

## **2.8 FUEL, OIL AND COOLANTS**

- a. MotoAmerica reserves the right to nominate a fuel supplier until Jan 15<sup>th</sup> 2016

### **2.8.3 Air**

Only ambