, has been interrupted. (ICC December 2015)

**18. FALSE START.**

A false start occurs when a driver under Starter's Orders moves forward from his prescribed position before the signal of start is given.

## **19. PENALTY FOR FALSE START.**

- **Road Races.** In the case of a massed start the driver concerned shall be penalised by the addition of one minute to the time taken by him/her to complete the course.

- **Short Circuits.** In the case of a massed start the driver concerned shall be penalised by the addition of twenty seconds to the time taken by him/her to complete the course.

In the case where the Supplementary Regulations provide, the Clerk of the Course shall have the power to increase the amount of the above penalty, or to impose other penalties within the limits prescribed in such Supplementary Regulations where applicable, any such penalty shall immediately be notified to the depot, or the representative of the driver concerned.

## **20. FINISH OF A RACE.**

When the leading driver on the track has completed the designated number of laps or duration for the race, a chequered flag will be displayed as that driver crosses the finish line. The chequered flag will continue to be displayed to the subsequent drivers, until the last driver completes that lap. The onus of completing the required number of laps rests with the driver, but no driver will be allowed to start a fresh lap after the chequered flag has been displayed.

In case of a photo-finish between two, or more, drivers, the decision shall be taken in favour of the driver whose front wheel leading edge crosses the plane of the finish line first. In case of ties, the drivers concerned will be ranked in the order of the best lap time made during the race.

Should for any reason the chequered flag be given before the leading driver completes the scheduled number of laps or duration, the race will be deemed to have finished. If the chequered flag is given to the leader then a result will be drawn accordingly, but if the chequered flag is given to a driver other than the leader then the result will be taken when the leader last crossed the finish line before the signal was given. Should the end of race signal be delayed for any reason, the race will be deemed to have finished when it should have finished and the drivers classified accordingly.

The results will be based on the most number of laps completed in the least time, corrected for group start time differences. To be counted as a finisher in the race and be included in the results a driver must have:

- i.) completed 75% of the number of laps carried out by the winner.
- ii.) crossed the finish line on the race track (not in the pit lane) after the race winner within 5 minutes. The driver (and passenger) must be in control of the machine when taking the chequered flag.

## **21. STOPPING AND RE-STARTING A RACE**

- (a) Only the Clerk of the Course (or in their unavoidable absence the Deputy Clerk of the Course) may decide to stop a race prematurely.
- (b) A red flag will be shown at the start line and simultaneously at all other designated Red Flag posts. If Red Lights are available then these may also be switched on.
- (c) When these signals are displayed all drivers must stop racing and return slowly to the Start/Pits area as directed by the course marshals under the instruction of the Clerk of the Course.

21.1 The conditions under which a race will be restarted depend on the status of the race and are detailed in 21.1.1, 21.1.2, and 21.1.3.

- (a) If a race includes more than one class, which may have been started separately, then all classes will be considered as a single race for the purposes of applying Standing Regulations 21.1.1, 21.1.2 and 21.1.3
- (b) The term 'leader' or 'race leader' shall mean the leader on the road who will not necessarily be the leader on corrected time.

21.1.1 If a race has to be stopped with less than 3 laps of its duration completed by the race leader it will, in normal circumstances, be considered null and void and will be restarted.

- (a) The race will be restarted as quickly as possible, consistent with track conditions allowing.
- (b) All drivers originally eligible to start may re-start
- (c) Motorcycles may be repaired or changed subject to having passed scrutineering examination.
- (d) Refuelling is permitted under instruction from the Clerk of the Course.
- (e) In principle the restarted race shall be for the full race distance
- (f) The Clerk of the Course may reduce the race distance:  
if condition have changed to wet or damp conditions  
if there are time constraints  
in lieu of additional sighting and/or warm up laps.

- (g) In exceptional circumstances if it is not possible to restart the race an order of classification may be prepared for the purpose of making awards (financial and otherwise), subject to the approval of the Stewards of the Meeting. This classification will be based upon the order of last crossing the finish line prior to the showing of the red flag, applying Standing Regulation 20. Drivers not actively involved in the race at the time when the red flag is displayed will not be classified.
  - (h) In all cases if it is not possible to restart the race, no points will be awarded towards any championship involved.
- 21.1.2 If a race has to be stopped between 3 laps and two-thirds race distance rounded down to the nearest whole number of laps, by the race leader then the race will be restarted.
- (a) The race will be started as quickly as possible, consistent with track conditions allowing.
  - (b) Drivers will be restarted from a grid based on the finishing order of the previous part of the race. The place of any driver unable to restart shall be left vacant.
  - (c) The finishing order of the previous part of the race will be based upon the order of last crossing the finishing line prior to the showing of the red flag. Drivers who are not actively competing in the race at the time when the red flag is displayed will not be classified.
  - (d) Motorcycles may be repaired subject to having passed scrutineering examination.
  - (e) Refuelling is permitted under instruction of the Clerk of the Course.
  - (f) In principle the number of laps of the restarted race shall be the number of laps required to complete the original race distance.
  - (g) The Clerk of the Course may reduce the race distance:
    - if conditions have changed to wet or damp conditions;
    - if there are time constraints;
    - in lieu of additional sighting and/or warm-up laps.
  - (h) There must be a minimum of 3 laps excluding any sighting and/or warm-up laps.
  - (i) The final result will be based on the classification of the restarted race, applying Standing Regulations 20&21.
  - (j) If the restarted race is stopped it may further restarted as required at the discretion the Clerk of the Course, applying Standing Regulation 21.1.1 and 21.1.2, over a minimum of 3 laps.
  - (k) If it is not possible to restart the race and complete two-thirds race distance by the race leader, the result of the last race where the race leader completed more than 3 laps will count. Half points will be awarded towards any championship for which the race counts.
- 21.1.3 If a race has to be stopped after the race leader has completed two-thirds race distance, rounded down to the nearest whole number of laps, it will be considered to have finished:
- (a) The order of classification shall be based upon the order of last crossing the finishing line prior to the showing of the red flag. Drivers who are not actively competing in the race at the time when the red flag is displayed will not be classified.
  - (b) Full points will be awarded towards any championship for which the race counts.
- 21.1.4 If a race has to be stopped after the leader(s) on the road have taken the chequered flag they will be classified as having finished the race.
- (a) The order of classification for those drivers who have not taken the chequered flag shall be based upon the order of last crossing the finishing line prior to the showing of the red flag. Drivers who are not actively competing in the race at the time when the red flag is displayed will not be classified.
  - (b) Full points will be awarded towards any championship for which the race counts.

(ICC December 2015)

# STOPPED RACE READY RECKONER

Laps Completed by Leader	RACE DISTANCE													
	3 Laps (2/3+2)	4 Laps (2/3=2)	5 Laps (2/3=3)	6 Laps (2/3=4)	7 Laps (2/3=4)	8 Laps (2/3=5)	9 Laps (2/3=6)	10 Laps (2/3=6)	11 Laps (2/3=7)	12 Laps (2/3=8)	13 Laps (2/3=8)	14 Laps (2/3=9)	15 Laps (2/3=10)	
0 Laps	restart	restart	restart	restart	restart	restart	restart	restart	restart	restart	restart	restart	restart	
1 Laps	restart *	restart *	restart *	restart *	restart *	restart *	restart *	restart *	restart *	restart *	restart *	restart *	restart *	
2 Laps	restart *	restart *	restart *	restart *	restart *	restart *	restart *	restart *	restart *	restart *	restart *	restart *	restart *	
3 Laps	result 3/2 laps	result 3/2 laps	result 3/2 laps	2nd part 3 Laps	2nd Part 4 Laps	2nd Part 5 Laps	2nd Part 6 Laps	2nd Part 7 Laps	2nd Part 8 Laps	2nd9 Part 9 Laps	2nd Part 10 Laps	2nd Part 11 Laps	2nd Part 12 Laps	
4 Laps		result 4/3 Laps	result 4/3 Laps	result 4/3 Laps	result 4/3 Laps	2nd Part 4 Laps	2nd Part 5 Laps	2nd Part 6 Laps	2nd Part 7 Laps	2nd Part 8 Laps	2nd Part 9 Laps	2nd Part 10 Laps	2nd Part 11 Laps	
5 Laps			result 5/4 Laps	result 5/4 Laps	result 5/4 Laps	result 5/4 Laps	2nd Part 4 Laps	2nd Part 5 Laps	2nd Part 6 Laps	2nd Part 7 Laps	2nd Part 8 Laps	2nd Part 9 Laps	2nd Part 10 Laps	
6 Laps				result 6/5 Laps	result 6/5 Laps	result 6/5 Laps	result 6/5 Laps	result 6/5 Laps	2nd Part 5 Laps	2nd Part 6 Laps	2nd Part 7 Laps	2nd Part 8 Laps	2nd Part 9 Laps	
7 Laps					result 7/6 Laps	result 7/6 Laps	result 7/6 Laps	result 7/6 Laps	result 7/6 Laps	2nd Part 5 Laps	2nd Part 6 Laps	2nd Part 7 Laps	2nd Part 8 Laps	
8 Laps						result 8/7 Laps	result 8/7 Laps	result 8/7 Laps	result 8/7 Laps	result 8/7 Laps	result 8/7 Laps	2nd Part 6 Laps	2nd Part 7 Laps	
9 Laps							result 9/8 Laps	result 9/8 Laps	result 9/8 Laps	result 9/8 Laps	result 9/8 Laps	result 9/8 Laps	2nd Part 6 Laps	
10 Laps								result 10/9 Laps	result 10/9 Laps	result 10/9 Laps	result 10/9 Laps	result 10/9 Laps	result 10/9 Laps	
11 Laps									Result 11/10 Laps	Result 11/10 Laps	Result 11/10 Laps	Result 11/10 Laps	Result 11/10 Laps	
12 Laps										Result 12/11 Laps	Result 12/11 Laps	Result 12/11 Laps	Result 12/11 Laps	
13 Laps											Result 13/12 Laps	Result 13/12 Laps	Result 13/12 Laps	
14 Laps												Result 14/13 Laps	Result 14/13 Laps	
15 Laps													Result 15/14 Laps	

restart \* = dispensation to prepare an order of classification in exceptional circumstances if it is not possible to restart the race. (ICC Dec. 2015)



## **22. OUTSIDE ASSISTANCE.**

If a driver receives outside assistance during a race, other than any provided by the organisers for the removal of himself, or his machine from the course in the interests of safety, he shall be excluded from the results.

## **23. FOUL, UNFAIR OR DANGEROUS DRIVING.**

The Clerk of the Course shall immediately exclude any driver who, in his opinion, is guilty of any foul, unfair or dangerous driving, either in practice or during the actual race. Deliberate lifting of the front wheel (Wheelieing) by a driver for the purposes of showmanship may result in exclusion, or any other action the Clerk of the Course may feel necessary.

## **24. ALTERATION OF PROGRAMME.**

In the event of a race being cancelled due to insufficient entries having been received, the promoters shall have the right to offer the race time and prizes for a race of similar length, for machines in another class or category.

## **25. ABANDONMENT.**

The promoters shall have the right, subject to the approval of the Stewards of the Meeting, to cancel, postpone, or abandon any event, or the competition itself, if circumstances should arise which, in their opinion, render such action necessary.

**26. ADVERTISING.** Advertising may be displayed on a motorcycle, and on the driver's and/or passenger's clothing, and helmet in any competition held under the permit of the MCUI, or a Centre of the MCUI, subject to the following conditions.

- (a) No advertisement shall be displayed within 5cms of any plate or number panel.
- (b) No advertisement shall be displayed on a driver's or passenger's clothing below the knee
- (c) The name of the motorcycle and/or sidecar and/or the name of the driver will not be regarded as advertising.
- (d) Notwithstanding the above conditions the promoters of any competition may, at their sole discretion, prohibit the display of any advertisement, or any particular advertisement, on any motorcycle, or on the clothing or helmet of any driver or passenger.
- (e) Where advertising, or any particular advertisement, is prohibited, all drivers will be notified at least seven days before the date of the meeting.
- (f) The MCUI may prohibit the display of any advertisement, which it deems to be offensive, or not in the best interests of the sport.

NOTE: Advertising at International Competitions must be in accordance with provisions of the International Sporting Code.

## **27. INSTRUCTIONS TO DRIVERS.**

Any instructions to drivers issued after the Supplementary Regulations have the same force as these Standing Regulations and the Supplementary Regulations.

## **28. PROTESTS.**

Every protest shall be in writing, signed by the entrant, or driver, making the protest, clearly specify the matter protested against, which shall refer to a single subject only, and be accompanied by a fee of £25 the protest fee will only be returned if the protest shall be to be justified, or upon a direction by the Stewards of the Meeting, a Centre, or the MCUI.

During a meeting, protests shall be handed to the Clerk of the Course, or his representative, for transmission to the Stewards of the Meeting. At all other times protests shall be addressed to the Secretary of the Meeting for transmission to the Stewards of the Meeting.

A protest, as to the validity of entry, eligibility of entrant, or driver or vehicle, shall be lodged at least twenty-four hours before the start of any National Competition, save when the conditions under which the Competition is held render this impracticable.

In such circumstances the protest shall be made with the minimum of delay, and at the latest within half an hour of the conclusion of the competition.

A protest against a decision of a Scrutineer, or of an Official measurement, shall be lodged immediately after the decision. A protest against any mistake, or irregularity, alleged to have occurred during the course of a race must be made within ten minutes of the finish of a race. No protest lodged after this time shall be considered, except with the special permission of the Stewards of the Meeting, who, before admitting a protest, must be satisfied that there has been no unnecessary delay on the part of the protester.

A protest concerning the results of a competition, and any matter not referred to above, shall be lodged within three days of the publication of the detailed results unless for any special reason, of which the Stewards of the Meeting shall be the sole judges, it could not have been lodged within that time. The results of a competition shall be deemed to have been published 24 hours after the date of dispatch to entrants and drivers. Proof of dispatch is to be furnished by the promoters if required.

## **29. INTERPRETATION.**

The decision regarding the interpretation of the GCR, these Standing Regulations the Supplementary Regulations, and any Instructions to Drivers, shall rest entirely with the Stewards of the Meeting, whose decision shall be final and binding subject to the provisions of the General Competition Rules.

## **30. DISCLAIMER.**

It is a condition of acceptance of entry that the promoters shall not be responsible for any damage to any motorcycle, or its accessories, howsoever caused, nor for the theft of any motorcycle during the meeting.

## **31. LIABILITY FOR DAMAGE.**

An entrant shall be liable for any damage caused by himself, his driver, or passenger or any agent, representative or servants, acting on their behalf, during the meeting. The promoters shall be empowered to act as agents for such persons, to agree and pay for any damage, and entrants shall on demand reimburse the promoters for any such sum so paid.

## **32. COMPLIANCE WITH REGULATIONS.**

Each and every entrant, driver, and passenger by entering, or being entered or nominated to take part in a competition thereby acknowledges that he will be bound by the General Competition Rules of the MCUI, these Standing Regulations, the Supplementary Regulations for the Competition, and any instructions to Drivers that may be issued, to all of which he undertakes to submit. He also expressly renounces the right to have recourse to any tribunal, or arbitration not provided for in the aforesaid Rules and Regulations.

**33. MACHINE ELIGIBILITY.** Only purpose built machines are acceptable in Road Races and Short Circuits. Exceptions to this rule will only be permitted if the machine is certified as suitable by the Technical Committee. The decision of the Technical Committee of either Centre or Centres is final.

## **34. WET RACES.**

The clerk of course allows riders time for change of tyres. Clerk of Course decision is final.

## **35. NEWCOMERS TO SHORT CIRCUIT RACING.**

All newcomers to short circuit racing must complete a training day before being allowed to enter their first race.

## **36. SIGNING ON AT ROAD RACES.**

Competitors at all road races are required to 'sign on' only once, this will cover both days racing. Competitors must report to race secretary on race day to receive race permit. If a competitor is not going to compete on race day, they must inform race secretary in writing 30 minutes before road closing time. No exceptions to the above rule.

## **37. COMMON START AT ROAD RACES UNIFORMITY.**

Clubs must have the start flag / lights and the finish flag on the same side of the road, so that there can be no confusion with riders. Only Red flag to be used to stop a race prematurely.

## **38. NOISE LEVELS.**

All machines must be silenced as per MCUI rules. This includes Classic Bikes. Maximum 105dba.

## **39. CHAIN GUARDS.**

Compulsory fitting of a chain guard to all machinery from the rear fork (swinging arm) in front of the rear drive sprocket to beyond the lower chain run so that nothing can be caught between the chain and sprocket. Exclusion at scrutineering if not fitted.

## **40. LINE JUDGES.**

Each promoting club will have a line judge for both the start and finish of racing.

## **41. ELIGIBILITY FOR PRE INJECTION CLASS.**

Any machine whose engine is normally aspirated through carburettors and is between Class (A) 201/600cc. Class (B) Over 630cc-1000cc  
No 250cc GP / 500cc GP machines are permitted.

(ICC Dec 2019)

## **42. PADDOCK AND PIT AREA SAFETY**

**42.1 GENERAL.** Competitors must observe all instructions given to them by the promoting club, the Clerk of

the Course and other Grid, Paddock and Pit Area officials as to how and where to park their vehicles (and those of their assistants and sponsors in the paddock) in the paddock, machine holding areas, the dummy grid, the grid and the designated pit area.

Competitors and their assistants and sponsors, must also observe any other regulations and protocols stipulated by the promoters/circuit owners in relation to 'curfew times' for movement of vehicles in the paddock, the type and number of vehicles allowed in the paddock, generator switch off times, etc.

- 42.2 **FIRE EXTINGUISHERS.** All competitors' vehicles must carry a dry powder fire extinguisher, of minimum capacity 2.5kg, which must bear a current Inspection Certificate. The fire extinguisher must be easily accessible and readily available.
- 42.3 **STORAGE OF FUEL IN THE PADDOCK AND REFUELLING.** Fuel must be stored in a well ventilated area. Only approved fuel storage containers to be used. No Smoking / No open flames in the areas of fuel storage and during refuelling.
- 42.4 **PROHIBITION OF SMOKING.** Smoking is prohibited in all machine holding areas, the dummy grid, the grid and the designated pit area.
- 42.5 **PARKING OF MACHINES AND STORAGE OF EQUIPMENT IN THE PADDOCK.** Competitors must park their machine(s) and store their equipment beside their vehicle(s), in a space consistent with number of machines the competitor has, and in such a manner as not to endanger other competitors, officials or spectators.
- 42.6 **EQUIPMENT IN MACHINE HOLDING AREAS, THE DUMMY GRID, THE GRID AND THE DESIGNATED PIT AREA.** The competitor's assistant(s)/pit attendant(s) must ensure that all equipment taken into these areas is controlled in such a manner as not to endanger other competitors, officials or spectators.
- 42.7 **PREVENTION OF ELECTROCUTION/ELECTRICAL SHOCK.**

To minimize the chances of electrocution/electrical shock, all power supplies from generators must be controlled by a 30 mA Residual Current Device (RCD)/Power Breaker. If the generator is not fitted with an RCD of this type, a 30 mA RCD must be fitted to the power cable at a maximum length of 50cms from the generator power output point, and preferably also mounted on the generator. Where the competitor is using a Power Supply provided by the Promoter/Circuit owner, under arrangement, the competitor must still ensure that the supply is controlled by an RCD. However, in this case the responsibility for the provision and installation of the circuit breaker rests with the Promoter/Circuit owner.

Where the competitor is using a Power Supply provided by the Promoter/Circuit owner, under arrangement, the competitor must still ensure that the supply is controlled by an RCD. However, in this case the responsibility for the provision and installation of the circuit breaker rests with the Promoter/Circuit owner.

Competitors must ensure that all that all cables, sockets and plugs used by them and their teams are in good and safe condition and free from breakages. Also that cable runs are kept to the minimum length possible and are positioned so as not to endanger, themselves, their assistants, other competitors, officials and spectators.

It is recommended that all electric cables, electrical sockets and plugs on electrical equipment used in the paddock, machine holding areas, the dummy grid, the grid and the designated pit area are of industrial type and waterproof. This will minimise the likelihood of the RCD on the power supply de-activating the supply due to fractures or adverse weather conditions.

Should the Clerk of the Course or the Appointed Safety Officers at an event consider a competitor or his/her team to be in breach of this regulation; the competitor shall immediately switch off all the electrical equipment and will not switch it on again until the breach has been remedied. Any competitor failing to do so immediately may be excluded from the meeting or subject to such other disciplinary action, consistent with the GCRs, that the Clerk of the Course and Stewards of the Meeting decide on.

(ICC Jan. 2009)

**Agreed to reclassify 'Road Racing Task Force Regulations' which are currently contained within Standing Regulation 41 as Chapter 1A to allow addition of new Standing Regulations without impacting Task Force Regulations**

(ICC Jan. 2009)

## CHAPTER 1A

### ROAD RACING TASK FORCE REGULATIONS.

The following regulations were first approved by the MCUI Inter Centre Conference in 2001 and revised as indicated at Special Conference of the MCUI on 9th March 2008

No	Recommendation/Regulation
<b>Course Improvements</b>	
1	Close Temple Course (Saintfield circuit).
2	Close Leitrim Course.
3	Independent Risk Analysis to be completed every five years.
4	Promoters Risk Assessment to be completed annually.
5	Annual MCUI/Road Service inspection of each course to be completed.
6	Short Term Action List to be implemented following risk assessment.
7	Outstanding issues arising from risk assessments to be incorporated into routine maintenance by Roads Services and utility providers.
8	Safety and medical equipment needs to be identified and resourced.
9	Photographic record of all course furniture to be established and maintained.
10	Speeds to be artificially reduced at potentially dangerous locations as identified by independent risk analysis
11	Additional protective measures to be introduced to potentially dangerous locations - as identified in the risk analysis
12	Preference is for an independent common official to be responsible for safety measures at all courses. (Special Conference 9th March 2008)
13	Paddock procedures and protocols to be developed.
<b>Rider Improvements</b>	
14	MCUI approved helmets, boots and protective clothing including gloves to be
15	Accident-involved helmets to be permanently marked.
16	100% scrutineering for helmets. Zero tolerance to impact damage. (Special Conference 9th March 2008).
17	Use of back and chest protectors are compulsory from 2020 at all tarmac events. (ICC Dec 2019)
18	Licence system to be reviewed to provide for restrictions, upgrades, and endorsements
19	Coloured jacket system to be strictly enforced for practice only, with riders having the option to wear the jacket during racing. (Special Conference 9th March 2008)
20	All event organisers to appoint a rider welfare officer reporting to the common official.
21	All riders to be provided with a prohibited substances list and random dope testing to be introduced to all events. All competitors to be bound by the MCUI anti-doping policy, whose policy will determine sanctions imposed.
22	Random alcohol testing to be introduced to all events. Zero tolerance.
23	Compulsory course induction and familiarization to be introduced for all Newcomers. (Special Conference 9th March 2008)
24	Previous evening or day practice to be compulsory for riders and promoters. No practice, no race. Exceptions will only be allowed for reasons of "force majeure" which mean that practice cannot be completed on the previous day, such exceptions to be approved by the Stewards of the Meeting". Reasons for 'force majeure' must be genuine, e.g. inclement weather, delays for accidents, etc.; but not delays caused by poor course preparation, or poor organisation by the promoter. (Special Conference 9th March 2008)
25	All riders to have a minimum of 5 laps practice.
26	All riders to have a minimum of one sighting lap.
27	All competitors in their first year in Irish National Road Racing are restricted to the class shown on their Competition Licence. Senior Support Class. 'A' licence holders are ineligible to ride in this class. Exceptions to the above will only be permitted if approved by the MCUI Road Race Commission. (ICC December 2019)
28	Competitors in their second year of Irish Road Racing (National or International) are restricted to a maximum of 3 races per day. (Special Conference 9th March 2008)
29	No rider to be permitted to enter more than 5 races per day.
30	Slow riders to be flagged off.
31	Rider training packages regarding fitness, mental preparation and riding techniques to be developed.

32	Both centres to provide an annual rider training programme.
33	Pump fuel to be required for all classes. Pump fuel is defined as fuel of maximum of 102 RON. (Special Conference 9th March 2008)
34	The feasibility of central fuel supplies being made available through the paddocks to be investigated.
35	Establish, via FIM research, some guidelines on tyre usage and practice.
36	Develop best practice guidelines for use of protective safety material (bales etc.).
37	Develop best practice guidelines for the design and construction of chicanes and other speed restricting devices.
<b>Official and Marshalling Improvements</b>	
38	Introduce up to 3 common officials.
39	Introduce rider welfare officer at each event.
40	Introduce and train a team of travelling marshals which shall include riders who have been competitive riders within the last 5 years.
41	Establish written guidelines for all officials.
42	Produce a motor cycle road racing marshal's handbook.
43	Run an annual safety seminar for marshals.
44	Run an annual seminar for clerks of courses and common officials.
45	Establish a small marshal's focus group.
46	Establish a qualification for, and a database of tutors.
47	Develop a recognised qualification for rider coaches.
48	Require annual training and / or a refresher course for all officials and marshals.
49	Review syllabi content, tutor training and resource material for (a) Clerk of Course training (b) Stewards' training (c) Marshal and flag marshal training (d) Spectator marshal training (e) First aid and medical training
50	Each course and each race to have prescribed maximum number of starters
51	Novices to have separate starts. (Special Conference 9th March 2008)
52	The number of classes to be prescribed at all events.
53	Investigate the possibility of establishing helicopter stand-by for all events.
54	Establish an all-Ireland safety commission and require a formal annual report.
55	Establish a small medical and first aid committee.
56	Review and standardise general course instructions.
57	Computerise and extend accident reports.
58	Revise records to include race miles actually ridden per event (and if possible per machine).
59	Design and implement a new entry form
60	Review first aid management and rewards.
61	Establish a forum or small focus group for:
62	(1) Riders.
63	(2) Stewards.
64	(3) Clerks of the course and common officials.
65	Commission an economic impact study.
66	Review MCUI structure.
67	Review club structure.

## CHAPTER 2

### STANDING REGULATIONS FOR PRE 1973 CLASSIC RACING MACHINES

#### 1. CATEGORIES.

A machine is categorised by the first year of manufacture, i.e. the chassis is the machine. Should the engine and/or proprietary parts post-date the chassis, the age of the machine shall be determined by the engine and/or proprietary parts. Proprietary parts shall mean the brakes, engine, frame, gearbox, front and rear suspension units and wheels. The parts must be of a design that was manufactured and available within the relevant classic period.

The categories shall be as follows:

- (a) British and European four stroke machines up to and including 31st December 1972.
- (b) Japanese four stroke machines with no more than two cylinders up to and including 31st December 1968.
- (c) Japanese two stroke machines up to and including 31st December 1967.
- (d) British and European two stroke machines up to and including 31st December 1968.
- (e) Japanese four stroke machines with single cylinder, single overhead cam, up to 250cc manufactured up to 31<sup>st</sup> December 1972
- (f) Honda four stroke twin cylinder machines-CD/CL/CB 175 K3-K7 models manufactured between 1969-79 will be eligible for competition within 250cc Pre 73 classic Class from 1<sup>st</sup> January 2020

(ICC December 2019)

#### 2. CLASSES

- (a) 250cc (up to 250cc)
- (b) 350cc (263-350cc)
- (c) 500cc (368-500cc)
- (d) 1000cc (526-1000cc)

To facilitate re-bores, capacity may be enlarged within the following limitations:

- ~ 250cc - by a maximum of 5%
- ~ 350cc - by a maximum of 5%
- ~ 500cc - by a maximum of 5%
- ~ 1000cc - by a maximum of 5%

#### 3. ENGINE.

Internal modifications will be permitted at the discretion of the owner. However, the external design of the engine may not be changed unless a similar modification was carried in the period for which the machine is eligible under Rule 1.

(Special ICC March 2009)

**4. IGNITION.** Modern ignition systems can be used provided it is single map as per Classic FIM rules.

(ICC March 2018)

**5. CARBURETTORS.** The carburettor(s) may be changed.

(Special ICC March 2009)

**6. BELT DRIVES.** The use of belt drives is permitted.

(Special ICC March 2009)

**7. FUEL.** As per MCUI rules.

(Special ICC March 2009)

#### 8. TWIN OR MULTI CYLINDER TWO STROKE MACHINES.

All twin or multi cylinder two stroke powered machines above the swept volume of 250cc will be deemed ineligible for classic racing after 1st January 1993.

For all twin or multi cylinder two stroke powered machines up to, and including the swept volume of 250cc:

- (a) Carburettors and inlet choke dimensions must not exceed a maximum of 30mm.
- (b) The external appearance of the engine parts/castings must remain as per the manufacturer's specification.

#### 9. NORTON COMMANDO ENGINE.

The 850cc Norton Commando engine will, as a special dispensation, be accepted as a continuation of the 750cc Commando model.

(Special ICC March 2009)

**10. WHEELS.** The wheels must be of wire spoke construction.

(Special ICC March 2009)

**10A. BRAKES.** Any pre 73 drum type brake may be fitted, the only disc brake callipers permitted are:

- AP Lockheed 2 piston calliper
- Honda single piston calliper
- Brembo or Grimeca (Moto Guzzi T3)
- Dunstall (Integral with slider)
- Yamaha (XS650)

Floating rotors are not permitted

(ICC December 2019)

#### 11. WHEEL RIM SIZES.

The maximum rim sizes allowed on Classic race machines up to and including, 500cc shall be WM3; over 501cc and up to 1000cc shall be WM4.

(Special ICC March 2009)

**12. TYRES.** Slicks or hand-cut slicks are not permitted.

(Special ICC March 2009)

### 13. TANKS/SEATS/FAIRINGS.

These shall be of a style and pattern in use within the period specified for the category of machine as mentioned in Rule 1.  
(Special ICC March 2009)

### 14. 'K' MODEL HONDAS

All 'K' model Honda machines manufactured after the 31st December 1968 will be accepted as a continuation run of the 'K' model.

Front forks and/or front wheel can be changed but the exchange units must be of a type available in the period pre-dating 31st December 1968. Any change of frame must be of a design and type manufactured in the period up to, and including, the 31st December 1968 cut-off date.  
(Special ICC March 2009)

### 15. NO RACING WITH OTHER MACHINES.

Pre 1973 Classic machines must not be run in the same race at the same time as other classes of machines.  
(Special ICC March 2009)

### 16. REGISTRATION OF MACHINES.

All machines must be registered with, and approved by, the M.C.U.I. which shall issue a Certificate of Registration in respect of each machine registered.

Riders of Classic machines taking part in a Classic race will have to produce their machine registration card in conjunction with their competition licence and medical certificate when signing on.  
(Special ICC March 2009)

### 17. BELLY PAN

All four stroke Classic machines must be fitted with a belly pan.  
(ICC 6th December 2014)

### 18. Additional machines to be included within Classic Pre-73 "Unlimited" class.

(A) To include the following 4-cylinder Honda machines:

CB750/4 CB500/4 cylinder (and CB550/4 as continuation of model)

CB350/4 cylinder (and CB400/4 as continuation of model)

(B) All machines to be single overhead cam only

(C) No slipper clutch allowed

(D) *Frame must be of a type and model used within appropriate period for the model and must maintain the manufacturer's original dimensions and shape.*

(E) Brakes -- Must be of a period design

(F) Wheels – As per section 11

(G) Tyres - -As per section 12

(H) Ignition - As per section 4

(I) Carburettors: Must be of a period Pre-73 design.

(J) Suspension: Front forks to be of period look telescopic design  
Maximum stanchion diameter 35mm No External reservoir on rear shocks.

(K) Exhaust Systems: Exhaust can be 4 into 4 /4 into 2 or 4 into 1  
Must not exceed 105dB when measured

(L) Oil containment as per Section 17

Machines must display Unlimited class number plates - -White Background Black Numbers

**Machines Must be registered as per MCUI GCR's**

**In the event of class oversubscribed, grid to be filled using appropriate individual class qualifying time**

**Other Machines to be included in classic unlimited class will include period replica and original models of multi cylinder exotica Pre-1973 Grand Prix racing machines such as the following:**

**MV500/4, MV 500/3, Paton500 twin, Benelli 500/4, Benelli 350/4, Benelli 250/4, Gilera 500/4**

(ICC Dec 2018)

## CHAPTER 3 (Updated December 2019)

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## **MCUI TECHNICAL REGULATIONS: - YOUNG GUNS CHALLENGE for use in 'MOTO-ONE' class from 2020**

All items not mentioned in the following articles must remain as originally produced by the Manufacturer for the homologated machine. Everything that is not authorised and prescribed in these rules is strictly forbidden. All motorcycles must comply in every respect with all the requirements for racing as specified in the Technical Regulations, unless it is equipped as such on the homologated machine.

All items not mentioned in the following articles must remain as originally produced by the Manufacturer for the homologated machine. Everything that is not authorised and prescribed in these rules is strictly forbidden. All motorcycles must comply in every respect with all the requirements for racing as specified in the Technical Regulations, unless it is equipped as such on the homologated machine.

### **1. Machines:**

Any 125cc two stroke single cylinder machine originally produced for road use with a water cooled engine with a maximum capacity as stated may be used provided it adheres to the following regulations.

### **2. Carburation Instruments:**

Carburation instruments must remain as homologated. Carburettor jets and needles may be replaced. No modification, polishing or cutting is allowed. Only the standard bodied carburettor is permitted. Electronic or mechanical enriching devices must remain installed and active (If the carburettor is changed from one model to another, the appropriate wiring loom must also be installed and be operative). Bell mouths must be as originally produced by the manufacturer for the homologated machine.

Throttle controls must be standard, quick action throttles are not permitted.

### **3. Frame Body and Rear Sub-Frame:**

Fairing, mudguards and seat unit may be altered or replaced. Windscreen, if fitted, may be replaced with transparent material only. The original instruments and fairing brackets may be removed or replaced. The petrol tank must remain as originally produced by the manufacturer for the homologated machine although it may be refinished if required. The position of the tank mounting points on the frame must remain as standard. The lower fairing has to be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (minimum 5 litres). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing. 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.

### **4. Front Forks:**

Forks structure (spindle, stanchions, bridges, stem etc.) must remain as originally produced by the manufacturer. Standard original internal parts of the forks may be modified. Aftermarket damper kits or valves may be installed. The fork caps can be modified or changed to add spring preload/compression and damping adjusters. Dust seals can be modified changed or removed providing the fork remains totally oil sealed. Any quantity or quality of oil can be used in the front forks. The height and position of the front fork in relation to the fork crowns is free. A steering damper may be added but may not act as a steering lock device.

### **5. Rear Suspension Unit:**

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

### **6. Wheels:**

Wheels must remain as originally produced by the manufacturer (any wheel from eligible models may be used). The speedometer drive may be replaced with a spacer. The cushion drive for the rear wheel must remain as originally produced for the standard wheel. No modification of the wheel axles or any fixing or mounting points for front brake callipers are authorised. Spacers can be modified. Modifications to the wheels to keep spacers in place are permitted.

### **7. Brakes:**

Brake discs must remain as originally produced by the manufacturer. The front and rear calliper (mount, carrier, hanger) must remain as originally produced. The front master cylinder may be changed but the rear master cylinder must remain as originally produced. Both reservoirs may be changed for aftermarket products. Front and rear hydraulic lines may be changed for aftermarket braided hoses. Front and rear brake pads may be changed. Air scoops are not permitted.

### **8. Tyres:**

All tyres must be treaded. Slick tyres are not permitted.

### **9. Foot Rests/Foot Rest Controls:**

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

### **10. Handle Bars and Hand Controls:**

Handle bars may be replaced (does not include brake master cylinder). Handle bars and hand controls may be relocated. Un-used switches can be removed but electric starter switch and engine stop switch must be located on the handlebars in accordance with MCUI Standing Regulations.

### **11. Fairing/Bodywork/Fuel Tank Cover:**

Fairing, seat, bodywork and fuel tank cover, may be replaced with cosmetic duplicates for racing purposes. The use of carbon fibre or exotic materials is forbidden. The original combination instrument cluster and bracket must remain standard. All other fairing brackets may be altered or replaced. Exotic materials are forbidden. The original air ducts must remain standard. Particle grills (if installed) may be removed. Front mud guards may be replaced with a cosmetic duplicate of the original and may be spaced to allow correct tyre clearance. Rear mudguard fixed on the swing arm can be modified or changed but the original profile must remain. Exotic materials are forbidden.

### **13. Seat and Support:**

Seat base and associated body work may be replaced with parts of similar appearance. These at may be modified to lower the seat height for smaller riders, under no circumstances may the sub-frame be altered to accommodate such changes. The appearance from both sides and rear must conform to the original silhouette.

### **14. Wiring Harness:**

The original wiring loom may only be modified as follows: The unused wire loom elements supplying current to indicators, horn, ignition contact and lights etc. may be unplugged and or removed (no cutting is allowed). The wiring loom may be relocated on the machine but no cutting of any wires is permitted.

**15. Battery:** The battery may be replaced but must remain in the standard location.

### **16. Air Box:**

The air box must remain as originally produced by the manufacturer (no modifications are permitted). The air filter element may be modified, removed or replaced.

**MCUI TECHNICAL REGULATIONS: - YOUNG GUNS CHALLENGE for use in 'MOTO-ONE' class from 2020 (Continued 1)**

**17. Cylinder Head:** No modifications permitted.

**18. Crankshaft:** No modifications are allowed.

**19. Connecting Rod:** No modifications are allowed.

**20. Pistons:** Manufacturers standard pistons or aftermarket pistons may be used but bore and stroke must remain as standard.

**22. Piston Pins and Clips:** No modifications are allowed.

**23. Cylinder:** No modifications are allowed except for replating/relining. Bore must remain as standard

**24. Crank Case and all other Engine Cases:** No modifications to these parts are allowed except polishing and matching.

**25. Transmission/Gearbox:**

No modifications to the gearbox or select or mechanism are allowed. Counter shaft, sprockets, chain pitch and size may be changed. The sprocket cover can be modified or removed. No quick-shifters or ignition interruption systems are permitted.

**26. Clutch:**

No modifications are allowed, except for replacing the friction and drive plates (the number of plates and their ratio must remain as the standard model). Clutch springs may be replaced.

**27. Ignition/Engine Control System:** (CDI/ECU)

The unit must remain standard.

**28. Generator, Alternator & Electric Starter:**

No other modifications are permitted. The electric starter must operate normally and always be able to start the engine throughout the event. The standard connections must be maintained to both the starter and generator.

**29. Ignition Switch and Key:**

These parts must remain on the bike and in working order.

**30. Exhaust System:**

Exhaust pipe and silencers may be altered or replaced from those fitted to the homologated motorcycle. This must adhere to the maximum noise regulations of 105db. The number of final exit(s) to the exhaust may be altered from that of the homologated machine. Wrapping of exhaust systems is permitted.

**31. Fasteners:**

Standard fasteners may be replaced with fasteners of any material and design but titanium fasteners may not be used. The strength and design of any replacement must be at least equal to the original part. Fairing/bodywork fasteners may be changed to the quick connect type, but aluminium fasteners may only be used in non-structural locations.

**32. Auto Lube System:**

The Auto lube or premix is allowed, however the auto lube system (including the oil tank and pump) must remain.

**33. The Following Items May Be Altered Or Replaced From Those Fitted To The Homologated Machine:**

Any type of lubrication, brake or suspension fluid may be used. Any type of spark plug may be used. Any inflation valves may be used. Wheel balance weights may be discarded, changed or added to. Any type of gaskets and gasket materials may be used.

**35. The Following Items Must Be Removed:** Headlamp, rear lamp and turn signal indicators, rear view mirrors, horn, license plate bracket, toolbox, helmet hooks and luggage carrier hooks, passenger footrests, passenger grab rails, safety bars, centre and side stands (fixed frame brackets must remain).

**36. Additional Equipment:** Additional equipment not on the original homologated motorcycle may not be added (i.e. data acquisition, computers, recording equipment etc.). Telemetry is not allowed. The only potentiometers and sensors allowed are those fitted as original equipment on the motorcycle as homologated.

**37. Replacement and Repairs:**

Where necessary, parts from an older or newer version of the same model maybe used. No advantage maybe gained from these changes.

**38. Chain Guards:**

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

**39. Fuel:**

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

(ICC December 2019)

**40. Radiator and Oil Cooler:**

The original radiator may be modified to aid cooling. Radiator hoses may be replaced with those of a similar internal diameter. The use of coolants is prohibited, water only to be used.

**41. Bore and Stroke:**

Bore and Stroke details must be displayed on the motorcycle.

**42. Race Numbers & Backgrounds:** As per MCUI regulations

**ALL MACHINES MUST HAVE**

**43. Rear Safety Light**

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
4. the light must be able to be switched on and off.

**44. Handlebar Lever Protection**

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

## **MCUI TECHNICAL REGULATIONS: - JUNIOR CUP MACHINES for use in 'MOTO-ONE' class from 2020**

All items not mentioned in the following articles must remain as originally produced by the Manufacturer for the homologated machine. Everything that is not authorised and prescribed in these rules is strictly forbidden. All motorcycles must comply in every respect with all the requirements for racing as specified in the Technical Regulations, unless it is equipped as such on the homologated machine.

### **1. Machines:**

For 4 Stroke machines originally produced for road use with a water cooled engine may be used provided it adheres to the following regulations.

### **2. PERFORMANCE/OUTPUT:**

All machines must be limited to 43bhp at the rear wheel. A tolerance of 1bhp will be permitted to allow for climatic and output irregularities between various dyno machines. The results of the MCUI official dyno test machine will be final.

### **Machines attributed to these Regulations are:**

HONDA CBR250R produced from 2011-2013  
HONDA CBR300R produced from 2014 onwards  
KAWASAKI NINJA 250R produced from 2008-2013  
KAWASAKI NINJA 300R produced from 2013 onwards  
KTM RC250 produced from 2015 onwards  
KTM RC390 produced from 2014 onwards  
YAMAHA YZF-R25 produced from 2014 onwards  
YAMAHA YZF-R3 produced from 2015 onwards  
BMW G310R produced from 2016 onwards

### **3. Carburation Instruments:**

Carburation instruments must remain as homologated. If a 250cc 4 stroke machine is being converted to 300cc then it is permitted to use the 300cc carburation instruments from the same manufacturer. Carburettor jets and needles may be replaced. No modification, polishing or cutting is allowed. Only the standard bodied carburettor is permitted, except in the case mentioned above. Electronic or mechanical enriching devices must remain installed and active (If the carburettor is changed from one model to another, the appropriate wiring loom must also be installed and be operative). Bell mouths must be as originally produced by the manufacturer for the homologated machine.

Throttle must be standard, quick action throttles are not permitted.

### **4. Frame Body and Rear Sub-Frame:**

Fairing, mudguards and seat unit may be altered or replaced. Windscreen, if fitted, may be replaced with transparent material only. The original instruments and fairing brackets may be removed or replaced. The petrol tank must remain as originally produced by the manufacturer for the homologated machine although it may be refinished if required. The position of the tank mounting points on the frame must remain as standard. The lower fairing has to be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (minimum 5 litres). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing. 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.

### **5. Front Forks:**

Forks structure (spindle, stanchions, bridges, stem etc.) must remain as originally produced by the manufacturer. Standard original internal parts of the forks may be modified. Aftermarket damper kits or valves may be installed. The fork caps can be modified or changed to add spring preload/compression and damping adjusters. Dust seals can be modified changed or removed providing the fork remains totally oil sealed. Any quantity or quality of oil can be used in the front forks. The height and position of the front fork in relation to the fork crowns is free. A steering damper may be added but may not act as a steering lock device.

### **6. Rear Suspension Unit:**

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

### **7. Wheels:**

Wheels must remain as originally produced by the manufacturer (any wheel from eligible models may be used). The speedometer drive may be replaced with a spacer. The cushion drive for the rear wheel must remain as originally produced for the standard wheel. No modification of the wheel axles or any fixing or mounting points for front brake callipers are authorised. Spacers can be modified. Modifications to the wheels to keep spacers in place are permitted.

### **8. Brakes:**

Brake discs must remain as originally produced by the manufacturer. The front and rear calliper (mount, carrier, hanger) must remain as originally produced. The front master cylinder may be changed but the rear master cylinder must remain as originally produced. Both reservoirs may be changed for aftermarket products. Front and rear hydraulic lines may be changed for aftermarket braided hoses. Front and rear brake pads may be changed. Air scoops are not permitted.

### **9. Tyres:**

All tyres must be treaded. Slick tyres are not permitted.

### **10. Foot Rests/Foot Rest Controls:**

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

### **11. Handle Bars and Hand Controls:**

Handle bars may be replaced (does not include brake master cylinder). Handle bars and hand controls may be relocated. Un-used switches can be removed but electric starter switch and engine stop switch must be located on the handlebars in accordance with MCUI Standing Regulations.

### **12. Fairing/Bodywork/Fuel Tank Cover:**

Fairing, seat, bodywork and fuel tank cover, may be replaced with cosmetic duplicates for racing purposes. The use of carbon fibre or exotic materials is forbidden. The original combination instrument cluster and bracket must remain standard. All other fairing brackets may be altered or replaced. Exotic materials are forbidden. The original air ducts must remain standard. Particle grills (if installed) may be removed. Front mud guards may be replaced with a cosmetic duplicate of the original and may be spaced to allow correct tyre clearance. Rear mudguard fixed on the swing arm can be modified or changed but the original profile must remain. Exotic materials are forbidden.

## **MCUI TECHNICAL REGULATIONS:-JUNIOR CUP MACHINES for use in 'MOTO-ONE' class from 2020 (Continued 1)**

### **13. Seat and Support:**

Seat base and associated body work may be replaced with parts of similar appearance. These at may be modified to lower the seat height for smaller riders, under no circumstances may the sub-frame be altered to accommodate such changes. The appearance from both sides and rear must conform to the original silhouette.

### **14. Wiring Harness:**

The original wiring loom may only be modified as follows: The unused wire loom elements supplying current to indicators, horn, ignition contact and lights etc. may be unplugged and or removed (no cutting is allowed). The wiring loom may be relocated on the machine but no cutting of any wires is permitted.

### **15. Battery:**

The battery may be replaced but must remain in the standard location.

### **16. Air Box:**

The air box must remain as originally produced by the manufacturer (no modifications are permitted). The air filter element may be modified, removed or replaced.

### **17. Cylinder Head:**

No modifications permitted

### **18. Crankshaft:**

Must remain as standard. Polishing and lightening of cranks is not permitted. The only exception being 250cc machines may fit the 300cc crank of the later 300cc machine from the same manufacturer.

### **19. Connecting Rod:**

Must remain as standard. Polishing and lightening of conrods is not permitted. The only exception being 250cc machines may fit the 300cc conrods if fitting the crank of the later 300cc machine from the same manufacturer as above.

### **20. Pistons:**

Must remain as standard. Other manufacturers pistons are permitted but bore and stroke must remain as standard. The only exception being 250cc machines may fit the 300cc pistons if fitting the crank and conrods of the later 300cc machine from the same manufacturer as above.

### **21. Piston Rings:**

No modifications are allowed. The only exception being 250cc machines are permitted to use the 300cc piston rings if converted as mentioned above.

### **22. Piston Pins and Clips:**

No modifications are allowed. The only exception being 250cc machines are permitted to use the 300cc piston pins and clips if using the pistons as mentioned at point 20

### **23. Cylinder:**

No modifications are allowed. The only exception being a cylinder spacer is permitted for 250cc machines to accommodate the longer stroke if fitting the 300cc conversion kit as mentioned at points 18 to 22 above.

### **24. Crank Case and all other Engine Cases:**

No modifications to these parts are allowed except polishing and matching.

All lateral covers/engine cases containing oil on 4 stroke machines and which could come in contact with the ground during a crash, must be protected by a second cover made from composite materials, 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.

Where secondary covers are not commercially available, engine case guards in the form of strengthened engine side covers may be installed.

The countershaft cover may be removed. The addition of a crankcase protector at the countershaft is allowed.

### **25. Transmission/Gearbox:**

No modifications to the gearbox or selector mechanism are allowed. Counter shaft, sprockets, chain pitch and size may be changed. The sprocket cover can be modified or removed. No quick-shifters or ignition interruption systems are permitted.

### **26. Clutch:**

No modifications are allowed, except for replacing the friction and drive plates (the number of plates and their ratio must remain as the standard model). Clutch springs may be replaced.

### **27. Ignition/Engine Control System: (CDI/ECU)**

The unit must remain standard in every other respect. In the case of a 250cc to 300cc conversion as mentioned above, the 250cc ECU/CDI may be replaced with the 300cc unit from the same manufacturer.

### **28. Generator, Alternator & Electric Starter:**

No other modifications are permitted. The electric starter must operate normally and always be able to start the engine throughout the event. The standard connections must be maintained to both the starter and generator.

### **29. Ignition Switch and Key:**

These parts must remain on the bike and in working order.

### **30. Exhaust System:**

Exhaust pipe and silencers may be altered or replaced from those fitted to the homologated motorcycle. This must adhere to the maximum noise regulations of 105db. The number of final exit(s) to the exhaust may be altered from that of the homologated machine. Wrapping of exhaust systems is permitted.

### **31. Fasteners:**

Standard fasteners may be replaced with fasteners of any material and design but titanium fasteners may not be used. The strength and design of any replacement must be at least equal to the original part. Fairing/bodywork fasteners may be changed to the quick connect type, but aluminium fasteners may only be used in non-structural locations.

### **32. The Following Items May Be Altered Or Replaced From Those Fitted To The Homologated Machine:**

Any type of lubrication, brake or suspension fluid may be used. Any type of spark plug may be used. Any inflation valves may be used. Wheel balance weights may be discarded, changed or added to. Any type of gaskets and gasket materials may be used.

**33. The Following Items Must Be Removed:** Headlamp, rear lamp and turn signal indicators, rear view mirrors, horn, license plate bracket, toolbox, helmet hooks and luggage carrier hooks, passenger footrests, passenger grab rails, safety bars, centre and side stands (fixed frame brackets must remain).

## **MCUI TECHNICAL REGULATIONS:-JUNIOR CUP MACHINES for use in 'MOTO-ONE' class from 2020 (Continued 2)**

**34. Additional Equipment:** Additional equipment not on the original homologated motorcycle may not be added (i.e. data acquisition, computers, recording equipment etc.). Telemetry is not allowed. The only potentiometers and sensors allowed are those fitted as original equipment on the motorcycle as homologated.

**35. Replacement and Repairs:**

Where necessary, parts from an older or newer version of the same model may be used. No advantage may be gained from these changes.

**36. Chain Guards:**

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

**37. Fuel:**

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

(ICC December 2019)

**38. Race Numbers & Backgrounds:** As per MCUI regulations

**ALL MACHINES MUST HAVE**

**39. Rear Safety Light**

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
4. the light must be able to be switched on and off.

**40. Handlebar Lever Protection**

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

All items not mentioned in the following articles must remain as originally produced by the Manufacturer for the approved machine. Everything that is not authorised and prescribed in these rules is strictly forbidden. All motorcycles must comply in every respect with all the requirements for racing as specified in the Technical Regulations, unless it is equipped as such on the approved machine.

**1. Machine:** Tianda TDR300**2. Carburation Instruments:**

Carburation instruments must remain as per approved machine. Carburettor jets and needles may be replaced. No modification, polishing or cutting is allowed. Only the standard bodied carburettor is permitted. Electronic or mechanical enriching devices must remain installed and active. Bell mouths must be as originally produced by the manufacturer for the approved machine. Air filter may be added. Throttle controls must be standard, quick action throttle unit as supplied with machine.

**3. Frame Body and Rear Sub-Frame:**

Main frame to remain standard, crash bungs may be fitted. Swinging arm to remain as standard. Suspension mounts and geometry (linkage) to remain as standard. Rear sub frame may be adjusted to suit the rider with no reduction in weight of the machine.

**4. Fuel Tank**

Fuel tank to remain as per standard fitment and not modified.

**5. Engine**

Engine to remain as a sealed unit as supplied by authorised agent. Secondary covers are required or appropriate positioned crash bungs if covers are not available. If after competition at technical inspection there is no seal in place the results for that competitor will be removed from the final placings for that days competitions. All engine breathers must go to containment of at least 250ml enclosed within the fairing. Valve clearances may be adjusted.

**6. Min Weight**

Machine must weigh a minimum of 103kg after race with minimum of 1 litre of fuel in tank

**7. Front Fork:**

Forks structure (spindle, stanchions, bridges, stem etc.) must remain as originally produced by the manufacturer. Standard original internal parts of the forks may not be modified. Only oil and springs may be changed. Any quantity or quality of oil can be used in the front forks. The height and position of the front fork in relation to the fork crowns is free. A steering damper may be added but may not act as a steering lock device.

**8. Rear Suspension unit:**

Rear suspension unit (shock absorber) to remain as standard. Rear suspension spring may be changed.

**9. Wheels:**

Wheels must remain as originally produced by the manufacturer. The cushion drive for the rear wheel must remain as originally produced for the standard wheel. No modification of the wheel axles or any fixing or mounting points for front brake callipers are authorised. Modifications to the wheels to keep spacers in line are permitted.

**10. Brakes:**

Brake discs must remain as originally produced by the manufacturer. The front and rear calliper (mount, carrier, hanger) must remain as originally produced. The front master cylinder may be changed but the rear master cylinder must remain as originally produced. Both reservoirs may be changed for aftermarket products. Front and rear hydraulic lines may be changed for aftermarket braided hoses. Front and rear brake pads may be changed. Air scoops are not permitted.

**11. Tyres:**

Tyre will be confirmed via MCUI Technical bulletin—based on finding suitable treaded tyres due to rim widths-Front fitment tyres will be permitted on rear rims.

**12. Foot Rests/foot Rest Control:**

Foot rests/foot rest controls can be per manufactured components or aftermarket components to allow better fitment for smaller/larger riders but brackets must be mounted to the frame at the original mounting points.

**13. Handle Bars and Hand Controls:**

As standard with brake guard to be fitted. Bar ends to be plugged or rubber covered. Levers to have 16mm ball ends. There must be at least 30mm clearance between handlebars and fuel tank, frame or bodywork when steering is on full lock on both sides against the steering stops. The steering damper must not be used as a steering stop. No welded repair to handlebars is allowed.

**14. Fairing/Bodywork/Fuel Tank Cover:**

To remain as standard, but tank cover and seat unit may be separated. Screen and screen height may be changed. Front mudguard and hugger must remain on the machine.

The lower fairing must be constructed to hold, in case of an engine breakdown, the total oil and engine coolant capacity used in the engine (minimum 2 litres). The lower edge of openings in the fairing must be positioned at least 50mm above the bottom of the fairing. The lower fairing must incorporate a hole of 25mm in the bottom of the front lower area. This hole must remain closed in dry conditions and must be only opened in wet conditions as declared by the Race Director.

**15. Wiring Harness:**

The original wiring loom must be used with no modifications.

**16. Battery:**

The battery may be replaced but must remain in the original position.

**17. Cylinder Head:**

No modifications permitted.

**18. Crankshaft:**

No modifications permitted.

**19. Connecting Rod:**

No modifications permitted.

**20. Pistons:**

Manufacturers standard pistons must be used. Bore and stroke must remain as standard.

**21. Piston Pins and Clips:**

No modifications permitted.

**22. Cylinder:**

No modifications permitted. Bore must remain as standard.

**23. Crankcase and All Other Engine Casings:**

No modifications permitted

**24. Transmission/Gearbox:**

No modifications to the gearbox or select or mechanism are allowed. Front and rear sprockets may be changed but chain pitch to remain 428. No quick-shifters or ignition interruption systems are permitted.

**25. Clutch:**

No modifications are allowed, except for replacing the friction and drive plates (the number of plates and their ratio must remain as the standard model). Clutch springs may be replaced.

**26. Ignition/Engine Control System: (CDI/ECU)**

The unit must remain standard.

**27. Generator, Alternator and Electric Starter:**

No other modifications are permitted. The electric starter must operate normally and always be able to start the engine throughout the event. The standard connections must be maintained to both the starter and generator.

**28. Ignition/ Starter Switch:**

These parts must remain as standard and in working order.

**29. Exhaust System:**

Exhaust pipe and silencers may not be altered or replaced. Must be as standard fitment. This must adhere to the maximum noise regulations of 105db.

**30. Fasteners:**

Standard fasteners may be replaced with fasteners of any material and design but titanium fasteners may not be used. The strength and design of any replacement must be of equal to the original part. Fairing/ bodywork fasteners may be changed to the quick connect type, but aluminium fasteners may only be used in non-structural locations.

**31. The following Items May Be Altered or Replaced from Those Fitted to the Approved Machine:**

Any type of lubrication, brake or suspension fluid may be used. Any type of spark plug may be used. Any inflation valves may be used. Wheel balance weights may be discarded, changed or added to. Any type of gaskets and gasket material may be used.

**32. Additional Equipment:**

Additional equipment not on the original approved motorcycle may not be added (i.e. data acquisition, computers, recording equipment etc.) Telemetry is not allowed. The only potentiometers and sensors allowed are those fitted as original equipment on the motorcycle as supplied.

**33. Replacement and Repairs:**

Where necessary, parts from an older or newer version of the same model may be used.

**34. Chain Guards:**

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

**35. Fuel:**

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

**36. Radiator and Oil Cooler:**

The original radiator may not be modified – to be as standard fitment. The use of coolants is prohibited, water only to be used.

**37. Race Numbers and Backgrounds:**

As per MCUI regulations.

**ALL MACHINES MUST HAVE**

**38. Rear Safety Light**

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
4. the light must be able to be switched on and off.

**39. Handlebar Lever Protection**

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

**40. Technical bulletins:**

As this machine is new for 2020 the Technical Committee may issue Technical bulletins throughout the season to deal with any issues regarding machine specification.

(ICC December 2019)

## MCUI SUPERSPORT 300 TECHNICAL REGULATIONS

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

Supersport 300 motorcycles require an FIM homologation. All machines must be normally aspirated. All motorcycles must comply in every respect with all the requirements for road racing as specified in these Technical Regulations unless they are already equipped as such on the homologated model. The appearance from the front, rear and the profile of Supersport 300 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.

#### 1. Motorcycle specifications

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

#### 2. Eligible Machines

The class is based around the MCRCB/MSVR Junior Supersport & FIM SS300 Technical Regulations. The MCUI has the right to decide which machines will be eligible in the class.

The following machines will be legal. This list can be amended at any time by the MCUI

- Honda CBR500R

- Kawasaki Ninja 300 (EX300ADF)

- Kawasaki Ninja 400 (EX400)

- KTM RC390 - KTM RC390R

- Yamaha YZF-R3

250-300cc machines previously used in the Junior Cup Class will be permitted.

#### 3. Balancing various motorcycle concepts

The MCUI reserve the right to applying balancing to the machines in the class as they see fit in order to maintain equality amongst models, in principle this will follow the FIM World Supersport 300 Championship regulations, but at all times the determination of the MCUI will prevail.

Methods may include but are not limited to the following:

- Rev Limit

- Weight limit change

- Approved parts, see relevant MCUI bulletin.

The decision to apply the handicap will be taken by the MCUI at any time deemed necessary to ensure fair competition.

Balancing parts and modifications published in line with FIM updates will be documented and published by the MCUI and supersede all following regulations throughout the season.

(ICC December 2019)

#### 4. Minimum weight (Subject to change in order to conform to FIM/MCRCB Regulations)

The minimum weight for each model is as follows:

Honda CBR500R	153Kg
Kawasaki Ninja 300 (EX300ADF)	140Kg
Kawasaki Ninja 400	145Kg
Yamaha YZF-R3	140Kg
KTM RC390	136Kg

At any time of the event, the weight of the whole motorcycle (including the tank and its contents) must not be lower than the minimum weight. There is no tolerance on the minimum weight of the motorcycle. During the final technical inspection at the end of the race, the selected motorcycles will be weighed in the condition they finished the race, and the established weight limit must be met in this condition. Nothing may be added to the motorcycle. This includes all fluids.

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.

The use of ballast is allowed to stay over the minimum weight limit and may be required due to the handicap system.

The use of must be declared to the Chief Technical Officer at the preliminary checks.

**5. Numbers and number plates** for font type and size see MCUI Standing Regulations, Technical Regulations Handbook. In case of a dispute concerning the legibility of numbers, the decision of the Technical Steward or Scrutineer will be final.

Manufacturer	Number	Background
Honda	White	Red
Kawasaki	White	Green
Yamaha	White	Blue
KTM	White	Orange

#### 6. Fuel

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

(ICC December 2019)

#### 7. Tyres

If a controlled tyre is to be imposed, all tyres must be provided by the official tyre supplier.

Further conditions will be stated in SS300 Championship Conditions and any bulletins issued by the MCUI.

The use of tyre warmers is allowed.

Any modification (cutting, grooving) is forbidden.

(ICC December 2019)

#### 8. Engine

Machines will be randomly chosen for dyno testing.



## **MCUI SUPERSPORT 300 TECHNICAL REGULATIONS (Continued 1)**

### **9. Fuel injection system**

- a. The original homologated fuel injection system must be used without any modification.
- b. The fuel injectors must be stock and unaltered from the original specification and manufacture.
- c. Air Funnels must remain as originally produced by the manufacturer for the homologated motorcycle.
- d. Butterfly valves cannot be changed or modified.
- e. Secondary throttle valves plates may be removed or fixed in the open position and the electronics may be disconnected or removed. The secondary throttle shaft(s) must remain in place.
- f. All the parts of the variable intake tract device must remain and operate exactly as homologated. They cannot be added if not fitted to the homologated machine.
- g. Air and air/fuel mixture can go to the combustion chamber exclusively through the throttle body butterflies.
- h. Electronically controlled throttle valves, known as 'ride-by-wire', may only be used if the homologated model is equipped with the same system. Software may not be modified and all the safety systems and procedures designed by the original manufacturer must be maintained.

### **10. Cylinder Head**

- a. Must be the originally fitted and homologated part with no modification allowed.
- b. The exhaust air bleed system must be blocked and the external fittings on the cam cover(s) may be replaced by plates.
- c. The head gasket may be changed.

### **11. Camshaft Assembly**

- a. Must be the originally fitted and homologated part with no modification allowed.
- b. At the technical checks: for direct cam drive systems, the cam lobe lift is measured; for non-direct cam drive systems (i.e. with rocker arms), the valve lift is measured.

### **12. Cam sprockets or gears**

- a. Cam sprockets may be slotted to allow the adjustment of cam timing.
- b. Pressed on cam sprockets may be replaced with an adjustable boss and cam sprocket.
- c. The cam chain and tensioner must remain as homologated.

### **13. Cylinders**

Must be the originally fitted and homologated part with no modification allowed.

### **14. Pistons**

Must be the originally fitted and homologated part with no modification allowed.

### **15. Piston rings**

Must be the originally fitted and homologated part with no modification allowed.

### **16. Piston pins and clips**

Must be the originally fitted and homologated part with no modification allowed.

### **17. Connecting rods**

Must be the originally fitted and homologated part with no modification allowed.

### **18. Crankshaft**

Must be the originally fitted and homologated part with no modification allowed.

### **19. Crankcase / Gearbox housing**

Must be the originally fitted and homologated parts with no modification allowed.

### **20. Lateral covers and protection**

See MCUI General Rules, Chapter 12 Technical Rules, Paragraph 9

### **21. Transmission / Gearbox**

- a. Must be the originally fitted and homologated parts with no modification allowed except:
  - i. The positive neutral selector mechanism may be removed.
  - ii. Shift star/indexer and detent may be replaced but must function as originally designed.
- b. Quick-shift (upshift) systems are allowed. The unit must be the MCUI; MCRCB/MSVR approved quickshifter/rev limiter.
- c. Downshift blipping is not allowed.
- d. Countershaft sprocket, rear wheel sprocket, chain pitch and size may be changed.
- e. The sprocket cover may be modified or eliminated.
- f. Chain guard as long as it is not incorporated in the rear fender may be removed.

### **22. Clutch**

- a. Clutch system (wet or dry type) and the method of operation (by cable or hydraulic) must remain as homologated.
- b. Friction and drive discs may be changed.
- c. Clutch springs (and number) may be changed.
- d. The clutch basket (outer) must be the originally fitted and homologated part but may be reinforced.
- e. The original clutch inner assembly may be modified or replaced by an aftermarket clutch, also including back torque limiting capabilities (slipper type).

### **23. Oil pumps and oil lines**

Must be the originally fitted and homologated part with no modification allowed.

## MCUI SUPERSPORT 300 TECHNICAL REGULATIONS (Continued 2)

### 24. Cooling System

- a. The only liquid engine coolant permitted is water.
- b. Protective meshes may be added in front of the oil and/or water radiator(s).
- c. The cooling system hoses and catch tanks may be changed.
- d. Radiator fan and wiring may be removed. Thermal switches, water temperature sensor and thermostat may be removed inside the cooling system.
- e. Radiator cap is free.
- f. 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.

### 25. Air box

- a. The air box must be the originally fitted and homologated part with no modification allowed.
- b. The air filter element may be modified or replaced but not eliminated and must be mounted in the original position.
- c. The air box drains must be sealed.
- d. All motorcycles must have a closed breather system. All the oil breather lines must be connected, may pass through an oil catch tank and must exclusively discharge in the airbox.
- e. No heat protection may be attached to the airbox.

### 26. Fuel supply

- a. Fuel pump and fuel pressure regulator must be the originally fitted and homologated part with no modification allowed
- b. The fuel pressure must be as homologated.
- c. Fuel lines from the fuel tank up to the delivery pipe assembly (delivery pipe excluded) may be replaced and must be located in such a way that they are protected from crash damage.
- d. Quick connectors or dry break connectors may be used.
- e. Fuel vent lines may be replaced.
- f. Fuel filters may be added.

### 27. Exhaust system

- a. Exhaust pipes and silencers may be modified or changed. Catalytic converters must be removed.
- b. 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.
- c. For safety reasons, the exposed edges of the exhausts pipe(s) outlet must be rounded to avoid any sharp edges.
- d. 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.
- e. The noise limit for Supersport 300 is 105 dB/A
- f. The test RPM will be as follows:

Machine	RPM
Honda CBR500R	5,000
Kawasaki Ninja 300 (EX300ADF)	6,500
Kawasaki Ninja 400 (EX400)	6,500
Yamaha YZF-R3	7,500
KTM RC390	5,500
KTM RC390R	5,500

### 28. Ignition / Engine Control System (ECU)

- A. The engine control system (ECU) must be either:
  1. The original system as homologated, with no change of software or with a manufacturer approved software.
  2. The original system (with the production ECU and no change of software or manufacture approved software) (option i) with an MCUI approved external fuel injection module added. The software and the firmware must be supplied and approved by the machines manufacturer. The Chief Technical Official must be supplied with the software/firmware and it must be added to the approved parts list before it may be used.
- B. The manufacturer must provide the MCUI with the tools/software to perform software checks.
- C. Throughout the season the manufacturer may update the software and the updates must be made available simultaneously to all users of the system with no charge, updating by a team is not compulsory.
- D. Central unit (ECU) may be relocated. All ECU's must be positioned in such a way as to be easily accessible for inspection.
- E. Optional equipment sold by the motorcycle Manufacturer for the homologated model is considered not homologated with the bike and must follow the requirements for approved electronics/data loggers.
- F. At any time during an event the Chief Technical officer has the right to make a team substitute their ECU or external module with the MCUI sample.
- G. Sensors may not be replaced, modified or substituted unless noted and the allowed OEM ECU sensors / channels are:
  1. Throttle position (multiple allowed)
  2. Map sensor, Map Sync (pressure sensor on the intake port used to synchronize the engine during the start)
  3. Airbox Pressure
  4. Engine pick-ups (Cam, crank)
  5. Twist grip position
  6. Rear Speed Only (from ABS sensor) (No front speed sensor permitted)
  7. Gearbox output shaft speed
  8. Gear position
  9. Air pressure
  10. Water temperature

## MCUI SUPERSPORT 300 TECHNICAL REGULATIONS (Continued 3)

11. Air temperature

12. Tip-Over Switch (No lean angle)

13. Gear shift load cell / switch

14. Lambda sensor (may be OEM or a replacement sensor see Art.5.5.9.1.g. It may be connected to the original harness/ECU or to the MCRCB approved lambda control module).

H. No extra sensors may be added for control strategies except the shift rod sensor of the MCRCB approved revlimiter / quickshifter

I. The MCRCB approved external fuel injection modules may not alter any sensor signal relating to the ride by wire system or control/actuate any part of the machine excepting the fuel injectors. No fuel module may add traction control strategies. The modules may only connect to the fuel injectors, lambda sensor, power supply and 'piggyback the Throttle Position, Gear and RPM signals'. Lambda closed loop/auto tuning is permitted. ONLY MCRCB approved auto tuning units may be used.

J. A compulsory MCRCB rev limiter / quickshift unit must be fitted; it is the teams discretion whether to use the quickshift function. This must remain fitted and active at all times. It must only be installed as detailed in the supplied instructions.

K. The MCUI, FIM/MCRCB quickshift unit is €500 + Vat + delivery.

L. Contact: - info@hmquickshifter.com Telephone 01795 429168

Machine	Part Number
Honda CBR500R	HMGP-HO1016
Kawasaki Ninja 300 (EX300ADF)	HMGP-KA1016
Kawasaki Ninja 400 (EX400)	HMGP-KA1712
Yamaha YZF-R3	HMGP-YA1016
KTM RC390 No ABS	HMGP-KT1016A
KTM RC390 ABS	HMGP-KT1016B
KTM RC390R 2017 (Euro 4)	HMGP-KT1712

HM Quickshifter wheel speed kits may be fitted as noted on the FIM approved parts list.

M. The initial rev limiter setting for each machine is as follows:

Machine	Max rpm
Honda CBR500R	10,000
Kawasaki Ninja 300 (EX300ADF)	13,000
Kawasaki Ninja 400 (EX400)	10,000
Yamaha YZF-R3	13,000
KTM RC390	10,450

These limits are subject to change at any time in order to conform to FIM/MCRCB Regulations

N. The following strategies are NOT allowed:

a. Traction control (including anti-spin / rate of change of rpm)

b. Launch Control

c. Anti Wheelie

d. Closed loop Engine Brake Control

e. Corner by Corner / Distance based adjustments

f. Rider adjusted trims

O. Other additional electronic hardware equipment not on the original homologated motorcycle cannot be added with the exceptions noted below.

P. Resistors/load may be added to replace the parts of the electrical system that have been removed (including lights and lambda sensors), to prevent ECU errors.

Q. Data logging and Telemetry are not allowed.

R. No remote or wireless connection to the bike for any data exchange or setting is allowed whilst the engine is running or the bike is moving.

S. Harness:

1) The key/ignition lock may be relocated, replaced or removed.

2) Cutting and removal of excess and unused wiring in the original wiring harness is allowed. All connectors must remain as originally fitted. No wires may be added. MCRCB/MSVR approved manufacturer Kit Harness is allowed.

T. A lap timer may be fitted from the FIM approved lap timer list.

U. Spark plugs may be replaced.

V. Battery is free.

### 29. Generator, alternator, electric starter

a. Must be the originally fitted and homologated part with no modification allowed.

b. The stator must be fitted in its original position and without offsetting.

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

d. During parc fermé the starter must crank the engine at a suitable speed for starting for a minimum of 2 seconds without the use a boost battery. No boost battery may be connected to the machine after the end of the session.

### 30. Main frame

During the entire duration of the event, each rider can only use one complete motorcycle as presented for Technical Control

### 31. Frame body and sub frames

a. The frame must be the originally fitted and homologated part with no modification allowed.

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

## **MCUI SUPERSPORT 300 TECHNICAL REGULATIONS (Continued 4)**

- c. 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. Crash protectors may be fitted to the frame using existing points (max. length: 50 mm), or pressed into the ends of the wheel axles (max. length: 30mm). Without exception, the wheel axles cannot be modified.
- d. The sidestand bracket may be cut or removed.
- e. Nothing else may be added or removed from the main frame body.
- f. All motorcycles must display a vehicle identification number punched on the frame body (chassis number).
- g. Engine mounting brackets or plates must remain as originally produced by the manufacturer for the homologated motorcycle.
- h. Front sub frame / fairing mount may be changed or altered, but the use of titanium and carbon (or similar composite materials) is forbidden.
- i. Rear Sub Frame:
  - 1. If removable it may be changed or altered, but the type of material must remain as homologated, or be material of a higher specific weight.
  - 2. If part of the main frame assembly then it may not be altered except as noted below.
  - 3. Additional seat support brackets may be added. Non-stressed protruding brackets may be removed if they do not affect the safety of the construction or assembly. Bolt-on accessories to the rear sub-frame may be removed.
- j. The paint scheme is not restricted but polishing the frame body or sub frames is not allowed

### **32. Suspension - General**

- a. Participants in the Supersport 300 class must only use the standard homologated or approved suspension units as laid down by MCRCB Regulations for that season.
- b. No type of electronic suspension may be used even when fitted to the homologated machine.
- c. Electronic controlled steering damper cannot be used if not installed in the homologated model for road use. However, it must be completely standard (any mechanical or electronic part must remain as homologated).

### **33. Front Forks**

- a. Forks (stanchions, stem, wheel spindle, upper and lower crown, etc.) Must be the originally fitted and homologated part with the following modifications allowed:
- b. The upper and lower fork clamps (triple clamp, fork bridges) must remain as originally produced by the manufacturer on the homologated motorcycle.
- c. Steering stem pivot position must remain in the homologated position (as supplied on the production bike). If the standard bike has inserts then the orientation/position of the original insert may be changed but the insert cannot be replaced or modified.
- d. A steering damper may be added or replaced with an after-market damper.
- e. The steering damper cannot act as a steering lock limiting device.
- f. Fork caps on the mechanical forks may only be modified or replaced to allow external adjustment. (This does not include the mechanical fork leg that is part of the homologated electronic fork set).
- g. Dust seals may be modified, changed or removed if the fork remains totally oil-sealed.
- h. Original internal parts of the homologated forks may be modified or changed. Approved aftermarket damper kits or valves may be installed. The original surface finish of the fork tubes (stanchions, fork pipes) may be changed. Additional surface treatments are allowed. (See 5.5.10.2.a)
- i. Electronic forks must have their complete internal parts (including all electronic control) replaced with a conventional damping system.

### **34. Rear fork (Swing-arm)**

- a. The rear fork must be the originally fitted and homologated part with no modification allowed.
- b. Rear fork pivot bolt Must be the originally fitted and homologated part with no modification allowed.
- c. Rear swingarm pivot position must remain in the homologated position (as supplied on the production bike). If the standard bike has inserts then the orientation/position of the original insert may be changed but the insert cannot be replaced or modified.
- d. A solid protective cover (shark fin) shall be fixed to the swing-arm, and must always cover the opening between the lower chain run, swingarm and the rear wheel sprocket, irrespective of the position of the rear wheel.
- e. Rear wheel stand brackets may be added to the rear fork by welding or by bolts. Brackets must have rounded edges (with a large radius). Fastening screws must be recessed. An anchorage system or point(s) to keep the original rear brake calliper in place may be added to the rear swing-arm.
- f. The sides of the swing-arm may be protected by a thin vinyl cover only, no composite or structural covers are allowed.

### **35. Rear suspension unit**

- a. Rear suspension unit (shock absorber) may be replaced with an approved unit (see MCRCB Rag's), but the original attachments to the frame and rear fork (swing arm) (or linkage) must be as homologated.
- b. All the rear suspension linkage parts must be the originally fitted and homologated part with no modification allowed.
- c. Removable top shock mounts must be the originally fitted and homologated part with no modification allowed. A nut may be made captive on the top shock mount and shim spacers may be fitted behind it to adjust ride height.
- d. Rear suspension unit and spring may be changed. An electronic shock absorber can be replaced with a mechanical one.

### **36. Wheels**

- a. Wheels must be the originally fitted and homologated part with no modification allowed.
- b. The wheel may be overpainted but the original finish cannot be removed.
- c. A non-slip coating / treatment may be applied to the bead area of the rim.
- d. If the original design includes a cushion drive for the rear wheel, it must remain as originally produced for the homologated motorcycle.
- e. Wheel axles and retaining nuts (or bolts) must remain as homologated, wheel spacers may be modified or replaced.
- f. Bearing spacers must remain as homologated.
- g. Wheel balance weights may be discarded, changed or added to. Any inflation valves may be used but 90 degree aluminium or steel inflation valves are compulsory.

## MCUI SUPERSPORT 300 TECHNICAL REGULATIONS (Continued 5)

### 37. Brakes

A. Brake discs may be replaced by aftermarket discs which comply with following requirements:-

- a. Brake discs must retain the same material as the homologated disc or be steel (max. carbon content 2.1 wt %).
- b. Non-floating or single piece discs may be replaced with floating discs. The disc carrier must be the same material as the homologated carrier, steel or aluminium.
- c. The outside diameters of the brake disc must not be larger than the homologated disc.
- d. The thickness of the brake disc may be increased but the disc must fit into the homologated brake calliper without any modification. The number of floaters is free.
- e. The fixing of the carrier on the wheel must remain the same as on the homologated disc.
- B. The front and rear brake calliper (mount, carrier, hanger) must be the originally fitted and homologated part with no modification allowed.
- C. In order to reduce the transfer of heat to the hydraulic fluid it is permitted to add metallic shims to the callipers, between the pads and the callipers, and/or to replace light alloy pistons with steel pistons made by the same manufacturer of the calliper.
- D. 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 motorcycle.
- E. 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.
- F. The front and rear master cylinder must be the originally fitted and homologated part with no modification allowed.
- G. Front and rear brake fluid reservoirs may be changed.
- H. Front and rear hydraulic brake lines must be replaced by braided lines. NO alloy or titanium banjo bolts are permitted.
- I. The split of the front brake lines for both front brake callipers must be made above the lower fork bridge (lower triple clamp).
- J. "Quick" (or "dry-break") connectors in the brake lines are not allowed.
- K. Front and rear brake pads may be changed. Brake pad locking pins may be modified for quick change type.
- L. Additional air scoops or ducts are not allowed.
- M. The Antilock Brake System (ABS) must be removed. The ABS units electronic board may remain fitted to stop ECU errors.
- N. Motorcycles must be equipped with brake lever protection (see MCUI GCR's, Chapter 12 Technical Rules, paragraph 7)

### 38. Handlebars and hand controls

- a. Handlebars may be replaced (except for the brake master cylinder).
- b. Handlebars and hand controls may be relocated.
- c. Throttle controls must be self-closing when not held by the hand.
- d. 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 on the homologated motorcycle. Cable operated throttles (grip assembly) must be equipped with both an opening and a closing cable including when actuating a remote drive by wire grip/demand sensor.
- e. Clutch and brake lever may be replaced with an after-market model. An adjuster to the brake lever is allowed.
- f. Switches may be changed but the electric starter switch and engine stop switch must be located on the handlebars.
- g. Motorcycles must be equipped with a functional ignition kill switch or button mounted on the right hand handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine. The button or switch must be RED.

### 39. Foot rest / Foot controls

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

### 40. Fuel tank

- a. Fuel tank must be the originally fitted and homologated part with no modification allowed.
- b. All fuel tanks must be completely filled with fire retardant material (opencelled mesh, i.e. Explosafe®).
- c. Fuel tanks with tank breather pipes must be fitted with non-return valves that discharge into a catch tank with a minimum volume of 250cc made of a suitable material.
- d. 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.
- e. A rider spacer/pad may be fitted to the rear of the tank with nonpermanent adhesive. It may be constructed of foam padding or composite material.
- f. The tank may not have a cover fitted over it unless the homologated machine also features a full cover.
- g. The sides of the fuel tank may be protected with a cover made of a composite material. These covers must fit the shape of the fuel tank.

### 41. Fairing / Bodywork

- a. Fairing and bodywork may be replaced with exact cosmetic duplicates of the original parts, but must appear to be as originally produced by the manufacturer for the homologated motorcycle, with slight differences due to the racing use (different pieces mix, fixing 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 allowed locally around holes and stressed areas.
- b. Overall size and dimensions must be the same as the original part, with a tolerance of +5mm, respecting the design and features of the homologated fairing as far as possible. The overall width of the frontal area may be +5mm maximum. The decision of the Chief Technical Officer is final.

## **MCUI SUPERSPORT 300 TECHNICAL REGULATIONS (Continued 6)**

- c. Wind screen may be replaced with an aftermarket product. The height of the windscreen is free, within a tolerance of +/- 15 mm referred to the vertical distance from/to the upper fork bridge. The screen must conform to the same profile from the front as the original – no double bubble or wide types. From a top view the length of the windscreen may be shortened by 25mm to allow clearance for the rider. The edge of the screen must have no sharp edges
- d. Fairing brackets may be altered or replaced.
- e. The ram-air intake must maintain the originally homologated shape and dimensions.
- 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 grilles or “wire-meshes” originally installed in the openings for the air ducts may be removed.
- g. The lower fairing must be constructed to hold, in case of an engine breakdown minimum 4 litres. The lower edge of all the openings in the fairing must be positioned at least 70 mm above the bottom of the fairing.
- h. The upper edge of the rear transverse wall of the lower fairing must be at least 70 mm above the bottom. The angle between this wall and the floor must be  $\leq 90^\circ$ .
- i. 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  $> 60\%$ .
- j. Motorcycles may be equipped with a radiator shroud (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.
- k. Front mudguards may be replaced with a cosmetic duplicate of the original parts and may be spaced upward for increased tyre clearance.
- l. Rear mudguard fixed on the swing arm may be modified, changed or removed. The chain guard may be removed as long as it is not incorporated in the rear fender.

### **42. Seat**

- a. Seat, seat base and associated bodywork may be replaced
- b. The appearance from front, rear and profile must conform to the homologated shape
- c. The top portion of the rear bodywork around the seat may be modified to a solo seat.
- d. The homologated seat locking system (with plates, pins, rubber pads etc.) may be removed.
- e. Material as Fairing
- f. All exposed edges must be rounded.

### **43. Fasteners**

- a. Standard fasteners may be replaced with fasteners of any material and design but titanium fasteners cannot be used. The strength and design must be equal to or exceed the strength of the standard fastener.
- b. Fasteners may be drilled for safety wire, but intentional weight-reduction modifications are not allowed.
- c. Thread repair using inserts of different material such as helicoils and timeserts.
- d. Fairing / bodywork fasteners may be replaced with the quick disconnect type.
- e. Aluminium fasteners may only be used in non-structural locations.

### **44. Rear Safety Light**

See MCUI GCR's, Chapter 12 Technical Rules, paragraph 6

### **45. The following items MAY be altered or replaced from those fitted to the homologated motorcycle**

- a. Any type of lubrication, brake or suspension fluid may be used.
- b. Gaskets and gasket materials.
- c. Material for brackets connecting non original parts (fairing, exhaust, instruments, etc.) to the frame (or engine) cannot be made from titanium or fibre reinforced composites excepting the exhaust silencer hanger that may be in carbon.
- d. Protective covers for the frame, chain and footrests may be made in other materials like fibre composite material if these parts do not replace original parts mounted on the homologated model.

### **46. The following items MAY BE Removed**

- a. Emission control items (anti-pollution) in or around the air box and engine (O2 sensors, air injection devices).
- b. Bolt-on accessories on a rear sub frame.

### **47. The following items MUST BE Removed**

- a. Headlamp, rear lamp and turn signal indicators (when not incorporated in the fairing). Openings must be covered by suitable materials.
- b. Rear-view mirrors.
- c. Horn.
- d. License plate bracket.
- e. Toolkit.
- f. Helmet hooks and luggage carrier hooks
- g. Passenger foot rests.
- h. Passenger grab rails.
- i. Safety bars, centre and side stands must be removed (fixed brackets must remain excepting side stand bracket).
- j. Catalytic converters

### **48. The following items MUST BE Altered**

- a. 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).
- b. Motorcycles must be equipped with a red light on the instrument panel that will illuminate in the event of oil pressure drop.

(ICC December 2018)

## **MCUI 125GP & 250GP TECHNICAL REGULATIONS**

### **1. Classes:**

The following classes will be accommodated, which will be designated by engine capacity:

125GP Over 80cc up to 125cc Maximum one cylinder

250 GP Over 175cc up to 250cc Maximum two cylinders

### **2. Engines:**

Engines may operate on the two stroke only. Engines must be normally aspirated. Cubic capacity of the engine will be defined by the swept volume of the cylinder, i.e. the area of the bore of the cylinder multiplied by the stroke. No tolerance on capacities is permitted. Engine capacity must be measured at ambient temperature.

### **3. Gears:**

There must be a maximum of six gears.

### **4. Weights:**

The following are the minimum weights permitted:

125cc motorcycle + rider 136 kg

250cc motorcycle 100 kg

Ballast may be added to achieve the minimum weights.

Weight may be checked at the initial technical control, but the main control of weight will be made at the end of practice sessions or at the end of the race. The weight of the motorcycle will be that measured in the form that the motorcycle participated, with fuel tank on and including normal levels of oil and water, and all additional equipment attached to the motorcycle, for example timekeeping senders, camera equipment, electronic telemetry equipment etc. For the 125cc class the weight checked will be the total of the rider with full protective clothing plus the weight of the motorcycle. Random weight controls may be carried out during practice in a designated weighing area.

### **5. Fuel Tanks:**

Fuel caps must be leak proof and have a positive closing device. Fuel tank breather pipes must include a non-return valve. Fuel tank breather pipes must discharge into a suitable container, one per motorcycle with a minimum capacity of 200cc and a maximum capacity of 250cc.

Except for the case that a fuel tank is fixed on the chassis with bolts, all fuel lines from the fuel tank to the engine/carburettor system should have a self-sealing breakaway valve. This valve must separate at less than 50% of the load required to break any part of the fuel line or fitting or to pull it out of the fuel tank.

### **6. Exhausts:**

The outlet of the exhaust must not extend behind a line drawn vertically through the edge of the rear tyre. For safety reasons the exposed edge of the exhaust pipe outlet must be rounded to avoid any sharp edges.

### **7. Footrests:**

Footrests must have rounded ends with a minimum solid spherical radius of 8mm

### **8. Handlebar Levers:**

Levers must not be longer than 200mm measured from the pivot point.

### **9. Bodywork:**

The windscreen edge and the edges of all other exposed parts of the streamlining must be rounded. The maximum width of bodywork must not exceed 600mm. The width of the seat or anything to its rear shall not be more than 450mm (exhaust pipes excepted).

Bodywork must not extend beyond a line drawn vertically at the leading edge of the front tyre and a line drawn vertically at the rearward edge of the rear tyre. The suspension should be fully extended when the measurement is taken.

When viewed from the side, it must be possible to see:

- a. At least 180 degrees of the rear wheel rim.
- b. The whole of the front rim, other than the part obscured by the mudguard, forks or removable air-intake.
- c. The rider, seated in a normal position with the exception of the forearms.

No transparent material may be used to circumvent the above rules.

The seat unit shall have a maximum height of the (approximately) vertical section behind the rider's seating position of 150mm. The measurement will be taken at a 90° angle to the upper surface of the flat base at the rider's seating position, excluding any seat pad or covering. Any on-board camera/antenna mounted on the seat unit is not included in this measurement.

Mudguards are not compulsory. When fitted, front mudguards must not extend:

- a. In front of a line drawn upwards and forwards at 45 degrees from a horizontal line through the front wheel spindle.
- b. Below a line drawn horizontally and to the rear of the front wheel spindle.

The mudguard mounts/brackets and fork-leg covers, close to the suspension leg and wheel spindle, and brake disc covers are not considered part of the mudguard.

Wings may be fitted provided they are an integral part of the fairing or seat and do not exceed the width of the fairing or seat or the height of the handlebars. Any sharp edges must be rounded. Moving aerodynamic devices are prohibited. The lower fairing should incorporate a maximum of two holes of 25mm. These holes must remain closed in dry conditions and must be only opened in wet race conditions, as declared by the Race Director.

### **10. Clearances:**

The motorcycle, unloaded, must be capable of being leaned at an angle of 50 degrees from the vertical without touching the ground, other than with the tyre. There must be a clearance of at least 15mm around the circumference of the tyre at all positions of the motorcycle suspension and all positions of the rear wheel adjustment.

### **11. Breather Pipes:**

Any breather pipe from the engine or gearbox must discharge into a suitable container with a minimum capacity of 250cc. There must be a separate container for each breather pipe.

## **MCUI 125GP & 250GP TECHNICAL REGULATIONS (Continued)**

### **12. Materials:**

The use of titanium in the construction of the frame, the front forks, the handle-bars, the swinging arm spindles, and the wheel spindles is forbidden. For wheel spindles, the use of light alloys is also forbidden. The basic structure of the crankshaft and camshafts must be made from steel or cast iron. Pistons, cylinder heads and cylinder blocks may not be composite structures which use carbon or aramid fibre reinforcing materials.

Brake callipers must be made from aluminium materials with a modulus of elasticity no greater than 80 Gpa. No parts of the motorcycle or engine may be made from metallic materials which have a specific modulus of elasticity greater than 50 Gpa / (g/cm<sup>3</sup>).

### **13. Rims:**

Maximum rim widths are as follows:

Front:

125cc 2.5"

250cc 4.0"

Rear:

125cc 3.5"

250cc 5.5"

### **14. Tyres:**

No restriction on tyres.

### **15. Noise Tests:**

The maximum noise levels at all times are 105 dB/A

### **16. Throttle Twist Grips:**

Throttle twist grips must close automatically when released.

### **17. Steering:**

Handlebars must have a width of not less than 450mm and their ends must be solid or rubber covered. The width of the handlebar is defined as the width measured between the outside of the handlebar grips or throttle twist grips. There must be at least 15 degrees of movement of the steering each side of the centre line. Stops must be fitted to ensure a clearance of at least 30mm between the handlebar and the fuel tank frame and/or bodywork when at the extremes of steering lock.

### **18. Brakes:**

Motorcycles must have a minimum of one brake on each wheel that is independently operated. In the 125cc and 250cc classes, only brake discs of ferrous materials are allowed.

### **19. Fasteners:**

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

### **20. Chain Guards:**

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

### **21. Fuel:**

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

(ICC December 2019)

### **22. Radiator and Oil Cooler:**

The original radiator or oil cooler may be modified to aid cooling. Radiator hoses may be replaced with those of a similar internal diameter. The use of coolants is prohibited, water only to be used.

### **23. Bore and Stroke:**

Bore and Stroke details must be displayed on the motorcycle.

### **24. Race Numbers & Backgrounds:**

As per MCUI rules.

### **ALL MACHINES MUST HAVE**

### **25. Rear Safety Light**

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
4. the light must be able to be switched on and off.

### **26. Handlebar Lever Protection**

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



## MCUI MOTO 450 TECHNICAL REGULATIONS

### 1. Eligible Machines:

Single cylinder 450cc machines listed by the FIM or UEM for Motocross or Supermoto competition from 2002 onwards.

### 2. Frame & Swinging Arm:

The standard frame and swinging arm must be retained. Engine mounting points must not be altered.

### 3. Wheels & Tyres:

Only 17inch rims may be used. No restrictions on tyres.

### 5. Clutches:

Slipper clutches are permitted.

### 6. Engine:

Tuning of engine is permitted using standard parts. Maximum power of 55bhp at post race control.

### 7. Weight:

Minimum weight of machine at post race control is 100kg.

### 8. Noise Limit:

Maximum noise level of 100dba at 5000rpm measured at post race control

### 9. Chain Guards:

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

### 10. Fuel:

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

(ICC December 2019)

### 11. Radiator and Oil Cooler:

The original radiator or oil cooler may be modified to aid cooling. Radiator hoses may be replaced with those of a similar internal diameter. The use of coolants is prohibited, water only to be used.

### 12. Bore and Stroke:

Bore and Stroke details must be displayed on the motorcycle.

### 13. Race Numbers & Backgrounds:

As per MCUI rules.

### 14. Bodywork and Colours:

Bodywork as supplied by the nominated series supplier in the following colours based on machine manufacturer

Kawasaki - Green

Honda - Red

Yamaha - Dark Blue

Suzuki - Yellow

Husqvarna - Red and White

KTM - Orange

All other manufactures -White

### ALL MACHINES MUST HAVE

### 15. Rear Safety Light

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
4. the light must be able to be switched on and off.

### 16. Handlebar Lever Protection

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

### 17. Engine Protection.

All lateral covers/engine cases containing oil on 4 stroke machines, and which could come in contact with the ground during a crash, must be protected by a second cover made from composite materials, aluminum or steel plates and/or bars are also permitted.

All these devices must be designed to be resistant against sudden shocks and must be fixed properly and securely.

Where secondary covers are not commercially available, Engine case guards in the form of strengthened engine side covers may be installed.

The countershaft cover may be removed. The addition of a crankcase protector at the countershaft is allowed.

## MCUI LIGHTWEIGHT SUPERSPORT TECHNICAL REGULATIONS

All items not mentioned in the following articles must remain as originally produced by the Manufacturer for the homologated machine. Anything that is not authorised and prescribed in these rules are strictly forbidden. All motorcycles must comply in every respect with all the requirements for racing as specified in the Technical Regulations, unless it is equipped as such on the homologated machine.

### Eligible Machines

Any 2 cylinder two stroke or 4 cylinder four-stroke motorcycles originally produced for road use with a water cooled engine between 201 – 415cc and any single or twin cylinder 4 Stroke machines with a maximum capacity of 450cc may be used provided it adheres to the following regulations.

Older models may be updated with genuine parts found on a newer version of the same model and newer models may use parts from older machines. All parts must be used as intended for the homologated machine and in accordance with the manufacturer's recommendations.

#### 1. Frame:

Frame must remain as originally produced by the manufacturer for the homologated machine. Nothing may be added or removed from the frame body with the exception of a steering damper bracket. Rear sub frame may be replaced or modified. Refinishing of frame to a suitable standard is acceptable.

#### 2. Swingarm:

No restrictions

#### 2. Suspension:

Forks may be replaced. Steering damper may be added although it cannot act as a steering lock device. Rear suspension unit can be changed or modified.

#### 3. Wheels:

Wheels may be changed but must be 17". Wheel bearings and spacers may be modified or changed where required. The speedometer drive may be removed and replaced with a spacer. The refinishing of wheel rims to a suitable standard is acceptable. 18" Rear wheel may be replaced with a suitable 17". Modifications can be made in order to accept safety retention devices.

#### 4. Brakes:

Front and rear brake discs may be changed. Only ferrous materials are allowed for brake discs. Front and rear brake calipers may be changed. Front and rear master cylinders may be changed. Front and rear hydraulic brake lines may be changed. The split of the front brake lines for both front brake calipers must be made above the lower fork bridge (bottom yoke). Front and rear brake pads may be changed.

#### 5. Tyres:

All tyres must be treaded. Slick tyres are not permitted.

#### 6. Controls:

Footrest and foot controls may be replaced or relocated but brackets must be mounted to the frame at the original mounting points. Handlebars, hand controls and cables may be altered or replaced (this does not include brake master cylinders) from those fitted to the homologated motorcycle. Electric stop switch must be located on the handlebars and must be operational.

#### 7. Fairing and Seat Unit:

Fairing, mudguards and seat unit may be altered or replaced. Windscreen, if fitted, may be replaced with transparent material only. The original instruments and fairing brackets may be removed or replaced. The petrol tank must remain as originally produced by the manufacturer for the homologated machine although it may be refinished if required. The position of the tank mounting points on the frame must remain as standard. The lower fairing has to be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (minimum 5 litres). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing. 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.

#### 8. Wiring Harness and Battery:

The wiring harness may be altered or replaced. Additional wiring may be added where required, with the exception of the following: Electric stop switch must be fitted and working.

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

#### 9. Air Box / Carburetion / Fuel Injection:

The air box may be altered or replaced from that fitted to the homologated motorcycle. The air filter element may be removed or replaced with an aftermarket item. Carburetors must be the standard units as on the homologated model. Throttle bodies for fuel injected machines must be as on the homologated model. Carburetor jets and needles may be replaced. Resizing of the air metering holes in CV carburetors slide control is permitted. No other alterations are permitted to the air intake or carburetion system. Bell mouths may be added, altered or replaced from those fitted to the homologated motorcycle. The fuel injection management system may not be altered or replaced other than the remapping of internally stored fueling maps.

#### 10. Engine:

Must not exceed cc as stated above. Cylinder head, camshafts, cam sprockets, crankshaft, rods, pistons, valves, cylinders and all other engine components may be modified. Polishing and lightening of engine parts is permitted. Balancing or gas flow modifications normally associated with individual tuning is permitted. Compression ratio of the engine may be changed. Camshaft timing may be changed. The crankcase/gearbox casing, clutch and generator covers may be protected by additional means, e.g. protective covers made of stainless steel or carbon/Kevlar composites. The thermostat may be removed from the housing to aid cooling, if required.

#### 11. Transmission:

An addition to the gearbox or selector mechanism, such as quick shift systems is permitted. Clutch Springs, friction and drive plates may be replaced. The use of slipper clutches is permitted. Gear shift detent spring may be replaced with a heavy duty item. Front and rear external drive sprockets, chain pitch and chain length can be changed.

#### 12. Ignition and Engine Control System:

Ignition and engine control system (CDI) may be modified or changed. All units must remain fully interchangeable with available control units. Modifications or alterations, whether electronic or mechanical, are permitted to the motorcycle to alter the engine ignition timing. The fitting of a curve changer is not permitted on 4 stroke machines.

## MCUI LIGHTWEIGHT SUPERSPORT TECHNICAL REGULATIONS (Continued)

### 13. Generator:

The generator, starting system, starter crank gear and starter shaft may be replaced, modified or removed from those fitted to the homologated motorcycle.

### 14. Exhaust System:

Exhaust pipe and silencers may be altered or replaced from those fitted to the homologated motorcycle. This must adhere to the maximum noise regulations of 105db as set out in the MCUI Standing Regulations. The number of final exit(s) to the exhaust may be altered from that of the homologated machine. Wrapping of exhaust systems is permitted.

### 15. Fasteners:

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

### 16. The Following Items MUST BE Removed:

Headlamp, rear lamp and turn signal indicators (when not incorporated in the fairing). Openings must be covered by suitable materials. Rear view mirrors, horn, license plate bracket, tool box, helmet hooks and luggage carrier hooks, passenger foot rests, passenger grab rails, safety bars, centre and side stands must be removed (fixed brackets must remain).

### 17. The following items MAY BE removed:

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

### 18. The following items MUST BE adhered to:

Motorcycle must be equipped with a functional ignition kill switch mounted on the handlebar that is capable of stopping a running engine. Side stand must be removed. All drain plugs must be safety wired. External oil filter screws and bolts that enter the oil or water cavities must be safety wired. Head lamp, rear lamp and turn indicators must be removed. A suitable material must cover the openings. Mirrors must also be removed.

### 19. Replacement and Repairs:

Where necessary, parts from an older or newer version of the same model may be used.

### 20. Chain Guards:

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

### 21. Fuel:

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

(ICC December 2019)

### 22. Radiator and Oil Cooler:

The original radiator or oil cooler may be modified to aid cooling. Radiator hoses may be replaced with those of a similar internal diameter. The use of coolants is prohibited, water only to be used.

### 23. Bore and Stroke:

Bore and Stroke details must be displayed on the motorcycle.

### 24. Race Numbers & Backgrounds:

As per MCUI rules.

### ALL MACHINES MUST HAVE

### 25. Rear Safety Light

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
4. the light must be able to be switched on and off.

### 26. Handlebar Lever Protection

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

### 27. Engine Protection.

All lateral covers/engine cases containing oil on, 4 stroke machines, and which could come in contact with the ground during a crash, must be protected by a second cover made from composite materials, aluminum or steel plates and/or bars are also permitted.

All these devices must be designed to be resistant against sudden shocks and must be fixed properly and securely.

Where secondary covers are not commercially available, Engine case guards in the form of strengthened engine side covers may be installed.

The countershaft cover may be removed. The addition of a crankcase protector at the countershaft is allowed.

## **MCUI MOTO 3 TECHNICAL RULES**

### **Engine; AS MOTO 3 IS FIM CLASS (MCUI) WILL ALLOW USE OF MOTO CROSS ENGINES**

Frames will be free but must comply to scrutineering

- 4-stroke reciprocating piston engines only.
- Engine capacity: maximum 250cc.
- Single cylinder only.
- Maximum bore size: 81mm. No oval pistons.
- Engines must be normally aspirated. No turbo-charging, no super-charging.
- Crankshaft speed limited to maximum: 14,000 rpm.\*
- Maximum of 1 ignition driver.\*
- Maximum of 5 valves.
- Pneumatic and/or hydraulic valve systems are not permitted.
- Valves timing system drive must be by chain.
- Variable valve timing and/or variable valve opening systems are not permitted.

### **Engine Supply**

- The engine is defined as the complete engine including intake system (throttle body, injectors), and one complete transmission.

### **Inlet & Fuel System**

- Variable-length inlet tract systems are not permitted.
- Only one throttle control valve is permitted, which must be controlled exclusively by mechanical means (e.g. cable) operated by the rider only. No other moving devices (except injectors) are permitted in the inlet tract before the engine intake valve. No interruption of the mechanical connection between the rider's input and the throttle is allowed.
- Idle speed adjustment by means of an air bypass system, controlled by the ECU is allowed.\*
- Fuel injectors must be located upstream of the engine intake valves.
- Maximum of 2 fuel injectors and 2 independent fuel injector drivers.\*
- Fuel pressure must not exceed 5.0 bar.
- Other than engine sump breather gases, only air or air/fuel mixture is permitted in the inlet tract and combustion chamber.
- Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

(ICC December 2019)

### **Exhaust system**

- Variable length exhaust systems are not permitted.
- Noise limit will be a maximum of 105 dB/A, measured in a static test.
- No moving parts (e.g. valves, baffles...) are allowed in the exhaust system.

### **Transmission**

- A maximum of 6 gearbox speeds is permitted.
- Electro-mechanical or electro-hydraulic clutch actuating systems are not permitted.

### **Chassis**

- Chassis can be of a prototype, the design and construction of which is free within the constraints of the FIM Grand Prix Technical Regulations.
- Minimum total weight of Motorcycle + Rider:
- Brake discs must be made from an iron-based alloy.
- Suspension systems must be of a conventional passive, mechanical type. Active and semi-active suspension systems and/or electronic control of any aspect of the suspension and ride height is not permitted. Springing must be by means of coil springs made of Iron-based alloys.

### **Wheels & Tyres**

- The only materials allowed for the wheels rims are Mg and Al alloys.
- The only permitted wheel rim sizes are:  
Front, 2.50" x 17"  
Rear, 3.50" x 17"

- Tyres as per MCUI rules.

### **Material & Construction**

- Construction materials must comply with Article 2.7.10 of the FIM Grand Prix regulations.
- Camshafts, crankshafts, piston pins must be made from Iron-based alloys.
- Engine crankcases, cylinder blocks and cylinder heads must be made from cast aluminium alloys.
- Pistons must be made from an aluminium alloy.
- Connecting rods, valves and valve springs must be made from either Iron-based based alloys. MCUI will allow Motocross type engines.

The split of the front brake lines for both front brake callipers must be made above the lower fork bridge (bottom yoke). Front and rear brake pads may be changed.

## **MCUI MOTO 3 TECHNICAL RULES (Continued)**

### **ALL MACHINES MUST HAVE**

#### **Rear Safety Light**

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
4. the light must be able to be switched on and off.

#### **Handlebar Lever Protection**

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

#### **Engine Protection.**

All lateral covers/engine cases containing oil on, 4 stroke machines, and which could come in contact with the ground during a crash, must be protected by a second cover made from composite materials, aluminum or steel plates and/or bars are also permitted.

All these devices must be designed to be resistant against sudden shocks and must be fixed properly and securely.

Where secondary covers are not commercially available, Engine case guards in the form of strengthened engine side covers may be installed.

The countershaft cover may be removed. The addition of a crankcase protector at the countershaft is allowed

## MCUI PRODUCTION TWINS TECHNICAL REGULATIONS

All items not mentioned in the following articles must remain as originally produced by the Manufacturer for the homologated machine. Everything that is not authorised and prescribed in these rules is strictly forbidden. All motorcycles must comply in every respect with all the requirements for racing as specified in the Technical Regulations, unless it is equipped as such on the homologated machine. Any four-stroke twin cylinder motorcycle originally sold for road use with a water cooled engine of up to 650cc may be used provided it adheres to the following regulations. Older models may be updated with genuine parts found on a newer version of the same model and newer models may use parts from older machines.

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

Frame and swing arm must remain as originally produced by the manufacturer for the homologated machine. Nothing may be added or removed from the frame body. Rear sub frame may be replaced or modified. The sub frame may only be altered if it was originally designed to be unbolted from the frame body. Refinishing of frame or swing arm to a suitable standard is acceptable.

### **2. Suspension:**

Forks must remain as originally produced by the manufacturer for the homologated machine with the exception of the following. Original internal parts of the fork may be modified or replaced. Aftermarket damper kits or valves may be installed. Fork springs may be replaced. Fork caps may not be modified or replaced beyond the homologated standard to allow external adjustments. Fork stanchions must retain the original finish. No additional surface treatments are allowed. Refinishing of the outer fork tubes to a suitable standard is acceptable. Steering damper may be added although it cannot act as a steering lock device. Rear suspension unit can be changed or modified. The original attachment to the frame and swing arm must be as homologated. The rear suspension linkage must remain as originally produced by the manufacturer for the homologated machine.

### **3. Wheels:**

Wheels must remain as originally produced by the manufacturer at the time of sale into the dealer/distributor network for the homologated machine except for the following. Wheel bearings and spacers may be modified or changed where required. The speedometer drive may be removed and replaced with a spacer. Refinishing of wheel rims to a suitable standard is acceptable. Front and rear wheel axles must remain as originally produced by the manufacturer for the homologated machine. Modifications can be made in order to accept safety retention devices.

### **4. Brakes:**

Front and rear brake discs may be changed but must fit the original calliper and mounting. The outside diameter must remain as fitted to the homologated machine. Only ferrous materials are allowed for brake discs. Front and rear brake callipers, including mount, carrier and hanger, must remain as originally produced by the manufacturer for the homologated machine. Front and rear master cylinders must remain as originally produced by the manufacturer for the homologated machine. 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 (bottom yoke). Front and rear brake pads may be changed.

### **5. Tyres:**

All tyres must be treaded. Slick tyres are not permitted.

### **6. Controls:**

Footrest and foot controls may be replaced or relocated but brackets must be mounted to the frame at the original mounting points. Handlebars, hand controls and cables may be altered or replaced (does not include brake master cylinder) from those fitted to the homologated motorcycle. Engine starter switch and electric stop switch must be located on the handlebars and must be operational.

### **7. Fairing and Seat Unit:**

Fairing, mudguards and seat unit may be altered or replaced. Windscreen, if fitted, may be replaced with transparent material only. The original instruments and fairing brackets may be removed or replaced. The petrol tank must remain as originally produced by the manufacturer for the homologated machine although it may be refinished if required. The position of the tank mounting points on the frame must remain as standard. The lower fairing has to be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (minimum 5 litres). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing. 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.

### **8. Wiring Harness and Battery:**

The wiring harness may be altered or replaced. Additional wiring may be added where required. No wiring or electronic equipment may be added or modified to alter the ignition or engine timing characteristics from those of the homologated machine with the exception of the following. The use of flash memory (flash RAM) for fuel injection mapping is allowed where the capability exists within the homologated motorcycle. An additional control unit to change the fuel mixture may be installed and must be fitted to the original connectors. The unit must not be able to perform any other function. The side stand switch, and related wiring, may be disabled or removed. Any electrical switch gear located on the handlebars or front sub frame may be unplugged or removed as required. Engine starter switch and electric stop switch must be fitted. All original electrical equipment not directly related to road use must be fully incorporated in to any modified wiring loom, including generator, CDI, regulator and starter motor. All original connections to the CDI must be retained and maintain their normal use. The size and type of battery may be changed and or relocated.

### **9. Radiator and Oil Cooler:**

The original radiator and oil cooler, if fitted, must remain as homologated. Radiator hoses may be replaced with those of a similar internal diameter. The use of coolants is prohibited, water only to be used.

### **10. Air Box / Carburetion / Fuel Injection:**

The air box may not be altered or replaced from that fitted to the homologated motorcycle. The air filter element must be fitted but may be replaced with an aftermarket item. The air box inlet rubbers may not be removed or altered. Carburettors must be the standard units as on the homologated model. Throttle bodies for fuel-injected machines must be as on the homologated model. Carburettor jets and needles may be replaced. Resizing of the air metering holes in CV carburettors slide control is permitted. No other alterations are permitted to the air intake or carburetion system. Bell mouths may not be added, altered or replaced from those fitted to the homologated motorcycle. The fuel injection management system may not be altered or replaced other than the remapping of internally stored fuelling maps.

## **MCUI PRODUCTION TWINS TECHNICAL REGULATIONS (Continued 1)**

### **11. Engine:**

Cylinder head, camshafts, cam sprockets, crankshaft, rods, pistons, valves, cylinders and all other engine components must be as homologated. No internal engine, gearbox and clutch parts may be altered or replaced with the exception of the gear shift detent spring, the clutch friction and drive plates and the clutch springs. Polishing and lightening of engine parts is not permitted. Balancing or gas flow modifications normally associated with individual tuning are not permitted.

Compression ratio of the engine must remain as homologated. Camshaft timing must remain as homologated. No other engine tuning or alteration from the homologated standard is permitted. The thermostat may be removed from the housing to aid cooling, if required.

### **12. Transmission:**

Additions to gearbox or selector mechanism, such as quick shift systems, are not allowed. Clutch springs; friction and drive plates may be replaced. Clutch baskets must remain as homologated. The use of slipper clutches is prohibited unless fitted as standard. Gear shift detent spring may be replaced with a heavy duty item. Front and rear external drive sprockets, chain pitch and chain length can be changed.

### **13. Ignition and Engine Control System:**

Ignition and engine control system (CDI) may not be modified or changed. All units must remain fully interchangeable with available control units. No modifications or alterations, whether electronic or mechanical, may be made to the motorcycle to alter the engine ignition timing. The use of flash memory (flash RAM) for fuel injection mapping is allowed where the capability exists within the homologated motorcycle. An additional control unit to change the fuel mixture may be installed and must be fitted to the original connectors. The unit must not be able to perform any other function. Fuel injection mapping may be reprogrammed. Alterations must remain within the capability of the standard fuel injection system as fitted to the homologated machine unless overridden with a permitted control unit.

### **14. Generator:**

The generator, starting system, starter crank gear and starter shaft may not be altered, replaced or removed from those fitted to the homologated motorcycle.

### **15. Exhaust System;**

Exhaust pipe and silencers may be altered or replaced from those fitted to the homologated motorcycle. This must adhere to the maximum noise regulations as set out in the MCUI regulations. The number of final exit(s) to the exhaust may be altered from that of the homologated machine. Wrapping of exhaust systems is permitted.

### **16. Fasteners:**

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

### **17. The Following Items MUST BE Removed:**

Headlamp, rear lamp and turn signal indicators (when not incorporated in the fairing). Openings must be covered by suitable materials. Rear view mirrors, horn, license plate bracket, tool box, helmet hooks and luggage carrier hooks, passenger foot rests, passenger grab rails, safety bars, centre and side stands must be removed (fixed brackets must remain).

### **18. The following items MAY BE removed:**

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

### **19. The following items MUST BE adhered to:**

Motorcycle must be equipped with a functional ignition kill switch or button mounted on the handlebar that is capable of stopping a running engine. Side stand must be removed. All drain plugs must be safety wired. External oil filter screws and bolts that enter the oil or water cavities must be safety wired. Head lamp, rear lamp and turn indicators must be removed. A suitable material must cover the openings. Mirrors must also be removed.

### **20. Replacement and Repairs:**

Where necessary, parts from an older or newer version of the same model maybe used.

### **21. Chain Guards:**

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

### **22. Fuel:**

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

(ICC December 2019)

### **24. Bore and Stroke:**

Bore and Stroke details must be displayed on the motorcycle.

### **25. Race Numbers & Backgrounds:**

As per MCUI rules.

### **26. BHP**

Maximum BHP 76

## **ALL MACHINES MUST HAVE**

### **27. Rear Safety Light**

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
4. the light must be able to be switched on and off.

## **MCUI PRODUCTION TWINS TECHNICAL REGULATIONS (Continued 2)**

### **28. Handlebar Lever Protection**

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

### **27. Engine Protection.**

All lateral covers/engine cases containing oil on, 4 stroke machines, and which could come in contact with the ground during a crash, must be protected by a second cover made from composite materials, aluminum or steel plates and/or bars are also permitted.

All these devices must be designed to be resistant against sudden shocks and must be fixed properly and securely.

Where secondary covers are not commercially available, Engine case guards in the form of strengthened engine side covers may be installed.

The countershaft cover may be removed. The addition of a crankcase protector at the countershaft is allowed



## MCUI SUPER TWINS TECHNICAL REGULATIONS

All items not mentioned in the following articles must remain as originally produced by the Manufacturer for the approved machine. Everything that is not authorised and prescribed in these rules is strictly forbidden. All motorcycles must comply in every respect with all the requirements for racing as specified in the Technical Regulations, unless it is equipped as such on the approved machine. Any four-stroke twin cylinder motorcycle with a water cooled engine of up to 650cc may be used provided it adheres to the following regulations. Older models may be updated with genuine parts found on a newer version of the same model and newer models may use parts from older machines.

### **Approved Manufacturers/Chassis**

Kawasaki ER650/Z650

Suzuki SV650

Paton S1-R

Tigcraft

Norton

Other manufacturers/Chassis will be approved at the discretion of the MCUI Technical committee and update bulletins issued during the season.

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

Frame and swing arm must remain as originally produced by the manufacturer for the homologated machine. Nothing may be added or removed from the frame body. Rear sub frame may be replaced or modified. The sub frame may only be altered if it was originally designed to be unbolted from the frame body. Refinishing of frame or swing arm to a suitable standard is acceptable.

### **2. Suspension:**

Forks may be replaced. Original internal parts of the fork may be modified or replaced. Aftermarket damper kits or valves may be installed. Fork springs may be replaced. Fork caps may be modified or replaced beyond the approved standard to allow external adjustments. Steering damper may be added although it cannot act as a steering lock device. Rear suspension unit can be changed or modified. The original attachment to the frame and swing arm must be as approved. The rear suspension linkage must remain as originally produced by the manufacturer for the homologated machine.

(ICC December 2019)

### **3. Brakes:**

Front and rear brake discs may be changed. Only ferrous materials are allowed for brake discs. Front and rear brake callipers may be changed.

Front and rear master cylinders may be changed. Front and rear hydraulic brake lines may be changed. The split of the front brake lines for both front brake callipers must be made above the lower fork bridge (bottom yoke). Front and rear brake pads may be changed.

### **4. Tyres:**

All tyres must be treaded. Slick tyres are not permitted.

### **5. Controls:**

Footrest and foot controls may be replaced or relocated but brackets must be mounted to the frame at the original mounting points. Handlebars, hand controls and cables may be altered or replaced (does not include brake master cylinder) from those fitted to the approved motorcycle. Engine starter switch and electric stop switch must be located on the handlebars and must be operational at post race scrutineering checks.

(ICC December 2019)

### **6. Fairing and Seat Unit:**

Fairing, mudguards and seat unit may be altered or replaced. Windscreen, if fitted, may be replaced with transparent material only. The original instruments and fairing brackets may be removed or replaced. The petrol tank must remain as originally produced by the manufacturer for the homologated machine although it may be refinished if required. The position of the tank mounting points on the frame must remain as standard. The lower fairing has to be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (minimum 5 litres). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing. 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.

### **7. Wiring Harness and Battery:**

The wiring harness may be altered or replaced. Additional wiring may be added where required. The size and type of the battery may be changed and relocated.

### **8. Engine:**

Cylinder head, camshafts, cam sprockets, crankshaft, rods, pistons, valves, cylinders and all other engine components may be modified but the capacity must not exceed 650cc. Polishing and lightening of engine parts is permitted. Balancing or gas flow modifications normally associated with individual tuning is permitted. Compression ratio of the engine may be changed. Camshaft timing may be changed. The crankcase/gearbox casing, clutch and generator covers may be protected by additional means, e.g. protective covers made of stainless steel or carbon/Kevlar composites. The thermostat may be removed from the housing to aid cooling, if required.

### **9. Transmission:**

Additions to the gearbox or selector mechanism, such as quick shift systems is permitted. Clutch springs; friction and drive plates may be replaced. The use of slipper clutches is permitted. Gear shift detent spring may be replaced with a heavy duty item. Front and rear external drive sprockets, chain pitch and chain length can be changed.

### **10. Generator:**

The generator, starting system, starter crank gear and starter shaft may not be altered, replaced or removed from those fitted to the homologated motorcycle.

### **11. Exhaust System;**

Exhaust pipe and silencers may be altered or replaced from those fitted to the approved motorcycle. This must adhere to the maximum noise regulations as set out in the MCUI regulations. The number of final exit(s) to the exhaust may be altered from that of the approved machine. Wrapping of exhaust systems is permitted.

(ICC December 2019)

## **MCUI SUPER TWINS TECHNICAL REGULATIONS (Continued)**

### **12. Fasteners:**

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

### **13. The Following Items MUST BE Removed:**

Headlamp, rear lamp and turn signal indicators (when not incorporated in the fairing). Openings must be covered by suitable materials. Rear view mirrors, horn, license plate bracket, tool box, helmet hooks and luggage carrier hooks, passenger foot rests, passenger grab rails, safety bars, centre and side stands must be removed (fixed brackets must remain).

### **14. The following items MAY BE removed:**

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

### **15. The following items MUST BE adhered to:**

The motorcycle must be equipped with a functional ignition kill switch or button mounted on the handlebar that is capable of stopping a running engine. Side stand must be removed. All drain plugs must be safety wired. External oil filter screws and bolts that enter the oil or water cavities must be safety wired. Head lamp, rear lamp and turn indicators must be removed. A suitable material must cover the openings. Mirrors must also be removed.

### **16. Replacement and Repairs:**

Where necessary, parts from an older or newer version of the same model may be used.

### **17. Chain Guards:**

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

### **18. Fuel:**

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

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### **19. Radiator and Oil Cooler:**

The original radiator or oil cooler must not be modified. Radiator hoses may be replaced with those of a similar internal diameter. The use of coolants is prohibited, water only to be used.

### **20. Bore and Stroke:**

Bore and Stroke details must be displayed on the motorcycle.

### **21. Race Numbers & Backgrounds:**

As per MCUI rules.

### **ALL MACHINES MUST HAVE**

#### **22. Rear Safety Light**

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
4. the light must be able to be switched on and off.

#### **23. Handlebar Lever Protection**

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

#### **24. Engine Protection.**

All lateral covers/engine cases containing oil on, 4 stroke machines, and which could come in contact with the ground during a crash, must be protected by a second cover made from composite materials, aluminum or steel plates and/or bars are also permitted.

All these devices must be designed to be resistant against sudden shocks and must be fixed properly and securely.

Where secondary covers are not commercially available, Engine case guards in the form of strengthened engine side covers may be installed.

The countershaft cover may be removed. The addition of a crankcase protector at the countershaft is allowed

#### **25. Weight**

Machines must weigh a minimum 155kg post-race including any fuel/oil and coolant.

(ICC December 2019)

**1. Displacement Capacities:**

Maximum capacities:

Supermono 500cc up to 750cc Single cylinder 4 Stroke.

- (a) Engines must be normally aspirated.
- (b) No tolerance on capacities is permitted.
- (c) Engine capacity must be measured at ambient temperature.

**2. Minimum Weights:**

Minimum weight at post race inspection is 95kg.

Ballast may be added to achieve minimum weights, but it must be securely fixed to the frame and must be declared to the Chief Scrutineer/Technical Steward at the preliminary check.

In the final inspection at the end of the race, the machines chosen will be weighed in the condition they finished the race. Nothing may be added to the machine including water, oil, fuel or tyres. A 1kg. tolerance in the weight of the machine at the post-race control is accepted.

**3. Number Plates:**

Size as per MCUI Standing Regulations.

The background colours and figures for Supermono are black background with yellow numbers.

With the RAL colour table values being black 9005 and yellow being 1003.

**4. Fuel:**

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

**5. Main Frame/ Chassis:**

The use of titanium and/or magnesium in the construction of the frame is not permitted.

**6. Front Forks:**

The use of titanium in the construction of the front forks is not permitted. The surface treatment is free. There must be at least 15 degrees of movement of the steering each side of the centre line. Stops must be fitted to ensure a clearance of at least 30mm between the handlebar and the tank when at the extremes of lock. The steering damper cannot act as a steering lock limiting device.

**7. Swingarm:**

The use of titanium, magnesium and composites in the construction of the swingarm is not permitted.

**8. Rear Shock:**

No restrictions.

**9. Wheels:**

Maximum front wheel rim width is 4.0 in.

Maximum rear wheel rim width is 6.25 in.

Minimum Wheel diameter is 16 in.

The use of titanium or any other light alloy in the construction of the wheel spindles is not permitted.

Carbon wheels are strictly forbidden.

**10. Brakes:**

Supermonos must have a minimum of one brake on each wheel that is independently operated. The use of carbon fibre or carbon composite discs is not permitted.

**11. Tyres:**

All dry tyres must be EU or DOT road legal tyres. Wet race tyres are permitted. Slick tyres are strictly prohibited. Tyre warmers are allowed.

**12. Foot Rest/ Foot Controls:**

Footrests may be of the folding type but in this case must be fitted with a device which automatically returns them to the normal position, and an integral protection must be provided at the end of the footrest. Non folding metallic footrests must have an end (plug) which is permanently fixed, made of plastic, Teflon or equivalent type of material (minimum radius of 8mm).

**13. Handlebars and Hand Controls:**

Handlebars must have a width of not less than 450mm and their ends must be solid or rubber covered. The width of the handlebar is defined as the width measured between the outside of the handlebar grips or throttle twist grips.

The use of titanium in the construction of handlebars is not permitted. Throttle controls must be self-closing when not held by the hand.

Levers must not be longer than 200mm. measured from the pivot point. Engine stop switch must be located on the handlebars.

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

**14. Fairing/Bodywork:**

The front wheel with the exception of the tyre and the part hidden behind the mudguard must be clearly visible from each side.

Bodywork must not extend beyond a line drawn vertically at the leading edge of the front tyre. The suspension should be fully extended when the measurement is taken. Mudguards shall not be considered as streamlining. Mudguards are not compulsory.

When fitted, front mudguards must not extend in front of a line drawn

Upwards and forwards at 45 degrees from a horizontal line drawn through the front wheel spindle or below a line drawn horizontally and to the rear of the front wheel spindle.

The windscreen edge and the edges of all other exposed parts of the streamlining must be rounded. The front inclination where the number plate is fixed must not exceed 30 degrees to the rear of the vertical.

Whatever the position of the handlebars, there must be a space of at least 20mm between the streamlining and the ends of the handlebars or other steering system, including any attachments thereto. The maximum width of bodywork must not exceed 600mm.

No part of the streamlining (fairing) must be to the rear of a vertical line drawn through the rear wheel axle. The rim of the rear wheel must be clearly visible over 180 degrees of its circumference to the rear of this line. There must be a clearance of at least 15mm around

the circumference of the tyre at all positions of the motorcycle suspension and all positions of the rear wheel adjustment. No part of the motorcycle shall project to the rear of a vertical line drawn through the exterior edge of the rear tyre. The motorcycle, unloaded, must be capable of being leaned at an angle of 50 degrees from the vertical without touching the ground, other than the tyres.

Air foils or spoilers may only be fitted on solo machines when they are part of the fairing or seat. They must not exceed the width of the fairing nor the height of the handlebar. Sharp edges must be rounded off with a minimum radius of 8mm. Moving aerodynamic devices are not permitted. The rider in the normal driving position must be completely visible, with the exception of his forearms, from either side, from the rear and from above. In a race position, the minimum space between the face of the rider, or his/ her helmet and the streaming (including the windscreen) must be 100mm. It is forbidden to use transparent materials to evade these rules.

The fuel cap must be fitted in such a way that it does not protrude in relation to the tank profile and cannot be torn off in a crash.

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 fairing should incorporate a maximum of two holes of 25mm. These holes must remain closed in dry conditions and can only be opened in wet conditions as declared by the Clerk of the Course.

All sharp edges must be rounded.

**15. Fuel Tank:**

Fuel tank must be completely filled with a fire retardant material (i.e. 'Explosafe'). Fuel tanks with tank breather pipes must be fitted with non-return valves that discharge into a catch tank with a minimum volume of 250cc made of a suitable material. Fuel caps, when closed must be leak proof. The fuel cap must be fitted in such a way that it does not protrude in relation to the tank profile and cannot be torn off in a crash.

**16. Seat:**

The width of the seat or anything to its rear shall be more than 450mm, exhaust systems excepted. The maximum height of the back of the riders seat is 150mm. This will be measured from the lowest point of the rigid base of seat to the uppermost part of the fairing behind the rider. All sharp edges must be rounded.

**17. Radiators and Oil Coolers:**

Oil cooler must not be mounted on or above the rear mudguard.

**18. Air Box:**

The air box is compulsory and must be completely closed around the induction bell mouth and all engine breather tubes, with air ingress only above the lowest point of the bell mouth lip. Carburation instruments may be entirely within the airbox. The airbox drains must be sealed. All Supermono 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 1000cc of discharged fluid.

**19. Carburation Instruments:**

No restrictions.

**20. Oil Lines:**

Oil lines containing positive pressure must be of metal reinforced construction with swaged or threaded connectors.

**21. Transmission/Gearbox:**

The maximum number of gears is limited to six speeds.

**22. Exhaust System:**

Maximum noise limit is **105db** in accordance with MCUI regulations. The correct stroke must be marked on a clearly visible position of the crankcase. The outlet of the exhaust must not extend behind a line drawn vertically through the edge of the rear tyre. The last 30mm of the pipe must be horizontal and parallel to the centre line of the motorcycle with a tolerance of +/- 10 degrees.

**23. Engine Protection.**

All lateral covers/engine cases containing oil on, 4 stroke machines, and which could come in contact with the ground during a crash, must be protected by a second cover made from composite materials, aluminum or steel plates and/or bars are also permitted.

All these devices must be designed to be resistant against sudden shocks and must be fixed properly and securely.

Where secondary covers are not commercially available, Engine case guards in the form of strengthened engine side covers may be installed.

The countershaft cover may be removed. The addition of a crankcase protector at the countershaft is allowed.

**24. The Following Items MUST BE incorporated:**

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

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

Motorcycles must be fitted with a functional ignition kill switch or button mounted on either side of the handlebar (within reach of the hand while on the grips) that is capable of stopping a running engine. Throttle controls must be self-closing when not held by the hand. Electric fuel pumps must be wired through a circuit cut out which will operate automatically in the event of an accident.

A test procedure for the circuit cut out must be incorporated in the design of electrically operated fuel pumps for use upon inspection.

All Supermono 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 1000cc of discharged fluid.

Where an oil breather pipe is fitted, the outlet must discharge into a catch tank located in an easily accessible position and which must be emptied before the start of a race. Oil cooler must not be mounted on or above the rear mudguard.

The minimum size of a catch tank shall be 250cc for gearbox breather pipes and engine breather pipes.

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All items not mentioned in the following articles must remain as originally produced by the Manufacturer for the homologated machine. Everything that is not authorised and prescribed in these rules is strictly forbidden. All motorcycles must comply in every respect with all the requirements for 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 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. The displacement capacities must remain at the homologated size. Modifying the bore and stroke to reach class limits is not allowed.

#### **Pre Injection:**

Any machine whose engine is normally aspirated through carburettors and is between 201/600cc.

No 250cc GP / 500cc GP machines are permitted.

#### **1. Displacement Capacities:**

Over 201cc up to 600cc

#### **2. Induction Tract Restriction:**

Carburetion instruments must remain as homologated.

#### **3. Frame Body and Rear sub-frame:**

Frame must remain as originally produced by the manufacturer for the homologated machine. Holes may be drilled on the frame only to fix approved components (i.e. fairing brackets, steering damper mount). 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. Nothing else 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. Additional seat brackets may be added, non-stressed protruding brackets may be removed if they do not affect the safety of the construction or assembly. Bolt-on accessories to the rear sub-frame may be removed. The paint scheme is not restricted but polishing the frame body or sub-frame is not allowed.

#### **4. 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. Dust seal can be modified, changed or removed if the fork is totally oil-sealed. The original surface finish of the fork tubes (stanchions, fork pipes) may be changed. Additional surface treatments are allowed. The upper and lower fork clamps (triple clamp, fork bridges) must remain as originally produced by the manufacturer on the homologated machine. Steering damper may be added or replaced with an aftermarket damper. The steering damper cannot act as a steering lock limiting device.

#### **5. Rear Fork (Swing arm):**

The rear fork must remain as originally produced by the manufacturer for the homologated 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 fork pivot bolt must remain as originally produced by the manufacturer for the homologated machine. Rear axle chain adjuster can be modified or changed. Rear wheel stand brackets may be added to the rear fork by welding or by bolts. Brackets must have rounded edges (with a large radius). Fastening screws must be recessed. An anchorage system or point(s) to keep the original rear brake calliper in place may be added to the rear swing-arm.

#### **6. Rear Suspension Unit:**

Rear suspension unit can 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. Rear suspension linkage must remain as originally produced by the manufacturer for the homologated machine.

#### **7. 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.

#### **8. 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. 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. The front master cylinder must remain as originally produced by the manufacturer for the homologated machine. 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 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.

#### **9. Tyres:**

All tyres must be treaded. Slick tyres are not permitted.

#### **10. 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 an 8 mm solid spherical radius. (see diagram A & C). Non folding footrests must have an end (plug) which is permanently fixed, made of aluminium, plastic, Teflon® or an equivalent type material (minimum radius 8mm). The plug surface must be designed to reach the widest possible area. The Technical Director has the right to refuse any plug not satisfying this safety aim.

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#### **11. Handle Bars and Hand Controls:**

Handle bars, throttle assembly and associated cables, hand controls and levers 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.

## **MCUI PRE-INJECTION 600 TECHNICAL REGULATIONS (Continued 1)**

### **12. 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 allowed.
- 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.
- 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 litres). 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.
- 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.
- o) Rear mudguards fixed on the swing-arm that incorporate the chain guard can 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).

### **13. Fuel Tank:**

Fuel tank must remain as originally produced by the manufacturer for the homologated machine. Fuel tanks with tank breather pipes must be fitted with non-return valves that discharge into a catch tank with a minimum volume of 250 cc made of a suitable material. 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.

### **14. 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. Holes may be drilled in the seat or rear cowl to allow additional cooling. Holes which are bigger than 10mm must be covered with metal gauze or fine mesh. Mesh must be painted to match the surrounding material. The solo seat then must incorporate the rear number plates. The appearance from both front rear and profile must conform in principle to the homologated shape. The seat/rear cowl replacement must allow for proper number display. All exposed edges must be rounded.

### **15. Wiring Harness:**

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

### **16. Battery:**

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

### **17. 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 main 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.

### **18. 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 motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox. The original air ducts running from the fairing to the air box may be altered or replaced. The original air ducts to the airbox may be altered or replaced.

### **19. Fuel Supply:**

Fuel lines may be replaced. Quick connectors or dry brake quick connectors may be used. Fuel vent lines may be replaced. Fuel filters may be added. Fuel petcock must remain as originally produced by the manufacturer. The fuel pump must remain as homologated. The fuel pressure regulator may be modified or changed.

### **20. Cylinder Head:**

Cylinder head must be as homologated. The following modifications are allowed. Grinding of the cylinder head surface on the side of the gasket. Modifications of the inlet and exhaust ports by taking off or adding material (welding is forbidden). Original homologated valves guides may be cut or modified, but only on the intake or exhaust port side. Polishing of the combustion chamber. Original valve seats must be used, but modifications are allowed to the shape. Compression ratio is free, but the combustion chamber can be modified only by taking material off. It is forbidden to add any material to the cylinder head unless as described above. The compression ratio is free. The combustion chamber may be modified. Rocker arms (if any) must remain as homologated (material and dimensions). Valves may be altered or replaced and the material can be changed, but maximum diameters and minimum weights must remain as homologated. The use of titanium valves is permitted only if the homologated machines are equipped with such kind of valves. Valve springs can be changed. Valve spring retainers may be replaced or modified, but their weight must be the same or higher than the original ones.

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### **21. 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 the technical checks: for direct camdrive systems, the camlobe lift is measured; for non-direct camdrive systems (i.e. with rocker arms), the valve lift is measured.

## **MCUI PRE-INJECTION 600 TECHNICAL REGULATIONS (Continued 2)**

### **22. Cam Sprockets:**

Cam sprockets can be modified or replaced to allow the degreasing of camshafts.

### **23. Crankshaft:**

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

### **24. Oil Pumps, Water Pumps and Oil Lines:**

Oil pump must remain as homologated. 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 treaded 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.

### **25. Connecting Rods:**

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

### **26. Pistons:**

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

### **27. Piston Rings:**

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

### **28. Piston Pins and Clips:**

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

### **29. 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.

### **30. 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. 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. 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. The countershaft cover may be removed. The addition of a crankcase protector at the countershaft is allowed.

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

All transmission/gearbox ratios are free. The number of gears must remain as homologated. Primary gears must remain as homologated. Quick-shift systems are allowed. Countershaft sprocket, rear wheel sprocket, chain pitch and size can be changed.

### **32. 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.

### **33. Ignition/Engine Control System: (ECU)**

Ignition/engine control system (ECU) may be modified or changed. Additional wiring harnesses may be added. Cutting of the wiring harness is allowed. Spark plugs and plug wires may be replaced.

### **34. Generator, Alternator, Electric Starter:**

Generator may be modified, removed or replaced. The electric starter must operate normally and always be able to start the engine during the practices and race.

### **35. Exhaust System:**

Exhaust pipes and silencers may be modified or changed. Catalytic converters must be removed. The number of 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 rider's foot or an area in contact with the fairing for protection from heat. The noise limit for Supersport will be 105 dB/A.

### **36. 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/bodywork fasteners may be changed to the quick disconnect type.

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

Any type of lubrication, brake or suspension fluid may be used. Any type of spark plug and plug cap may be used. Any inner tube (if fitted) or inflation valves may be used. 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.

### **38. The following items MAY BE removed:**

Instrument and instrument bracket and associated cables. Emission control items (anti-pollution) in or around the air box (O2 sensors, air injection devices). Tachometer. Speedometer and related wheel spacers. 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.

### **39. The Following Items MUST BE removed:**

Headlamp, rear lamp and turn signal indicators (when not incorporated in the fairing). Openings must be covered by suitable materials. Rear view mirrors, horn, license plate bracket, tool box, helmet hooks and luggage carrier hooks, passenger foot rests, passenger grab rails, safety bars, centre and side stands must be removed (fixed brackets must remain).

**40. The following items MUST BE altered:**

Motorcycles must be equipped with a functional ignition kill switch or button mounted at least on one side of the handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine. Throttle controls must be self-closing when not held by the hand. All drain plugs must be wired. External oil filter(s) screws and bolts that enter an oil cavity must be safety wired (i.e. on crankcases, oil

lines, oil coolers, etc.) All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox. Where breather or overflow pipes are fitted they must discharge via existing outlets. The original closed system must be retained, no direct atmospheric emission is permitted. Oil cooler must not be mounted on or above the rear mudguard.

**41. Additional Equipment:**

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

**42. Replacement and Repairs:**

Where necessary, parts from an older or newer version of the same model maybe used.

**43. Chain Guards:**

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

**44. Fuel:**

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

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**45. Bore and Stroke:**

Bore and Stroke details must be displayed on the motorcycle.

**46. Race Numbers & Backgrounds:**

As per MCUI rules.

**ALL MACHINES MUST HAVE****47. Rear Safety Light**

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
4. the light must be able to be switched on and off.

**48. Handlebar Lever Protection**

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



All items not mentioned in the following articles must remain as originally produced by the Manufacturer for the homologated machine. Everything that is not authorised and prescribed in these rules is strictly forbidden. All motorcycles must comply in every respect with all the requirements for racing as specified in the Technical Regulations, unless it is equipped as such on the approved machine. The appearance from both front, rear and the profile of motorcycles must (except when otherwise stated) conform in principle to the approved shape (as originally produced by the manufacturer). The appearance of the exhaust system is excluded from this rule. The displacement capacities must remain at the approved size. Modifying the bore and stroke to reach class limits is not allowed.

**Pre Injection 1000:**

Any 4 stroke machine whose engine is normally aspirated through carburettors and is between 630 to 1000cc.

No fuel injected machines are permitted.

**1. Displacement Capacities:**

Over 630cc up to 1000cc

**2. Induction Tract Restriction:**

Carburetion instruments must remain as homologated.

**3. Frame Body and Rear sub-frame:**

Frame must remain as originally produced by the manufacturer for the homologated machine. Holes may be drilled on the frame only to fix approved components (i.e. fairing brackets, steering damper mount). 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. Nothing else 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. Additional seat brackets may be added, non-stressed protruding brackets may be removed if they do not affect the safety of the construction or assembly. Bolt-on accessories to the rear sub-frame may be removed. The paint scheme is not restricted but polishing the frame body or sub-frame is not allowed.

**4. 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. Dust seal can be modified, changed or removed if the fork is totally oil-sealed. The original surface finish of the fork tubes (stanchions, fork pipes) may be changed. Additional surface treatments are allowed. The upper and lower fork clamps (triple clamp, fork bridges) must remain as originally produced by the manufacturer on the homologated machine. Steering damper may be added or replaced with an aftermarket damper. The steering damper cannot act as a steering lock limiting device.

**5. Rear Fork (Swing arm):**

The rear fork must remain as originally produced by the manufacturer for the homologated 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 fork pivot bolt must remain as originally produced by the manufacturer for the homologated machine. Rear axle chain adjuster can be modified or changed. Rear wheel stand brackets may be added to the rear fork by welding or by bolts. Brackets must have rounded edges (with a large radius). Fastening screws must be recessed. An anchorage system or point(s) to keep the original rear brake calliper in place may be added to the rear swing-arm.

**6. Rear Suspension Unit:**

Rear suspension unit can 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. Rear suspension linkage must remain as originally produced by the manufacturer for the homologated machine.

**7. 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.

**8. 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. 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. The front master cylinder must remain as originally produced by the manufacturer for the homologated machine. 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 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.

**9. Tyres:**

All tyres must be treaded. Slick tyres are not permitted.

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

**11. Handle Bars and Hand Controls:**

Handle bars, throttle assembly and associated cables, hand controls and levers 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.

**12. 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 allowed.
- 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.
- 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 litres). 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.
- 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.
- o) Rear mudguards fixed on the swing-arm that incorporate the chain guard can 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).

**13. Fuel Tank:**

Fuel tank must remain as originally produced by the manufacturer for the homologated machine. Fuel tanks with tank breather pipes must be fitted with non-return valves that discharge into a catch tank with a minimum volume of 250 cc made of a suitable material. 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.

**14. 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. Holes may be drilled in the seat or rear cowl to allow additional cooling. Holes which are bigger than 10mm must be covered with metal gauze or fine mesh. Mesh must be painted to match the surrounding material. The solo seat then must incorporate the rear number plates. The appearance from both front rear and profile must conform in principle to the homologated shape. The seat/rear cowl replacement must allow for proper number display. All exposed edges must be rounded.

**15. Wiring Harness:**

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

**16. Battery:**

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

**17. 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 main 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.

**18. 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 motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox. The original air ducts running from the fairing to the air box may be altered or replaced. The original air ducts to the airbox may be altered or replaced.

**19. Fuel Supply:**

Fuel lines may be replaced. Quick connectors or dry brake quick connectors may be used. Fuel vent lines may be replaced. Fuel filters may be added. Fuel petcock must remain as originally produced by the manufacturer. The fuel pump must remain as homologated. The fuel pressure regulator may be modified or changed.

**20. Cylinder Head:**

Cylinder head must be as homologated. The following modifications are allowed. Grinding of the cylinder head surface on the side of the gasket. Modifications of the inlet and exhaust ports by taking off or adding material (welding is forbidden). Original homologated valves guides may be cut or modified, but only on the intake or exhaust port side. Polishing of the combustion chamber. Original valve seats must be used, but modifications are allowed to the shape. Compression ratio is free, but the combustion chamber can be modified only by taking material off. It is forbidden to add any material to the cylinder head unless as described above. The compression ratio is free. The combustion chamber may be modified. Rocker arms (if any) must remain as homologated (material and dimensions). Valves may be altered or replaced and the material can be changed, but maximum diameters and minimum weights must remain as homologated. The use of titanium valves is permitted only if the homologated machines are equipped with such kind of valves. Valve springs can be changed. Valve spring retainers may be replaced or modified, but their weight must be the same or higher than the original ones.

**21. 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 the technical checks: for direct camdrive systems, the camlobe lift is measured; for non-direct camdrive systems (i.e. with rocker arms), the valve lift is measured.

**22. Cam Sprockets:**

Cam sprockets can be modified or replaced to allow the degreasing of camshafts.

**23. Crankshaft:**

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

**24. Oil Pumps, Water Pumps and Oil Lines:**

Oil pump must remain as homologated. 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 treaded 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.

**25. Connecting Rods:**

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

**26. Pistons:**

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

**27. Piston Rings:**

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

**28. Piston Pins and Clips:**

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

**29. 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.

**30. 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. 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. 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. The countershaft cover may be removed. The addition of a crankcase protector at the countershaft is allowed.

**31. Transmission/Gearbox:**

All transmission/gearbox ratios are free. The number of gears must remain as homologated. Primary gears must remain as homologated. Quick-shift systems are allowed. Countershaft sprocket, rear wheel sprocket, chain pitch and size can be changed.

**32. 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.

**33. Ignition/Engine Control System: (ECU)**

Ignition/engine control system (ECU) may be modified or changed. Additional wiring harnesses may be added. Cutting of the wiring harness is allowed. Spark plugs and plug wires may be replaced.

**34. Generator, Alternator, Electric Starter:**

Generator may be modified, removed or replaced. The electric starter must operate normally and always be able to start the engine during the practices and race.

**35. Exhaust System:**

Exhaust pipes and silencers may be modified or changed. Catalytic converters must be removed. The number of 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 rider's foot or an area in contact with the fairing for protection from heat. The noise limit for Supersport will be 105 dB/A.

**36. 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/bodywork fasteners may be changed to the quick disconnect type.

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

Any type of lubrication, brake or suspension fluid may be used. Any type of spark plug and plug cap may be used. Any inner tube (if fitted) or inflation valves may be used. 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.

**38. The following items MAY BE removed:**

Instrument and instrument bracket and associated cables. Emission control items (anti-pollution) in or around the air box (O2 sensors, air injection devices). Tachometer. Speedometer and related wheel spacers. 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.

**39. The Following Items MUST BE removed:**

Headlamp, rear lamp and turn signal indicators (when not incorporated in the fairing). Openings must be covered by suitable materials. Rear view mirrors, horn, license plate bracket, tool box, helmet hooks and luggage carrier hooks, passenger foot rests, passenger grab rails, safety bars, centre and side stands must be removed (fixed brackets must remain).

**40. The following items MUST BE altered:**

Motorcycles must be equipped with a functional ignition kill switch or button mounted at least on one side of the handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine. Throttle controls must be self-closing when not held by the hand. All drain plugs must be wired. External oil filter(s) screws and bolts that enter an oil cavity must be safety wired (i.e. on crankcases, oil

lines, oil coolers, etc.) All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox. Where breather or overflow pipes are fitted they must discharge via existing outlets. The original closed system must be retained, no direct atmospheric emission is permitted. Oil cooler must not be mounted on or above the rear mudguard.

**41. Additional Equipment:**

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

**42. Replacement and Repairs:**

Where necessary, parts from an older or newer version of the same model maybe used.

**43. Chain Guards:**

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

**44. Fuel:**

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

**45. Bore and Stroke:**

Bore and Stroke details must be displayed on the motorcycle.

**46. Race Numbers & Backgrounds:**

As per MCUI rules.

**ALL MACHINES MUST HAVE****47. Rear Safety Light**

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
4. the light must be able to be switched on and off.

**48. Handlebar Lever Protection**

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

(ICC December 2019)

1. Any two or four stroke machine manufactured between 1.1.1963 and 31.12.1984
2. Water Cooled machines are not permitted.
3. No external modifications to cylinders, castings and casings.
4. Frames to be manufactured before cut-off date (31.12.84) or bona fide copy.
5. Alternative swinging arms are permitted if available within the period, no modifications allowed to the design to accommodate wider rear tyre.
6. Dual Shock absorber - Mono shock is prohibited. No piggy back style units.
7. Front Forks and mechanical anti dive if fitted must be of a type and model used in the era. Maximum diameter 38mm.
8. Any front brake (or period replacement) may be used. Floating discs are prohibited. Rear drum brake must be retained if fitted as standard.
9. Any carburettor available within the period including power jets is permitted.
10. Noise- All must comply with current MCUI noise regulations.
11. Wheels to be wire spoke unless otherwise fitted as standard by the manufacturer. (Riders must be aware of the dangers of using elderly cast wheels). Maximum permitted tyre widths are 125 cc =3" 250/350 cc =3" 500 cc =5" 501-1300 cc =7"
12. Ignition unit any type allowed.
13. The competitor is requested to style their machine to resemble racing machines of the era. Suitable seats, tanks, and fairings are readily available.
14. All four stroke post classic machines must be fitted with a belly pan.
15. Chain Guards: A guard must be fitted in such a way as to prevent trapping between the lower drive chain run and the final drive sprocket at the rear wheel.
16. Tyres – Only treaded tyres are permitted – Use of tyre warmers are not permitted
17. Fuel – Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.
18. Rear Safety Light  
All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.
  1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
  2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
  3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
  4. the light must be able to be switched on and off.
19. Handlebar Lever Protection  
All motorcycles must be equipped with a brake lever protection, intended to prevent the handlebar brake lever from being accidentally activated in the case of collision with another motorcycle.

(ICC December 2019)

Only genuine grand prix factory racing machines are allowed, modified street bikes are not allowed.

125, 250 and 350 machines can compete together but will be scored as separate classes.

1. 125cc disc valve twins all years and suspension types are allowed.

2. 125cc Single cylinder machines up to 1994 – Beam frames permitted.

3. 250cc and 350cc parallel or tandem twin machines up to 31<sup>st</sup> December 1984. Machines must have 16" or 18" wheels only. Frames must be steel or aluminium square or round section. No beam frames.

4. 250cc 'V' twin machines up to 31<sup>st</sup> December 1995, 17" wheels and beam frames are permitted. These machines will run in separate category.

5. Alternative but period and replica brake components may be used. No Radial Callipers permitted.

6. The competitor is requested to style their machine to resemble racing machines of the era. Suitable seats, tanks, and fairings are readily available.

7. Race Numbers and Backgrounds – As per MCUI Rules.

8. Tyres - Slick tyres are permitted.

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

10. Noise limit 105db.

11. Fuel – Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

#### 12. Rear Safety Light

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
4. the light must be able to be switched on and off.

#### 13. Handlebar Lever Protection

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

(ICC December 2019)

## MCUI SUPERSPORT TECHNICAL REGULATIONS

All items not mentioned in the following articles must remain as originally produced by the Manufacturer for the homologated machine. Everything that is not authorised and prescribed in these rules is strictly forbidden. All motorcycles must comply in every respect with all the requirements for 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 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. The displacement capacities must remain at the homologated size. Modifying the bore and stroke to reach class limits is not allowed.

### 1. Displacement Capacities:

Over 400cc up to 600cc 4 Stroke 4 cylinders  
Over 600cc up to 636cc 4 Stroke 4 cylinders  
Over 500cc up to 675cc 4 Stroke 3 cylinders  
Over 650cc up to 750cc 4 Stroke 2 cylinders

(ICC December 2019)

### 2. Minimum Weights:

The minimum weights will be: 600 cc four cylinders 161 kg  
The minimum weights will be: 636 cc four cylinders 161 kg  
The minimum weights will be: 675 cc three cylinders 161 kg  
The minimum weights will be: 750 cc four cylinders 161 kg

(ICC December 2019)

In the final inspection at the end of the race, the checked machines will be weighed in the condition they were at the end of the race. The established weight limit must be met in the condition the machine finished the race. Nothing can be added to the machine including water, oil, fuel or tyres. At 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. 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 that the rider and team will be disturbed as little as possible, but in any case the rider and team must comply with these checks.)

### 3. Induction Tract Restriction:

Carburetion instruments must remain as homologated.

### 4. Frame Body and Rear sub-frame:

Frame must remain as originally produced by the manufacturer for the homologated machine. Holes may be drilled on the frame only to fix approved components (i.e. fairing brackets, steering damper mount). 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. Nothing else 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. Additional seat brackets may be added, non-stressed protruding brackets may be removed if they do not affect the safety of the construction or assembly. Bolt-on accessories to the rear sub-frame may be removed. The paint scheme is not restricted but polishing the frame body or sub-frame is not allowed.

### 5. 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. Dust seal can be modified, changed or removed if the fork is totally oil-sealed. The original surface finish of the fork tubes (stanchions, fork pipes) may be changed. Additional surface treatments are allowed. The upper and lower fork clamps (triple clamp, fork bridges) must remain as originally produced by the manufacturer on the homologated machine. Steering damper may be added or replaced with an aftermarket damper. The steering damper cannot act as a steering lock limiting device.

### 6. Rear Fork (Swing arm):

The rear fork must remain as originally produced by the manufacturer for the homologated 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 fork pivot bolt must remain as originally produced by the manufacturer for the homologated machine. Rear axle chain adjuster can be modified or changed. Rear wheel stand brackets may be added to the rear fork by welding or by bolts. Brackets must have rounded edges (with a large radius). Fastening screws must be recessed. An anchorage system or point(s) to keep the original rear brake calliper in place may be added to the rear swing-arm.

### 7. Rear Suspension Unit:

Rear suspension unit can 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. Rear suspension linkage must remain as originally produced by the manufacturer for the homologated machine.

### 8. 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.

### 9. 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. 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. The front master cylinder must remain as originally produced by the manufacturer for the homologated machine. Rear master cylinder must remain as originally produced by the manufacturer for the homologated machine. Front and rear hydraulic brake lines may be changed.

## **MCUI SUPERSPORT TECHNICAL REGULATIONS (Continued 1)**

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 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.

### **10. Tyres:**

All tyres must be treaded. Slick tyres are not permitted.

### **11. 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 an 8 mm solid spherical radius. (see diagram A & C). Non folding footrests must have an end (plug) which is permanently fixed, made of aluminium, plastic, Teflon® or an equivalent type material (minimum radius 8mm).

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

### **12. Handle Bars and Hand Controls:**

Handle bars, throttle assembly and associated cables, hand controls and levers 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.

### **13. 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 allowed.
- 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.
- 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 litres). 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.
- 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.
- o) Rear mudguards fixed on the swing-arm that incorporate the chain guard can 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).

### **14. Fuel Tank:**

Fuel tank must remain as originally produced by the manufacturer for the homologated machine. Fuel tanks with tank breather pipes must be fitted with non-return valves that discharge into a catch tank with a minimum volume of 250 cc made of a suitable material. 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.

### **15. 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. Holes may be drilled in the seat or rear cowl to allow additional cooling. Holes which are bigger than 10mm must be covered with metal gauze or fine mesh. Mesh must be painted to match the surrounding material. The solo seat then must incorporate the rear number plates. The appearance from both front rear and profile must conform in principle to the homologated shape. The seat/rear cowl replacement must allow for proper number display. All exposed edges must be rounded.

### **16. Wiring Harness:**

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

### **17. Battery:**

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

### **18. 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 main 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 oil cooler. Additional oil coolers are not allowed.

### **19. 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 motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox. The original air ducts running from the fairing to the air box may be altered or replaced. The original air ducts to the airbox may be altered or replaced.



## **MCUI SUPERSPORT TECHNICAL REGULATIONS (Continued 2)**

### **20. Fuel Injection System:**

Throttle bodies 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 may be altered or replaced from those fitted by the manufacturer on the homologated machine. Butterfly cannot be changed or modified. No modifications of fuel pump or pressure regulator are allowed. The fuel injection management computer chip (EPROM) may be changed. Fuel pump and fuel pressure regulator must remain as homologated. The use of flash memory ("flash RAM") for fuel injection mapping is allowed.

### **21. Fuel Supply:**

Fuel lines may be replaced. Quick connectors or dry brake quick connectors may be used. Fuel vent lines may be replaced. Fuel filters may be added. Fuel petcock must remain as originally produced by the manufacturer. The fuel pump must remain as homologated. The fuel pressure regulator may be modified or changed.

### **22. Cylinder Head:**

Cylinder head must be as homologated. The following modifications are allowed. Grinding of the cylinder head surface on the side of the gasket. Modifications of the inlet and exhaust ports by taking off or adding material (welding is forbidden). Original homologated valves guides may be cut or modified, but only on the intake or exhaust port side. Polishing of the combustion chamber. Original valve seats must be used, but modifications are allowed to the shape. Compression ratio is free, but the combustion chamber can be modified only by taking material off. It is forbidden to add any material to the cylinder head unless as described above. The compression ratio is free. The combustion chamber may be modified. Rocker arms (if any) must remain as homologated (material and dimensions). Valves may be altered or replaced and the material can be changed, but maximum diameters and minimum weights must remain as homologated. The use of titanium valves is permitted only if the homologated machines are equipped with such kind of valves. Valve springs can be changed. Valve spring retainers may be replaced or modified, but their weight must be the same or higher than the original ones.

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

### **24. Cam Sprockets:**

Cam sprockets can be modified or replaced to allow the degreasing of camshafts.

### **25. Crankshaft:**

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

### **26. Oil Pumps, Water Pumps and Oil Lines:**

Oil pump must remain as homologated. 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 treaded 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.

### **27. Connecting Rods:**

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

### **28. Pistons:**

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

### **29. Piston Rings:**

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

### **30. Piston Pins and Clips:**

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

### **31. 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.

### **32. 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. 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. 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. The countershaft cover may be removed. The addition of a crankcase protector at the countershaft is allowed.

### **33. Transmission/Gearbox:**

All transmission/gearbox ratios are free. The number of gears must remain as homologated. Primary gears must remain as homologated. Quick-shift systems are allowed. Countershaft sprocket, rear wheel sprocket, chain pitch and size can be changed.

### **34. 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.

### **35. Ignition/Engine Control System: (ECU)**

Ignition/engine control system (ECU) may be modified or changed. Additional wiring harnesses may be added. Cutting of the wiring harness is allowed. Spark plugs and plug wires may be replaced.

### **36. Generator, Alternator, Electric Starter:**

Generator may be modified, removed or replaced. The electric starter must operate normally and always be able to start the engine during the practices and race.

## **MCUI SUPERSPORT TECHNICAL REGULATIONS (Continued 3)**

### **37. Exhaust System:**

Exhaust pipes and silencers may be modified or changed. Catalytic converters must be removed. The number of 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 rider's foot or an area in contact with the fairing for protection from heat. The noise limit for Supersport will be 105 dB/A.

### **38. 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/bodywork fasteners may be changed to the quick disconnect type.

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

Any type of lubrication, brake or suspension fluid may be used. Any type of spark plug and plug cap may be used. Any inner tube (if fitted) or inflation valves may be used. 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.

### **40. The following items MAY BE removed:**

Instrument and instrument bracket and associated cables. Emission control items (anti-pollution) in or around the air box (O2 sensors, air injection devices). Tachometer. Speedometer and related wheel spacers. 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.

### **41. The Following Items MUST BE removed:**

Headlamp, rear lamp and turn signal indicators (when not incorporated in the fairing). Openings must be covered by suitable materials. Rear view mirrors, horn, license plate bracket, tool box, helmet hooks and luggage carrier hooks, passenger foot rests, passenger grab rails, safety bars, centre and side stands must be removed (fixed brackets must remain).

### **42. The following items MUST BE altered:**

Motorcycles must be equipped with a functional ignition kill switch or button mounted at least on one side of the handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine. Throttle controls must be self-closing when not held by the hand. All drain plugs must be wired. External oil filter(s) screws and bolts that enter an oil cavity must be safety wired (i.e. on crankcases, oil lines, oil coolers, etc.) All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox. Where breather or overflow pipes are fitted they must discharge via existing outlets. The original closed system must be retained, no direct atmospheric emission is permitted. Oil cooler must not be mounted on or above the rear mudguard.

### **43. 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.

### **44. Replacement and Repairs:**

Where necessary, parts from an older or newer version of the same model maybe used.

### **45. Chain Guards:**

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

### **46. Fuel:**

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

(ICC December 2019)

### **47. Bore and Stroke:**

Bore and Stroke details must be displayed on the motorcycle.

### **48. Race Numbers & Backgrounds:**

As per MCUI rules.

### **ALL MACHINES MUST HAVE**

#### **49. Rear Safety Light**

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
4. the light must be able to be switched on and off.

#### **50. Handlebar Lever Protection**

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

## MCUI SUPERSTOCK TECHNICAL REGULATIONS

(These regulations will apply to the follow Championships – Junior Superstock – Superstock 1000)

These regulations are the MCUI Superstock Regulations. The FIM regulations differ specifically regarding electronics and gearbox. We believe that Superstock regulations, as the name implies, should only allow limited modifications to the homologated machine.

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

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

As the name Superstock implies, the machines used are allowed limited modifications. Most modifications that are allowed are only allowed for safety reasons.

Superstock motorcycles require FIM Homologation (see art 2.9). The MCUI/MCI may homologate machines, which comply or will comply with the principles stated by the FIM.

All machines must comply with all requirements of Road Racing as specified in the MCUI 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 and engine case and tank guards is excluded from this rule.

### 1. Machine Specifications:

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

### 2. Balancing various motorcycle concepts:

In order to equalize the performance of motorcycles with different engine configurations, changes in the minimum weight can be applied according to their respective racing performances. The decision about applying a handicap system to a respective class will be taken by MCUI at any time. These handicaps will follow the system like described in 2.4.4.2 of the Superbike regulation, but will be adapted to the Superstock class.

### 3. Displacement capacities:

The following engine configurations compose the Superstock 1000, Junior Superstock and Junior Twins.

### 4. Superstock 1000:

- 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

### 5. Junior Superstock:

- Over 500cc up to 600cc 4-stroke 4 cylinders maximum
- Over 600cc up to 675cc 4-stroke 3 cylinders maximum
- Over 650cc up to 750cc 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.

### 6. Minimum Weight:

- The FIM decides the minimum weight value for a homologated model as sold to the public by determining its dry weight.
- The dry weight of a homologated motorcycle is defined as the total weight of the empty motorcycle as produced by the manufacturer (after removal of fuel, vehicle number plate, tools and the main stand when fitted but with oil and radiator liquid at the prescribed level). To confirm the dry weight a minimum of three motorcycles are 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 for Superstock 1000.
- minus 10 KG for Junior Superstock
- In the final inspection at the end of the race, the checked machines will be weighed in the condition they were at the end of the race.
- The established weight limit must be met in the condition the machine finished the race. Nothing can be added to the machine including water, oil, fuel or tyres.
- At the time of the event, the weight of the whole machine including the tank and its contents must be not less than the minimum weight, with a tolerance of 1 kg.

During the practice and qualifying sessions every rider may be asked to submit his motorcycle to a weight control.

### 7. Tyres:

All tyres must be treaded. Slick tyres are not permitted.

### 8. Carburetion Instruments / Fuel Injection System:

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

- Carburetion instruments must remain as homologated
- Bell mouths must remain as originally produced by the manufacturer for the homologated machine.
- The injectors must remain standard units as on the homologated motorcycle.

See also 2.7.8.17 Fuel Supply

### 9. 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, tappets, oil seals, shims, cotter valve, spring base and retainers must be as originally produced by the manufacturer for the homologated machine. Only normal maintenance interventions as prescribed by the Manufacturer in the model's Service Manual are authorized.
- Valve springs shims are not allowed.

### 10. Camshaft:

- No modifications are allowed.
- At the technical checks: for direct cam drive systems, the cam lobe lift is measured; for non-direct cam drive systems (i.e. rocker arms) the valve lift is measured.
- The timing of the camshaft is free, however no machining of the camshaft sprocket is authorised.

### 11. Cam Sprockets or Gears: -No dimensional modifications are allowed

### 12. Cylinders: - No modifications are allowed.

### 13. Pistons: - No modifications are allowed (including polishing and lightening).

## **MCUI SUPERSTOCK TECHNICAL REGULATIONS (Continued 1)**

**14. Piston Rings:** - No modifications are allowed.

**15. Piston Pins and Clips:** - No modifications are allowed.

**16. Connecting Rods:** - No modifications are allowed (including polishing and lightening).

**17. Crankshaft:** - No modifications are allowed (including polishing and lightening)

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

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

- The original lateral (side) covers may be modified without modification to the position and dimensions of the covered parts. The modified cover must have at least the same resistance to impact.

- 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.

- 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 MCUI, 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.

**19. Transmission/Gearbox:**

- The material and heat treatment of the highest 2 gear pinions may be changed, but the number of teeth has to be kept as homologated.

- Other modifications or additions to the gearbox or selector mechanism, including quick shift systems are not allowed. Quick shift systems are allowed if on the homologated model.

- Only countershaft sprocket, rear wheel sprocket, chain pitch and size can be changed.

- The sprocket cover can be modified or eliminated.

**20. 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.

**21. 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.

**22. Radiator and oil coolers:**

- Additional radiators and / or oil coolers are not allowed.

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

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

- Radiator fan and wiring may be removed

**23. 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.

**24. Fuel Supply:**

- The fuel injection management computer chip (EPROM) may be changed.

- The use of flash memory (flash RAM) for fuel injection mapping is allowed. An additional control unit to change the fuel mixture may be installed and must be fitted to the original connectors, the unit must not be able to perform any other function. (The original wire-loom must remain unmodified).

- Fuel pump and fuel pressure regulator must remain as homologated.

- Fuel lines may be replaced but the fuel petcock must remain as originally produced by the manufacturer.

- Quick connectors or dry break quick connectors may be used.

- Fuel vent lines may be replaced.

- Fuel filters may be added.

See also 2.7.8.1 Carburetion Instruments/Fuel Injection

**25. Exhaust System:**

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

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

- Catalytic converters must be removed

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

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

- The noise limit for Superstock is 105 dB/A (with a 3 dB/A tolerance after the race).

**26. Ignition/Engine Control System (ECU):**

- Spark plugs may be replaced.

- The central unit (ignition/engine control unit/CDI) must stay as homologated.

**27. Generators:**

- No modifications allowed.

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

## **MCUI SUPERSTOCK TECHNICAL REGULATIONS (Continued 2)**

### **28. Additional Equipment:**

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

### **29. Wiring Harness:**

- The original wire-loom may be modified only as indicated hereafter:
- The unused wire loom elements supplying current to direction indicators, horn, ignition contact and key lock etc. may be unplugged and/or removed (no cutting allowed).
- Cutting of the wiring harness is not allowed but to disconnect connectors is allowed.
- The wiring harness may only be used for the purpose it is homologated for unless stated in these regulations.

### **30. Battery:**

Battery is free but nominal capacity must be equal or higher than the homologated type.

### **31. 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.
- Holes may be drilled on the frame only to fix approved components (i.e. fairing brackets, steering damper mount)
- Nothing can be added by welding or removed by machining from the frame body.
- All motorcycles must display the manufacturers' vehicle identification number on the frame body (chassis number), with the exception of spare frames.
- Engine mounting brackets or plates must remain as originally produced by the manufacturer for the homologated machine.
- Rear sub frame must remain as originally produced by the manufacturer for the homologated machine.
- Additional seat brackets may be added, non-stressed protruding brackets may be removed if they do not affect the safety of the construction or assembly.
- Bolt on accessories to the rear sub-frame may be removed.
- The paint scheme is not restricted but polishing the frame body or the sub frame is not allowed.

### **32. Front Forks:**

- Forks structure (spindle, stanchions, bridge, stem etc.) must remain as originally produced by the manufacturer for the homologated machine.
- Standard original internal parts of the forks may be modified.
- Aftermarket damper kits or valves may be installed.
- No aftermarket or prototype electronic ally-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/MCUI competitions.
- The fork caps can be modified or changed to add spring preload/compression adjusters.
- Dust seal can be modified, changed or removed if the fork is totally oil-sealed.
- Any quality and quantity of oil can be used in the front forks.
- The height and position of the front fork in relation to the fork crowns is free.
- The upper and lower fork clamps (triple clamp, fork bridges) must remain as originally produced by the manufacturer on the homologated machine.
- Steering damper may be added or replaced with an after-market damper.
- The steering damper cannot act as a steering lock limiting device.

### **33. Rear Fork (Swing arm):**

- Every part of the rear fork must remain as originally produced by the manufacturer for the homologated machine (including rear fork pivot bolt and rear axle adjuster).
- Rear wheel stand positioning (support) brackets may be added to the rear fork. Brackets must have rounded edges (with a large radius) viewed from all sides. Fastening screws must be recessed.
- For safety reasons, it is compulsory to use a chain guard fitted in such a way as to prevent trapping between the lower chain run and the final driven sprocket at the rear wheel.

### **34. Rear Suspension Unit:**

- Rear suspension unit (shock absorber) may be modified or replaced, but the original attachments to the frame and rear fork (swing arm) must be used and the rear suspension linkage must remain as originally produced by the manufacturer for the homologated machine.
- Rear suspension unit spring may be changed
- No aftermarket or prototype electronic ally-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/MCUI competitions.

### **35. 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.
- Any inner tube (if fitted) or inflation valves may be used.
- Wheel balance weights may be discarded, changed or added to.

## MCUI SUPERSTOCK TECHNICAL REGULATIONS (Continued 3)

### 36. Brakes:

- Brake discs must remain as originally produced by the manufacturer for the homologated machine. Front discs can be made floating, using original rotors and discs unmodified (washers and pins may be modified or changed)
- Front and rear brake callipers (mount, carrier, hanger) must remain as originally produced by the manufacturer for the homologated machine.
- The rear brake calliper bracket may be fixed on the swing arm, but the bracket (support) 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 using a helicoil.
- The front and rear master cylinder must remain as originally produced by the manufacturers for the homologated machine.
- 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 for quick change types.
- Additional air scoops or ducts are not allowed.

### 37. Footrest/Foot Controls:

- Footrest/foot controls may be relocated but brackets must be mounted to the frame at the original mounting points. Their two original mounting points of fixture (on foot controls and on the shift shaft) must remain as original.
- Footrest may be rigidly mounted or a folding type which must incorporate a device to return them to the normal position.
- The end of the footrest must have an 8mm solid spherical radius.
- Non-folding footrests must have an end (plug) which is permanently fixed, made of plastic, Teflon® or an equivalent type material (minimum radius 8mm). The plug surface must be designed to reach the widest possible area. The Chief Technical Officer has the right to refuse any plug not satisfying this safety aim.

### 38. Handlebars and Hand Controls:

- Handlebars may be replaced (does not include brake master cylinder).
- Handlebars and hand controls may be relocated.
- Throttle controls must be self-closing when not held by the hand.
- Throttle assembly and associated cables may be modified or replaced.
- Clutch and brake lever may be exchanged by an aftermarket copy.
- Switches can be changed but electric starter switch and engine stop switch must be located on the handlebars.

### 39. Fuel Tank:

- Fuel tank filler cap may be altered or replaced from those fitted to the homologated motorcycle, by a "screw-on" type fuel cap (SAFETY).
- All fuel tanks must be completely filled with a fire retardant material (open celled mesh i.e. "Explososafe ®").
- Fuel tank valve petcock must remain as originally produced by the manufacturer for the homologated machine.
- The sides of the fuel tank may be covered by a protective part made of a composite material. These protectors must fit the shape of the tank
- Fuel tanks with a tank breather pipes must be fitted with non-return valves that discharge into a catch tank with a minimum volume of 250cc made of a suitable material.

### 40. Seat:

- The appearance from both front rear and profile must conform to the homologated shape.
- Seat, seat base and associated body work may be replaced with parts of similar appearance as originally produced by the manufacturer for the homologated machine.
- The top portion of the rear bodywork around the seat may be modified to a solo seat.
- The homologated seat locking system (with plates, pins, rubber pads etc.) may be removed
- All exposed edges must be rounded.

### 41. Fairing/Body Work:

- a) Fairing and bodywork may be replaced with exact cosmetic duplicates of the original parts, but must appear to be as originally produced by the manufacturer for the homologated machine, with slight differences due to the racing use (different attachment points, fairing bottom etc.). The materials may be changed. The use of carbon fibre or carbon composite materials is not allowed. The front of the fairing may be modified to accommodate a front number plate in compliance with MCUI General Technical Regulations.
- b) Overall size and dimensions must be the same as the original part.
- c) Windscreens may be replaced with a duplicate of transparent material. The height of the windscreen is free, within a tolerance of +/- 15 mm regarding the vertical height from 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 axle to axle.
- e) The original combination instrument/fairing brackets may be replaced, but the use of titanium and carbon (or similar composite materials) is forbidden. All other fairing brackets may be altered or replaced.
- f) The original air ducts running between the fairing and the air box may be altered or replaced. Carbon Fibre composites and other exotic materials are forbidden, particle grills or wire meshes, originally installed in the openings of the air-ducts, may be taken away.
- g) The lower fairing has to be constructed to hold, in case of engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (minimum 5 litres). The lower edge of the openings in the fairing must be positioned at least 50mm above the bottom of the fairing.
- h) If the lower fairing should incorporate a maximum of two holes of 25mm. These holes must remain closed in all conditions.
- i) Front mudguards may be replaced with cosmetic duplicates of the original parts and may be spaced upwards for increased tyre clearance.
- j) Rear mudguards fixed on the swinging arm can be modified or changed but the original profile must be respected.
- k) All exposed edges must be rounded.
- l) Motorcycles can be equipped with inner ducts to improve the air stream towards the radiator but the appearance of the front, the rear and the profile of the motorcycle must not be changed.

## MCUI SUPERSTOCK TECHNICAL REGULATIONS (Continued 4)

m) Screen Height - there is no FIM homologated height. An average will be determined and the results are all taken from a fixed casting point on the top fork yoke by the ignition mounting point to the top of the top of the screen.

### 42. 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.

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

- A special one way valve can be fitted to the crankcase oil filler opening (to avoid oil spillage)
- Any type of lubrication, brake or suspension fluid may be used.
- Gasket and gasket materials (with the exception of the cylinder base gasket).
- Instrument, instrument bracket(s) and associated cables
- Painted external surface finishes and decals.
- Material for brackets connecting non-original parts to the frame (or engine) cannot be made from titanium or fibre reinforced composites.
- Protective covers for engine, frame, chain, footrests etc. can be made in other material like fibre composite material if these parts do not replace original parts mounted on the homologated model.
- Tachometer – NB this must be working so that noise limits may be measured – (MCUI Only)

### 44. The Following Items May Be Removed:

- Emission control items (anti-pollution) in or around the airbox and engine (O2 sensors, air injection devices)
- Instrument and instrument bracket and associated cables.
- Speedometer.
- Chain guard as long as it is not incorporated in the rear fender.
- Bolt on accessories on a rear sub frame.

### 45. The following items MUST BE removed:

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

### 46. 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.
- All drain plugs must be wired. External oil filter(s) screws and bolts that enter an oil cavity must be safety wired (i.e. on crankcases, oil lines, oil coolers, etc.)
- All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox
- Where breather or overflow pipes are fitted they must discharge via existing outlets. The original closed system must be retained, no direct atmospheric emission is permitted.

### 47. Chain Guards:

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

### 48. Fuel:

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

(ICC December 2019)

### 49. Bore and Stroke:

Bore and Stroke details must be displayed on the motorcycle.

### 50. Race Numbers & Backgrounds:

As per MCUI rules.

## ALL MACHINES MUST HAVE

### 51. Rear Safety Light

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
4. the light must be able to be switched on and off.

### 52. Handlebar Lever Protection

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

## MCUI SUPERBIKE TECHNICAL REGULATIONS

All items not mentioned in the following articles must remain as originally produced by the Manufacturer for the homologated machine. Everything that is not authorised and prescribed in these rules is strictly forbidden. All motorcycles must comply in every respect with all the requirements for 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 motorcycles must (except when otherwise stated) conform in principle to the homologated shape (as originally produced by the manufacturer). The appearance of the exhaust system is excluded from this rule.

### 1. Displacement Capacities:

Over 590cc up to 1010cc 4 Stroke 4 cylinders (701cc-1010cc for Clubman's Senior Championship)

Over 690cc up to 1010cc 4 Stroke 3 cylinders

Over 700cc up to 1200cc 4 Stroke 2 cylinders (1010cc limit for Clubman's Senior Championship)

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

Balancing various motorcycle concepts

### 2. Minimum Weight:

The minimum weights will be: 590cc/1010cc three/four cylinders 162 kg

The minimum weights will be: 700cc/1200cc two cylinders 168 kg

### 3. For up to 1000 cc 2 cylinders:

Carburetion instruments refer to both throttle bodies. Carburation instruments must be used un-modified either as the original homologated carburetion instrument or as the homologated optional carburetion instrument. The only modifications allowed to the homologated Carburation instruments original or optional are jets, needles, throttle valves, fuel injectors and bell mouths. Variable-length fuel injection intake tract devices that function while the engine is operating are prohibited, unless such a system is used on the homologated machine.

### 4. For up to 1010 cc 3 & 4 cylinders and 1200 cc 2 cylinders:

Carburetion instruments refers to throttle bodies. The original homologated carburetion instruments must be used un-modified. The use of optional homologated carburetion instruments is not allowed. The fuel injectors may be replaced, however they must fit without modification to the homologated throttle body. The carburetion instruments intake insulators may be modified. Bell mouths may be altered or replaced. 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.

### 5. 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 carburetion 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 carburetion 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,

A motorcycle may have a non-circular air restrictor, provided that the area of this restrictor is equivalent to the area of a nominal circular restrictor.

### 6. Machine Specifications:

All items not mentioned in the following articles must remain as originally produced by the manufacturer for the homologated machine. The use of titanium in the construction of the front forks, the handlebars and the swing-arm spindle is forbidden.

### 7. 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 by 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 seats 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.

### 8. Front Forks:

Front fork in whole or part may be changed but must be the same type homologated (leading link, telescopic, upside down, etc.). The upper and lower fork clamps (triple clamp, fork bridges) can be changed or modified. Steering damper may be added or replaced with an aftermarket damper. The steering damper cannot act as a steering lock limiting device.

### 9. 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.

### 10. Rear Suspension Unit:

Rear suspension unit can be changed but a similar system must be used (i.e. dual or mono). The rear suspension linkage may be modified or replaced. The original fixing points in the frame (if any) must be used to mount the shock absorber, linkage and rod assembly fulcrum (pivot points).



## **MCUI SUPERBIKE TECHNICAL REGULATIONS (Continued 1)**

### **11. 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. 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 rims smaller than 16 in. in diameter are not allowed. Maximum front wheel rim width : 4.00 in. Maximum rear wheel rim width : 6.25 in.

### **12. 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.

### **13. Tyres:**

No restriction on tyres.

### **14. 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.

### **15. 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.

### **16. Fairing/Bodywork:**

Fairing, mudguards and body work must conform in principle to the homologated shape as originally produced by the manufacturer. Wind screen may be replaced. Original air ducts running between the fairing to the airbox may be altered or replaced from those fitted to the homologated motorcycle. The lower fairing has to be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (min. 5 litres). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing. The lower fairing must incorporate one 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. Minimal changes are allowed in the fairing to permit the use of an elevator (stand) for wheel changes and to add plastic protective cones to the frame or the engine. Holes may be drilled or cut in the fairing or bodywork to allow additional increased intake air to the oil cooler. Holes bigger than 10mm must be covered with a particle grill or fine wire mesh. Grill/mesh must be painted to match the surrounding material. Front mudguard must conform in principle to the homologated shape originally produced by the manufacturer. Holes may be drilled in the front mudguard to allow additional cooling. Holes bigger than 10mm must be covered with metal gauze or fine mesh. Mesh must be painted to match the surrounding material. Rear mudguard may be added or removed. Material of construction of the front mudguard, rear mudguard and fairing may be altered or replaced from those fitted to the homologated motorcycle.

### **17. Fuel Tank:**

Material of construction of the fuel tank may be altered or replaced from those fitted to the homologated motorcycle. 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 Technical Director 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.

### **18. 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 solo seat then must incorporate the rear number plates. The appearance from both front rear and profile must conform in principle to the homologated shape. The seat/rear cowl must allow for proper number display. Holes may be drilled in the seat or rear cowl to allow additional cooling. Holes which are bigger than 10mm 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.

### **19. 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. Oil cooler must not be mounted on or above the rear mudguard. The appearance from the front, rear and profile of the machine must in principle conform to the homologated shape after the addition of additional radiators or oil coolers.

### **20. 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 air box. 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 air box. The breather system (air box 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.

## **MCUI SUPERBIKE TECHNICAL REGULATIONS (Continued 2)**

### **21. Fuel Supply The engine control unit (ECU):**

May be modified or changed. Fuel pump and pressure regulator may be modified or changed. Fuel lines from fuel tank up to the injectors 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 defects. 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.

### **22. 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 unless a complete kit is available through normal commercial channels. For up to 1010 cc 3 & 4 cylinders and 1200 cc 2 cylinders aftermarket or modified cam drive components are allowed, however the cam drive must be in the homologated location. 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.

### **23. 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 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. The valves may be altered or replaced from those fitted to the homologated motorcycle. The valve seats may be altered or replaced from those fitted to the homologated motorcycle. The valve guide may be altered or replaced from those fitted to the homologated motorcycle. Valve springs may be altered or replaced from those fitted to the homologated motorcycle. The valve retainers may be altered or replaced from those fitted to the homologated motorcycle.

- For up to 1010 cc 3 & 4 cylinders and 1200 cc 2 cylinders

Aftermarket 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).

### **24. Camshaft:**

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

### **25. Cam Sprockets or Gears:**

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

### **26. Crankshaft:**

- For up to 1000 cc 2 cylinders

Crankshaft may be altered or replaced from those fitted to the homologated motorcycle. Crankshaft stroke must remain as homologated.

- For up to 1010 cc 3 & 4 cylinders and 1200cc 2 cylinders

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 aftermarket ignition components or sensors is permitted.
- d) Balance shaft may be removed.

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

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

### **28 Connecting Rods:**

- For up to 1000 cc 2 cylinders and up to 1010 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.

### **29. Pistons:**

- For up to 1000cc 2 cylinders, up to 1010 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 piston kit must be used.

### **30. Piston Rings:**

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

## **MCUI SUPERBIKE TECHNICAL REGULATIONS (Continued 3)**

### **31. Piston Pins and Clips:**

Piston pins and clips may be altered or replaced from those fitted to the homologated motorcycle.

### **32. 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.

### **33. 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. 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. 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 must be fixed properly and securely.

### **34. 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. 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.

### **35. Clutch:**

Aftermarket or modified clutches are permitted. Back torque limiter is permitted.

- For up to 1000 cc 2 cylinders

Clutch system (wet or dry type) and method of operation (cable/hydraulic) may be altered or replaced from those fitted to the homologated motorcycle.

- For up to 1010 cc 3 & 4 cylinders and 1200cc 2 cylinders

Clutch system (wet or dry type) and method of operation (cable/hydraulic) must remain as homologated

### **36. Ignition/Engine Control System:**

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

### **37. 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.

### **38. 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 rider's foot or an area in contact with the fairing for protection from heat. The noise limit for Superbikes will be 105 dB/A (with a 3 dB/A tolerance after the race).

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

Any type of lubrication, brake or suspension fluid may be used. Any type of spark plug and plug cap may be used. Any inner tube (if fitted) or inflation valves may be used. Gaskets and gasket material. Wheel balance weights may be discarded, changed or added to. Bearings (ball, roller, taper, plain, etc.) of any type or brand may be used. Fasteners (nuts, bolts, screws, etc.). Electronic devices, electric cables, connectors, battery and switches. External surface finishes and decals.

### **40. The following items MAY BE removed:**

Instrument and instrument bracket and associated cables. Tachometer. Speedometer and associated wheel spacers. Radiator fan and wiring. Chain guard.

### **41. The Following Items MUST BE Removed:**

Headlamp, rear lamp and turn signal indicators (when not incorporated in the fairing). Openings must be covered by suitable materials. Rear view mirrors, horn, license plate bracket, tool box, helmet hooks and luggage carrier hooks, passenger foot rests, passenger grab rails, safety bars, centre and side stands must be removed (fixed brackets must remain).

### **42. The following items MUST BE altered:**

Motorcycles must be equipped with a functional ignition kill switch or button mounted at least on one side of the handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine. Throttle controls must be self-closing when not held by the hand. All drain plugs must be wired. External oil filter(s) screws and bolts that enter an oil cavity must be safety wired (i.e. on crankcases, oil lines, oil coolers, etc.) All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox. Where breather or overflow pipes are fitted they must discharge via existing outlets. The original closed system must be retained, no direct atmospheric emission is permitted. Oil cooler must not be mounted on or above the rear mudguard.

### **43. 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.

### **44. Replacement and Repairs:**

Where necessary, parts from an older or newer version of the same model may be used.

### **45. Chain Guards:**

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

### **46. Fuel:**

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

(ICC December 2019)

### **47. Bore and Stroke:**

Bore and Stroke details must be displayed on the motorcycle.

## **MCUI SUPERBIKE TECHNICAL REGULATIONS (Continued 4)**

### **48. Race Numbers & Backgrounds:**

As per MCUI rules.

### **ALL MACHINES MUST HAVE**

#### **49. Rear Safety Light**

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
4. the light must be able to be switched on and off.

#### **50. Handlebar Lever Protection**

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

**1. ELIGIBLE MACHINES**

4-6 cylinder 4-stroke machines 600cc-1010cc built before 1<sup>st</sup> January 1994 or until equivalent production ceased.

2 cylinder 4-stroke machines 600cc-1200cc built before 1<sup>st</sup> January 1994 or until equivalent production ceased.

2 stroke unlimited cc built before 1<sup>st</sup> January 1994 or until equivalent production ceased.

Plus the following models that were basically unchanged from that period until they ceased production.

Ducati 888

Honda RC30

Honda RS250 until end 1993

Honda CBR900 until end of 1995

Kawasaki ZXR750 up to end 1995

Suzuki GSXR up to end 1995

Yamaha OWO1

Yamaha YZF750R and SP until end of production

Yamaha TZ up to end 1993

GP machines(e.g. YZR500, RG500, TZ750) up to end 1993

'Specials' from in period accepted on a case by case specific basis, to be approved by technical committee.

Year eligibility to be assessed annually, by appointed committee.

All motorcycles must comply in every respect with all requirements for Road Racing as specified in the MCUI regulations.

**2. ENGINE**

Engine modification, including increase in capacity, is free within the general regulations but excludes the use of later engines and crank cases than the dates for the allowable machines.

**3. MINIMUM WEIGHTS**

Minimum weights are free

**4. NUMBER PLATE COLOURS**

Front and side number colours are: - White Backgrounds with Black Numbers. As per M.C.U.I Regulations

**5. CARBURATION INSTRUMENTS**

Carburation instruments are free within the constraints of equipment freely available within the up to 1994 period.

**6. FUEL**

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

**7. FRAME BODY AND REAR SUBFRAME**

For all machines, the engine and frame must be from period and regulation eligible machines. Fairings and seat units should be visually appropriate for the period, the engine and frame must be from period and regulation eligible machines.

**8. FRONT FORKS**

Front fork as available to end of 1999. A steering damper may be added but may not act as a steering lock device.

**9. REAR FORK (Swing Arm)**

The rear fork unit may be modified within the limits of period availability for the model.

**10. REAR SUSPENSION UNITS**

Rear suspension units, including all linkages and mounting points, are free.

**11. WHEELS**

Wheels are free, provided they remain within the minimum size range for the machine capacity as listed in the current M.C.U.I Regulations

**12. BRAKES**

Brakes as available up to 1<sup>st</sup> January 2001, but no carbon or ceramic units or radial callipers are permitted.

**13. TYRES**

Tyres may be treaded or slick. The use of tyre warmers is allowed.

**14. WIRING HARNESS**

The wiring harness is free.

**15. IGNITION / ENGINE CONTROL SYSTEM (CDI/IGNITOR)**

In principal the ignition control system is free, but may not contain any traction control or launch control functions not associated with the machine periods as listed above. Power Commanders and the like are permitted for altering fuelling etc.

**16. OTHER NON-PERIOD MODIFICATIONS**

There are numerous non-period modifications made to certain types of racing machinery, some of which are safety related and others which are performance related. In principal any safety related modification will be permitted, whereas performance related modifications not listed above will not be permitted. This does not include tuning of barrels, porting, polishing or changing any component in line with what was considered acceptable 'in period'.

Data acquisition sensors other than for road speed are not permitted. Any disputes in this area will be adjudicated upon by the M.C.U.I Technical Stewards.

**17. REAR SAFETY LIGHT**

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
4. the light must be able to be switched on and off.

**18. HANDLEBAR LEVER PROTECTION**

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

**19. ENGINE PROTECTION.**

All lateral covers/engine cases containing oil on, 4 stroke machines, and which could come in contact with the ground during a crash, must be protected by a second cover made from composite materials, aluminum or steel plates and/or bars are also permitted.

All these devices must be designed to be resistant against sudden shocks and must be fixed properly and securely.

Where secondary covers are not commercially available, Engine case guards in the form of strengthened engine side covers may be installed.

The countershaft cover may be removed. The addition of a crankcase protector at the countershaft is allowed.

**THE FOLLOWING ITEMS MUST BE REMOVED FROM ALL MACHINES:**

Headlamp, rear lamp and turn signal indicators.

Rear view mirrors.

Horn.

License plate bracket.

Tool box.

Helmet hooks and luggage carrier hooks.

Passenger foot rests.

Passenger grab rails.

Safety bars, centre and side stands (fixed frame brackets may remain)

(ICC December 2019)

## **MCUI TECHNICAL REGULATIONS FORMULA 1 ERA SUPERBIKES 2013**

### **1. ELIGIBLE MACHINES**

In principle, all 4-stroke machines of the following ages are eligible:-

4 cylinder 750cc machines built before 1st January 2000

3 cylinder 950cc machines built before 1st January 2000

2 cylinder 1010cc machines built before 1st January 2000

Plus the following models that were basically unchanged from that period until they ceased production:-

Kawasaki ZX7R and RR up to 2003

Aprilia RSV Mille & Mille R up to 2003 (not later model RSV 1000 with central air intake)

Suzuki TL1000S & TL1000R up to 2003

Triumph T595 up to 2001

MV Augusta F4 750 Oro & S models to 2002

Honda RC51 (SP1 & SP2)

Ducati 916 – 996 (not 998 models)

Yamaha OWO1 (to 861cc)

Yamaha YZF 750 (all models)

Yamaha R7 (750cc only no conversions)

“Specials” from in period accepted on a case by case specific basis.

All motorcycles must comply in every respect with all requirements for Road Racing as specified in the M.C.U.I regulations.

### **2. DISPLACEMENT CAPACITY**

The displacement must remain within 15cc of the original design for the engine concerned allowing for rebore repairs. Four cylinder machines built before 1st January 1995 may be over bored to a maximum of 861cc and the smaller capacity twins & triples from the same period may be updated with the later parts to bring the capacity up to the class limits. Machines built after 1st January 1995 may not exceed the cc limits as listed above for the relevant year of manufacture.

### **3. MINIMUM WEIGHTS**

The minimum machine weight at post race control must not be less than:-

Up to 750cc – 160kg (4 cylinders)

Up to 750cc – 145kg (2 & 3 cylinder)

Up to 950cc – 162kg (2 & 3 cylinder)

Up to 1010cc – 165kg (2 cylinders)

### **4. NUMBER PLATE COLOURS**

Front and side number colours are: - White Backgrounds with Black Numbers. As per M.C.U.I Regulations

### **5. CARBURATION INSTRUMENTS**

Carburation instruments are free within the constraints of equipment freely available within the up to 2003 period.

### **6. FUEL**

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

(ICC December 2019)

### **7. FRAME BODY AND REAR SUBFRAME**

For all machines, the engine and frame must be from the same model unless an older engine is married to a frame made within the period restraints listed above. (TT Formula 1 machines excepted)

### **8. FRONT FORKS**

Front fork fitment is free. A steering damper may be added but may not act as a steering lock device.

### **9. REAR FORK (Swing Arm)**

The rear fork unit is free.

### **10. REAR SUSPENSION UNITS**

Rear suspension units, including all linkages and mounting points, are free.

### **11. WHEELS**

Wheels are free, provided they remain within the minimum size range for the machine capacity as listed in the current M.C.U.I Regulations

### **12. BRAKES**

Brakes are free, but no carbon or ceramic units are permitted.

### **13. TYRES**

No Slick Tyres . The use of tyre warmers is allowed.

### **14. WIRING HARNESS**

The wiring harness is free.

### **15. IGNITION / ENGINE CONTROL SYSTEM (CDI/IGNITOR)**

In principal the ignition control system is free, but may not contain any traction control or launch control functions not associated with the machine periods as listed above. Power Commanders and the like are permitted for altering fuelling etc.

## **MCUI TECHNICAL REGULATIONS FORMULA 1 ERA SUPERBIKES 2013(Continued)**

### **16. OTHER NON-PERIOD MODIFICATIONS**

There are numerous non-period modifications made to certain types of racing machinery, some of which are safety related and others which are performance related. In principal any safety related modification will be permitted, whereas performance related modifications not listed above will not be permitted. This does not include tuning of barrels, porting, polishing or changing any component in line with what was considered acceptable 'in period'.

Data acquisition sensors other than for road speed are not permitted. Any disputes in this area will be adjudicated upon by the M.C.U.I Technical Stewards.

### **ALL MACHINES MUST HAVE**

#### **17. REAR SAFETY LIGHT**

All motorcycles must have a functioning red light mounted at the rear of the seat to be used during wet practice/races or in low visibility conditions as declared by the Clerk of the Course.

1. the lighting direction must be parallel to the centre line of the motorcycle (running direction) and it must be clearly visible from the rear, at least 15 degrees to both the left and right sides of the centre line of the motorcycle.
2. it must be safely mounted on the very end of seat/rear bodywork and approximately on the centre line of the motorcycle.
3. the power output/luminosity must be equivalent to approximately 10-15W (incandescent) or 3-5W (led).
4. the light must be able to be switched on and off.

#### **18. HANDLEBAR LEVER PROTECTION**

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

#### **19. ENGINE PROTECTION.**

All lateral covers/engine cases containing oil on, 4 stroke machines, and which could come in contact with the ground during a crash, must be protected by a second cover made from composite materials, aluminum or steel plates and/or bars are also permitted.

All these devices must be designed to be resistant against sudden shocks and must be fixed properly and securely.

Where secondary covers are not commercially available, Engine case guards in the form of strengthened engine side covers may be installed.

The countershaft cover may be removed. The addition of a crankcase protector at the countershaft is allowed.

### **THE FOLLOWING ITEMS MUST BE REMOVED FROM ALL MACHINES:**

Headlamp, rear lamp and turn signal indicators.

Rear view mirrors.

Horn.

License plate bracket.

Tool box.

Helmet hooks and luggage carrier hooks.

Passenger foot rests.

Passenger grab rails.

Safety bars, centre and side stands (fixed frame brackets may remain)



**OPEN 600 AND FORMULA II SIDECAR****SPECIFICATIONS:**

Open 600 and Formula II sidecars must comply with the general Sidecar unless changed by the following specifications:

Introduction. The object of this specification is to make use of cheaper, more readily available engine units of theoretically similar power outputs and of widely different configurations and hopefully to provide less expensive racing of a more traditional kind to the benefit of competitors, constructors and spectators. Hub centre steering, remote steering linkages and the use of articulated joints in the steering mechanism are not allowed.

**1. ENGINE TYPES**

The only permitted engines for the Open 600 sidecar class are:

Up to 350cc 2 stroke, twin cylinder

501-600cc, 4 stroke, 4cylinder

Production based Rotary engines are not permitted

Over-boring is not permitted.

Induction systems.

a. The only permitted engines for this class are:

501-600cc, 4 stroke, 4 cylinder,

Production based. 501-600cc, 4 stroke:

Any carburettor is permitted.

501-600cc four-stroke Fuel injection engines:

Fuel injection systems are permitted using only the throttle-bodies as homologated for the engine concerned.

The injectors must be standard units as on the homologated engine.

Bell mouths, intake tract devices (Velocity stacks, air funnels) may be modified or replaced.

Variable length intake devices (Velocity stacks, air funnels) that function while the engine is operating are not allowed, unless such a system is used on homologated machine/engine. Butterfly cannot be changed or modified. Where fitted a secondary butterfly or slide may be locked in the fully open position. Any fuel pump may be used but fuel pressure must remain as homologated for that engine.

Homologated fuel pressure regulators must remain unmodified. The fuel ignition ECU and Ignition Control Unit may be changed. b.

Cylinder heads to Supersport specification allowed c. Everything below the head gasket is free. d. Fuel injection instruments/fuel injectors must remain as homologated. e. These regulations should remain unchanged for at least 3 years 2017 onwards.

**2 GENERAL CONSTRUCTION**

The Sidecar may be placed either side of the motorcycle. Hinged sidecars and steerable sidecar wheels are forbidden. Neither the rider nor passenger may be attached to the machine. Remote steering linkages and the use of articulated joints in the steering mechanism are not allowed. By definition an articulated joint is one allowing movement in more than one plane.

The three road wheels may be disposed as to give two or three tracks. If three tracks are made then the centres of the tracks of the motorcycle shall not be more than 75mm apart.

A passenger must be carried and must always be protected from the road wheels and both primary and final drives either by mudguard or some other means.

The main frame (See Figure 1A) must consist of a minimum, of a steering head, a frame to accommodate the engine, and a main spar to the sidecar wheel, which will be made from good quality steel tube. The tubing used for the construction of the frame may be of a circular or non-circular section. If circular, the outside diameter shall not exceed 101.6mm. If non-circular, the maximum cross section shall not exceed 101.6mm measured at right angles to any flat face.

These three components must be permanently fixed by welding or brazing.

The rear swinging arm outer pivot housings may be detachable from the main frame, the pivot housings must be made from either steel or a suitable solid aluminium alloy billet. The finished article if made from aluminium alloy must be hard anodised. The use of castings for the outer pivot housings are forbidden.

The sidecar wheel upright or flange plate at the end of the main sidecar wheel spar may be detachable, the upright flange plate must be made from either steel or a suitable solid aluminium alloy billet. The finished article if made from aluminium alloy must be hard anodised, any supporting tie rods to the upright or flange plate must be made of steel. The use of castings for the sidecar wheel upright or flange plate are forbidden.

The sidecar wheel stub axle housing may be detachable from the sidecar wheel upright/flange plate, the housing must be made from either steel or a suitable solid aluminium alloy billet. The finished article if made from aluminium alloy must be hard anodised. The use of castings for the sidecar wheel stub axle housing are forbidden.

Reinforcement of the steering head is allowed. The steering head may be fully boxed in to a maximum of 305mm, measured from any point between the top and the bottom of the steering head spindle centre line. Should any lightening or inspection holes be added to the "Fully Boxed In" section, they will be deemed as still "Fully Boxed In" and not open.

The front forks should be either a leading/trailing fork, or links with the wheel equally supported on each side. The construction of the front forks and yokes must be made of good quality steel and must be either welded or brazed during construction. The lower loop must be made of good quality steel. Minimum suspension travel to be 20mm.

The rear swinging arm must be made of good quality steel, single sided swinging arms are allowed, and must have minimum of 20mm of travel in a single plane. The rear swinging arm pivot spindle must be 90 degrees to the fore and aft centre line of the rear wheel. The swinging arm must either be welded or brazed during construction, the dimensions for the swinging arm are free. Wishbone type swinging arms fitted to monocoque chassis's are forbidden. The use of composite construction is forbidden with the exception of the sidecar platform, i.e. aluminium or carbon fibre skinned honeycomb.

The use of titanium in the construction of the frame, front forks, handlebars, swinging arm and wheel spindles is forbidden.

For wheel spindles, the use of light alloys is also forbidden. Under trays must be detachable.

Monocoque construction is forbidden.

**OPEN 600 AND FORMULA II SIDECAR****3 ENGINE POSITION**

The engine must be positioned in such a way that the centre line of the engine (by definition a position midway between centre lines of outermost cylinders) shall not exceed 160mm beyond the centre line of the rear wheel of the motorcycle.

The engine must be positioned behind the steering head and in front of the driver.

The drive must be transmitted to the road through the rear wheel of the motorcycle. An engine positioned behind the rider and in front of the rear wheel is forbidden.

**4 DIMENSIONS**

Weight (Minimum) 136.5kg. without fuel. The addition of ballast to reach this weight is forbidden.

Width (Overall Maximum) 1575mm.

Wheelbase (Maximum) 1651mm.

Track 800mm minimum, 1105mm maximum. The distance is measured from the centre of the track left by the rear wheel to the centre of the track left by the sidecar wheel.

Height (Overall Maximum) 800mm.

Ground clearance. The ground clearance measured over the entire length and width of the vehicle race ready, fully loaded with rider, passenger and fuel must be not less than 65mm with the handlebars on in a straight position. No device is permitted to reduce the 65mm ground clearance during the course of the event.

Note: The imperial measurements are no longer used so the Metric figures have been rounded up to nearest mm the differences were 0.1mm and 0.2mm.

**5 STREAMLINING AND BODYWORK**

The streamlining must be easily detachable for Technical Inspection. Aerofoils or spoilers are not permitted on streamlining.

The forward extremity of the streamlining shall not be more than 400mm in front of the line taken from a vertical tangent to the front tyre.

The extreme rear edge of the streamlining must not be more than 400mm to the rear of the line taken from a vertical tangent to the rear tyre.

The provision of coachwork or streamlining is optional, but the vehicle must have accommodation for a passenger and the coachwork or streamlining shall not impede complete freedom of movement by the rider or passenger at all times.

Whatever the position of the handlebars, there must be a space of at least 20mm between the streamlining and the ends of the handlebars or any other parts of the steering mechanism or front wheel.

A solid and effective protection must be fitted between the rider and the engine, this protection must prevent direct contact between the riders body or clothing and escaping flames or leaking fuel or oil.

The fairing must be mounted in such a way as to ensure the integrity of the whole installation in the event of failure of any individual mounting.

**6 PASSENGER PLATFORM**

Minimum dimensions 800mm by 300mm measured 150mm above the platform. The orientation is free.

RIDER The rider in the normal riding position must be completely visible, with the exception of the arms, legs, and feet from above.

PASSENGER The passenger must be able to lean out to either side of the sidecar, for this purpose the vehicle must be fitted with suitable hand-holds for the passenger to hold on to when leaning out. The hand-holds must be of the closed loop type, a single projection hand-hold is not permitted.

**7 AIR INTAKES**

Cooling air intakes must be so constructed that there is NO forward projection/protrusion to catch or foul in the event of accident.

**8 OIL AND COOLANT CONTAINMENT**

In the area directly below the engine, the oil containment tray must be constructed to hold, in case of an engine break down, at least half of the total oil and engine coolant capacity used in the engine (minimum 5 litres).

The surrounding edges of the tray must be at least 50mm high measured vertically from the bottom of the tray.

The frontal edge of the oil tray wall must be extended upwards to arrive just below (within 20mm) of the exhaust ports of the engine.

Holes for the engine mounts (hangers) must be sealed.

From a vertical view, the engine must be located completely inside the oil tray platform.

The rear wheel must be protected from any possible oil spray. To make this protection, the engine and rear wheel compartment must be separated. This separation must be created by installing a solid divider (wall) running from the top of the inside of the bodywork to the bottom of the oil tray and to the full width of the rear tyre. This divider (wall) must overlap the rear edge of the oil tray down to the bottom.

All machines must use this tray.

All sidecars shall attach oil absorbent materials of no less a quality than 3M Product number T156 or CEP Sorbents product number CEP-EP100.

This material shall be securely fixed to the following areas of the sidecar.

The entire oil-tray, both the bottom and the inside walls of the same. The volume of material used in this area, according to the manufacturers specifications, shall absorb not less than 3 litres of oil.

Any bodywork directly covering the engine.

In the event that oil is absorbed by the material, it must be replaced before the next track session. The material must be attached in such a way that it should be easily replaced, yet must not become dislodged whilst on the track, and its effectiveness is not inhibited, i.e. if an adhesive is used it must not clog the material, causing it to lose its absorbent properties.

All absorbent material shall be non-flammable by design.

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

Oil coolers must not be mounted on or above the bodywork of the sidecar.

The location of the oil tank and the oil cooler should be placed in a location where it is least likely to be damaged on an accident.

**OPEN 600 AND FORMULA II SIDECAR**

For 2018 onwards all oil lines must be professionally manufactured and certified.  
Sump plug, oil filters, Ignition pickup covers and Clutch centre covers should all be lockwired or lockplated.  
The gear lever should exit via a rubber boot or flexible seals if the gear lever exits outside the retaining area.  
The chain slot must have a flexible seal fitted.

**9 AIRBOX**

An airbox must be used with all four-stroke engines.  
The airbox intake sizes are restricted as follows:  
If 1 intake is used a maximum of 103mm Internal Diameter is permitted.  
If 2 intakes are used a maximum of 73mm Internal Diameter per intake is permitted or equivalent area if none circular section(s) are used measured within 50mm of the point of entry into the airbox.  
The airbox must completely close around the induction bell-mouths.  
The carburettors or throttle-bodies may be entirely within the airbox.  
The engine must have a closed breather system.  
The engine breather must be connected and discharge in the airbox only (by a sealed catch tank if required)  
The airbox must cover and collect fluids discharged from the bell-mouths.  
The airbox must be constructed in such a way as to prevent any oil discharged in the airbox from spilling on the track.  
This oil containment must hold a minimum of 1000cc of oil.  
The airbox must be sealed to prevent spillage of oil or fuel.

**10 OIL CATCH TANKS**

Four-stroke motorcycles must have a closed breather system. The oil breather line must be connected and discharge into the airbox only. (by a sealed catch tank if required).

**11 WHEELS**

The minimum diameter of an inflated tyre must be 400mm. All wheels must be of metal construction, any modification to the rim or the spokes of the original cast composite wheel as supplied by the manufacturer is prohibited.

**12 STEERING**

Steering of the front wheel must be accomplished by non-adjustable handlebars securely fixed to the forks or yokes of the motorcycle. They must be secured to steering members turning the front wheel and its supports directly with no intermediate push or pull rods. Handlebars and all steering bearings must be located on the sprung portion of the front suspension.  
Any form of remote steering is forbidden.  
Handlebar width 450mm minimum.  
Steering lock angle each side of straight ahead position to be 20 degrees minimum, measured at the headstock.  
Whatever the position of the handlebars the front wheel must never touch the streamlining.  
Handlebar clamps must be carefully radiused and engineered so as to avoid fracture points in the bar.  
Any butt welded handle bars must be suitably gusseted.

**13 THROTTLE CONTROLS**

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

**14 CONTROL LEVERS**

All handlebar levers (clutch, brake etc.) must be ball ended. The ball diameter must be at least 19mm permanently fixed and forming an integral part of the lever.

**15 BRAKES**

All three wheels must be braked. The brake system must consist of:  
One main system with at least two circuits operating separately, one of the circuits must operate on at least two of the three wheels.  
If one circuit fails the other must work efficiently.  
An emergency system operated by a simple circuit operating on either the front or rear wheel of the motorcycle is compulsory.  
Only ferrous discs allowed.

**16 TYRES**

For all meetings the use of slick tyres is permitted. The wheel rim shall be at least 254mm in diameter and 64mm in width. The diameter of the tyre must be at least 400mm and the width 100mm, maximum front tyre width 220mm.  
The surface of a slick tyre must contain two or more hollows at 180 degree intervals or less, indicating the limit of wear on the centre and shoulder areas of the tyre. When at least two of these indicator hollows become worn on different parts of the periphery, the tyre must no longer be used.

**17 MUDGUARDS AND WHEEL PROTECTION**

The rear driving wheel must be covered down to the level of the sidecar platform on the sidecar platform side of the wheel and to the centre of the driving wheel on the outermost side of the wheel.  
The rear facing section of the rear seat must cover the rear driving wheel down to the level of the rear wheel rim.  
The sidecar wheel must be enclosed from the sidecar platform and level with the sidecar platform on the outside and around the periphery. Provision for the checking of the sidecar wheel tyre pressure is allowed.

**18 EXHAUST PIPES**

The exhaust system must fulfil all the requirements concerning noise control. Exhaust fumes must be discharged in a manner so as to not raise dust, foul the tyres or brakes or inconvenience a passenger or any other driver. The furthest extremity of the exhaust pipe must not exceed a vertical line drawn at a tangent to the rear edge of the sidecar platform.

**OPEN 600 AND FORMULA II SIDECAR**

On the side opposite a sidecar the exhaust pipes must not extend beyond the streamlining. On the other side the exhaust pipes must not extend beyond the width of the sidecar.

Exhaust pipes must be fitted/positioned so that it is impossible for them to become entangled with another machine.

**19 FUEL TANK**

Fuel tanks must be sufficiently independently protected from the ground. A non-return valve must be fitted to the petrol tank breather pipe, this pipe must discharge into a suitable catch tank, minimum capacity 500ml.

The fuel filler cap must be fitted in such a way that it does not protrude from the fairing and cannot be torn off in an accident.

**20 BATTERY**

The battery must be covered in such a way that neither the driver nor the passenger can come into contact with the battery or its contents.

**21 CUT OUT DEVICE**

An ignition cut-out must be fitted to operate when the driver leaves the machine. This cut-out system must interrupt the primary circuit and must be wired for both the supply and return current. The cut-out must be placed as near to the centre of the handlebar as possible and must be operated by a non-elastic string of adequate length and thickness and strapped to the driver's body. A spiral cable (similar to that of a telephone wire) of maximum 1m extended length is permitted.

Any electric fuel feed pump must be wired in such a way as to cut out if the engine cut-out device is operated.

**22 RED WARNING LIGHT**

Sidecars must be equipped for all the duration of the event with a functional rear-facing red anti-fog lamp, measuring a minimum of 30 sq.cm and producing a minimum of 1500 MCD continuous light.

Pulsating lights are not permitted.

The light must be installed at least 100mm off the ground, located in the area between the back wheel and the sidecar platform.

The light must be mounted on a part of the suspended body, (not on any unsuspended parts) and ensure no obstruction from the fairing and/or the passenger.

Red lights must be switched on when a "Wet Race" is declared.

**23 TRACTION CONTROL**

Any electronic traction control system is forbidden. Wheel speed sensors are not permitted.

**24 REAR VIEW MIRROR**

External rear view mirrors having suitable dimensions and mountings may be used for closed public road races only.

(ICC December 2019)

**FORMULA 1 SIDECAR****SPECIFICATIONS**

Formula 1 Sidecars must comply with the general Sidecar specification unless changed by the following specifications:

**25 ENGINE SPECIFICATIONS**

1. Two Stroke Engines Maximum 750cc. Prototype engine design is allowed. Maximum of 4 cylinders.
2. Four Stroke Engines Motorcycles of mass production only Maximum 1000cc. Maximum 4 cylinders.
- 2A. 750cc 4 stroke 4 cylinder engines fitted within F2 specification chassis will be permitted to compete within F1 class.
3. Balancing and Lightening are permitted.
4. Con rods may be changed, however the use of carbon or titanium is not allowed in their construction. The use of exotic materials is not allowed, (i.e. ceramics, metal matrix/aluminium beryllium) unless as fitted by manufacturer to homologated engine.
5. Piston rings and pins may be changed.
6. The original cylinder head may be modified, however the number of ports and valves must remain as originally produced by the manufacturer.
7. Camshafts may be altered or replaced. Method of cam drive must remain as originally produced by the manufacturer.
8. The Ignition/Injection Engine Control system is free.
9. Maximum of 6 speed transmission.
10. The clutch may be modified but must remain either wet or dry types as originally produced.
11. The generator and/or electric starter may be removed.
12. Carburettors may be altered or replaced.
13. The use of exotic materials is not allowed, (i.e. ceramics, metal matrix/aluminium beryllium). Unless as fitted by manufacturer to homologated engine.
14. The oil lubrication system is free.

**26 ENGINE**

Must be positioned in front of the rear wheel in such a way that the centre line of the engine shall not extend more than 160mm beyond the centre line of the rear wheel track of the motorcycle. By definition the centre line of the engine is the position midway between the centre lines of the outmost cylinders for transverse engines, or the crankshaft for in-line engines.

**27 DIMENSIONS**

Overall width Maximum 1700mm (67 ins) (including exhaust system)

Overall height Maximum 800mm (31.5) (with exception of airbox max height 950mm (37.5 ins))

Overall length Maximum 3300mm (130 ins)

Overall wheelbase Maximum 2300mm (90.5)

**28 STEERING**

The motorcycle must be steered by a handlebar. The handlebar extremities must not be lower than the front wheel spindle (nor more than 500mm (19.7 ins) behind the front wheel spindle in the straightahead position) (the steering axis must not be offset more than 75mm (2.9 ins) from the front wheel centre line).

Any butt welded handle bars must be suitably gusseted.

**29 SUSPENSION** The suspension of the front wheel must be designed so that under suspension action and in the straight ahead position, the wheel shall only move vertically and in a single plane relative to the motorcycle. The plane must be on the driving direction. This must occur without changes to the camber or the tracking. The vertical travel of the front and rear wheel spindles under suspension action must be at least 20mm (0.75 ins). The use of active suspensions is forbidden.

**30 WHEEL PROTECTION** The rear wheel and sidecar wheel must be enclosed down to the level of the sidecar platform on the inside. The sidecar wheel on the outside must be enclosed down to the height of its axle centre-line. The rear wheel must be enclosed down to the top of the rim flange on the outside.

**31 EXHAUST** The exhaust pipe must not extend beyond the width of the sidecar and the furthest extremity of the exhaust pipe must not exceed the vertical line drawn at a tangent to the rear edge of the sidecar bodywork. Exhaust pipes fitted to the side of the sidecar must be covered so that it is impossible for the passenger to be burnt. The ends of the exhaust pipes fitted to the sidecar must be so positioned or protected that it is impossible for them to become entangled with another machine.

**32 NOISE**

Max noise limit 105db

**33 FUEL**

Fuel as per Technical Fuel regulations as per Chapter 12 within MCUI GCR's.

**34 NUMBERS AND BACKGROUNDS**

As per MCUI rules.

(ICC December 2019)

# MCUI Technical Regulations Handbook



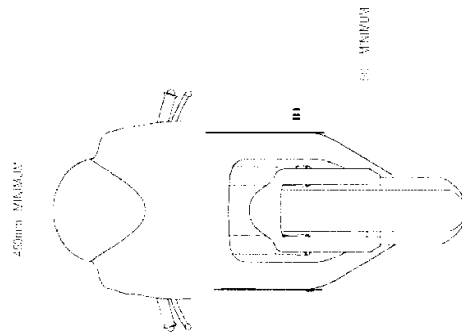
## Technical Information

## MCUI GUIDE TO SCRUTINEERING

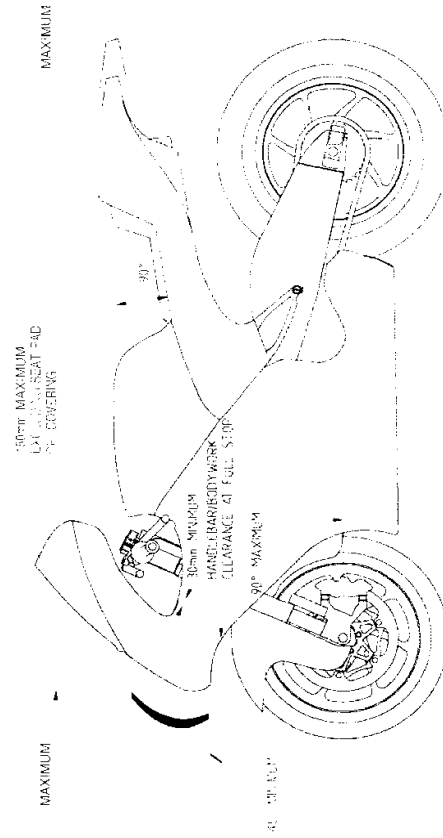
Please note that this is a guide only and the list is not exhaustive.

1. Handle Bars, Grips, Bar Ends, Clearance.
2. Throttle.
3. Sump Plug. (Must be lock wired)
4. Levers, Brake and Clutch.
5. Front Wheel, Bearings, Nuts.
6. Front Tyre, Valve Cap.
7. Steering Head Stock, Fork Clamp Bolts.
8. Steering Stops.
9. Steering Damper.
10. Front Forks, Oil Seals.
11. Fairing Brackets.
12. Screen Edges.
13. Fuel Tank, Fuel Cap.
14. Seat
15. Front Mud Guard.
16. Front Sprocket.
17. Rear Wheel, Bearings, Nuts, Sprockets
18. Rear Tyre, Valve Cap.
19. Foot Pegs.
20. Rear Suspension.
21. Chain, Guard, Links.
22. Exhaust, End Can.
23. Oil Filler Cap. (Must be lock wired)
24. Oil Filter. (Must be lock wired)
25. Belly Pan, Drainage Holes. (Must be sealed in dry weather)
26. Swing Arm
27. Frame.
28. Start Button, Kill Switch.
29. Rear Brake, Pads, Callipers, Bolts, Pins, Discs, Pipes, Cylinders
30. Front Brake, Pads, Callipers, Bolts, Pins, Discs, Pipes, Cylinders.
31. Engine Cases.

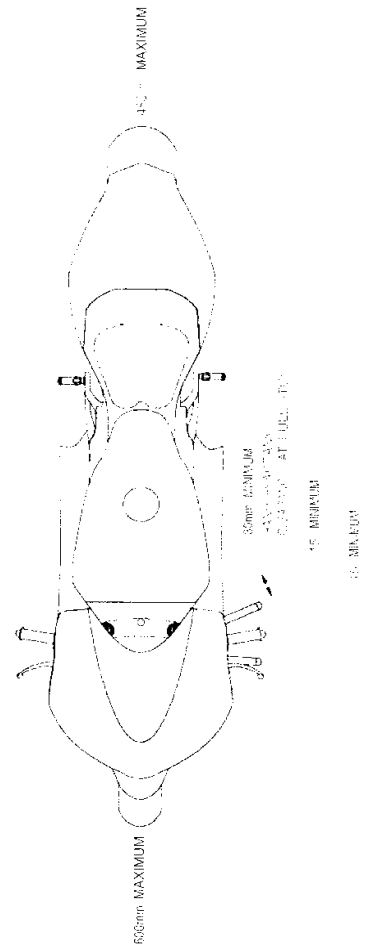
**DIAGRAM 1**



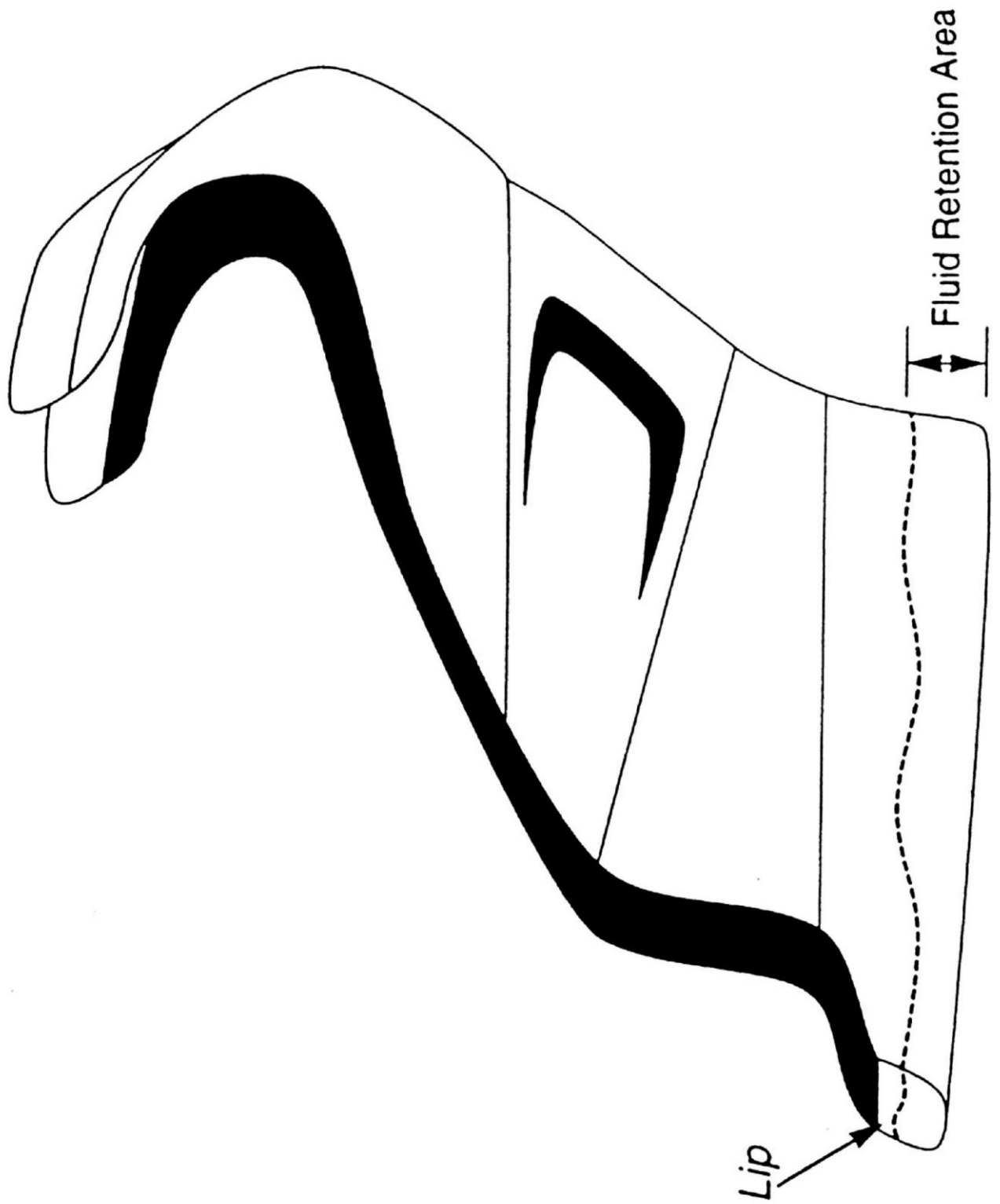
**DIAGRAM 2**



**DIAGRAM 3**





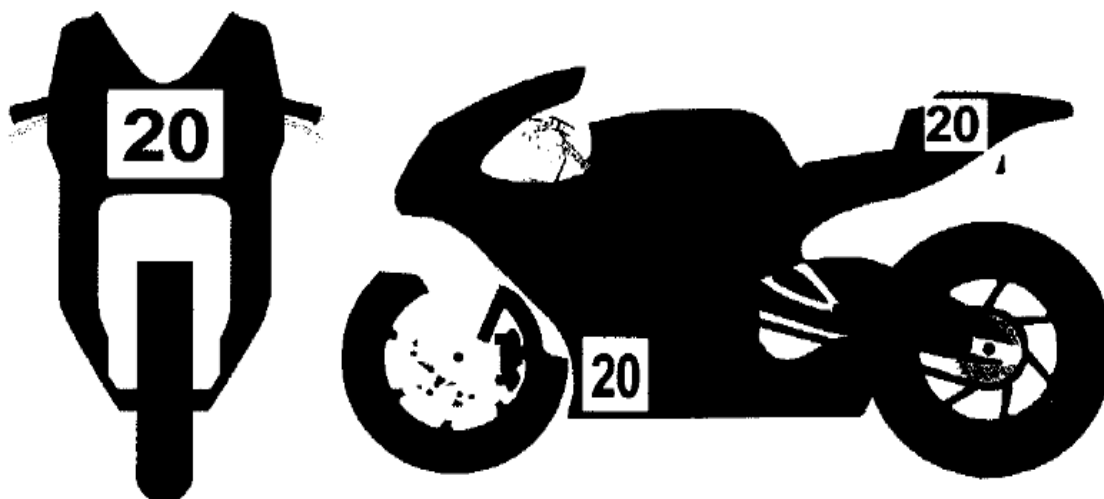


## MCUI NUMBER PLATES AND NUMBERS

1. Number plates must be rectangular or elliptical in shape with minimum measurements of 285mm x 235mm. In place of separate plates a space of equivalent size in matt colours can be painted or fixed on the bodywork or streamlining.  
Plates which are just a larger outline of the number are not permitted. In the case of bodywork of a similar colour to the specified number plate background colour, there must be a minimum 5mm black line all around the perimeter of the number plate.
2. The allocated number and plate must be affixed to the front and the two sides of the motorcycle so that both front and side numbers are clearly visible to the public and officials **ON BOTH SIDES OF THE TRACK** as follows:

**FRONT NUMBERS** must be fitted directly on the front of the fairing and not to one side. All fairings may be modified to accommodate this. Where the design of the fairing makes this **IMPOSSIBLE** the numbers must be fixed on **BOTH** sides of the front fairing.

**SIDE NUMBERS** must be fitted to the middle or lower part of the side fairing. Side numbers can also be fitted to the seat fairing subject to being clearly visible to the public and officials.



3. The figures must be clearly legible and like the background must be in matt colours to avoid reflection from sunlight. The minimum dimensions of the numbers being: Figures to be of the form shown in the diagram at (7) and to be solid in colour - shading or outlining in a different colour is not permitted. 4. Advertising must not appear on the number plate and a space of at least 50mm must be left free around all number plates in which no advertising may appear. No advertising may appear within in the figures of the number. All other numbers or markings on a motorcycle liable to cause confusion with the number must be removed.

Height of figure:	140mm (front number)	120mm (side number)
Width of figure:	80mm (front number)	60mm (side number)
Width of stroke:	25mm	
Space between two figures:	15mm	

(ICC December 2018)

4. Advertising must not appear on the number plate and a space of at least 50mm must be left free around all number plates in which no advertising may appear. No advertising may appear within in the figures of the number. All other numbers or markings on a motorcycle liable to cause confusion with the number must be removed.

5. The following matt colours, with corresponding RAL codes shall be used.

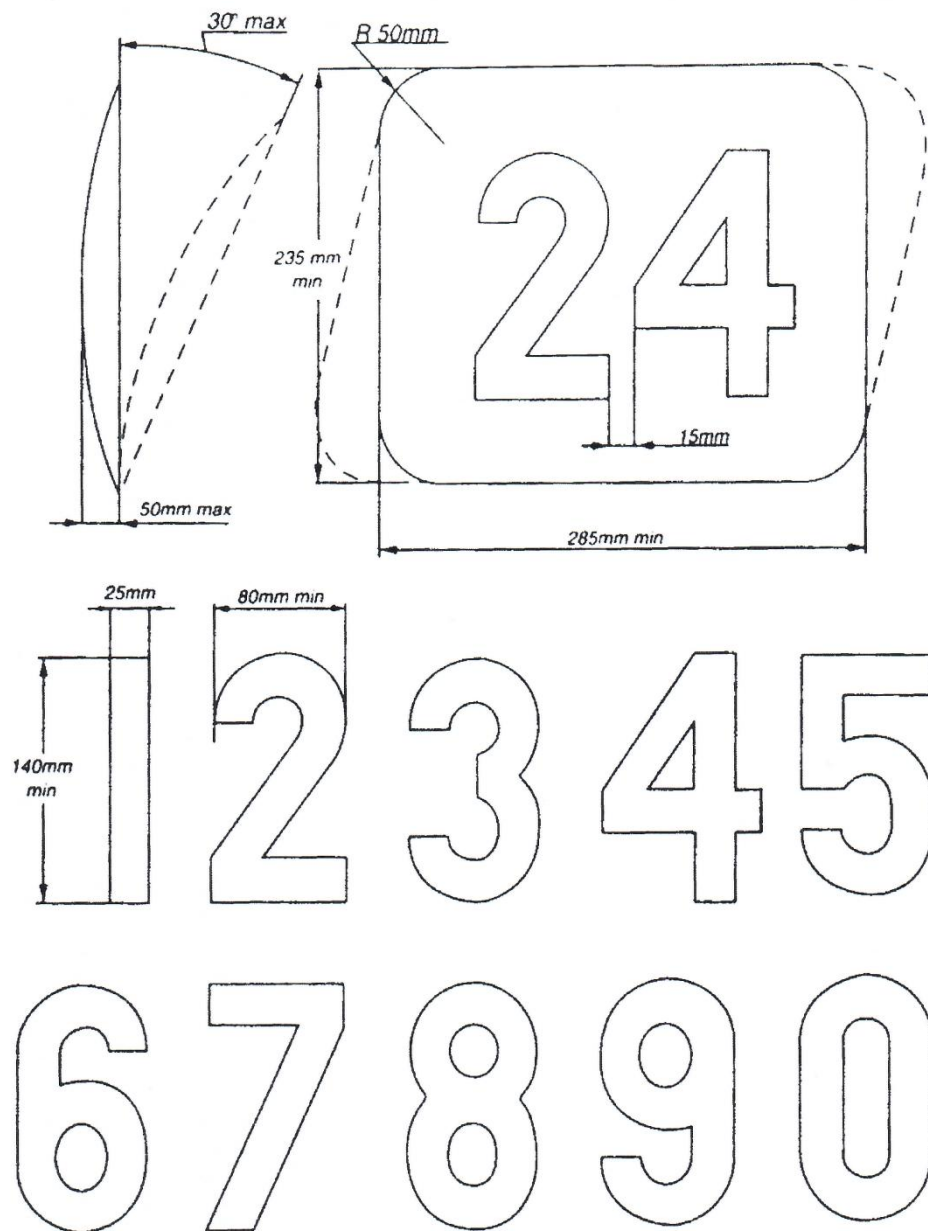
Black	RAL 9005	Red	RAL 3020
Blue	RAL 5010	Green	RAL 6002
Yellow	RAL 1003	White	RAL 9010

Background Colour	Number Colour	Classes
Black Background	White Numbers	Moto 3 /125 GP – Moto 1
Green Background	White Numbers	250 GP – Classic 250cc
Blue Background	White Numbers	350 GP – Classic 350cc – Lightweight Supersport – Supertwins
Yellow Background	Black Numbers	500 GP – Classic 500cc – Production Twins
White Background	Red Numbers	Pre-Injection 600
Yellow Background	Black Numbers	Supersport Cup - Superbike Cup
White Background	Blue Numbers	Supersport
White Background	Black Numbers	Superbike – Classic 1000cc – Sidecar
Red Background	White Numbers	Superstock 1000 - Pre Injection 1000
Black Background	Yellow Numbers	Supermono

(ICC Dec 2019)

6. Motorcycles which do not comply with these rules may not pass scrutineering and/or technical control. The decision of the Technical Steward will be final.

## MCUI NUMBER PLATE, NUMBERS & FONTS GUIDE



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Futura Heavy

0 1 2 3 4 5 6 7 8 9

Futura Heavy Italic

*0 1 2 3 4 5 6 7 8 9*

Univers Bold

0 1 2 3 4 5 6 7 8 9

Univers Bold Italic

*0 1 2 3 4 5 6 7 8 9*

Oliver Med.

0 1 2 3 4 5 6 7 8 9

Oliver Med. Italic

*0 1 2 3 4 5 6 7 8 9*

Franklin Gothic

0 1 2 3 4 5 6 7 8 9

Franklin Gothic Italic

*0 1 2 3 4 5 6 7 8 9*

## NUMBER PLATES

(ICC December 2019)



Background: Black    Number: White Young Guns Challenge – Moto3/125GP - Junior Cup
Background: Green    Number: White 250 GP – 250 Classic
Background: Blue    Number: White 350GP - 350 Classic –Lightweight Supersport - Supertwins
Background: Yellow    Number: Black 500GP - 500 Classic – Production Twins
Background: White    Number: Red Pre-Injection
Background: White    Number: Blue Supersport
Background: Yellow    Number: Black Supersport Cup – Superbike Cup
Background: White    Number: Black Superbike - 1000 Classic – Sidecar – F1 Era
Background: Red    Number: White Superstock 1000 – Pre Injection 1000
Background: Black    Number: Yellow Supermono

If Class not listed within the MCUI Technical Rules, the Technical committee will follow the FIM technical rules for the class background and number colours and issue a class specific bulletin.

(ICC December 2019)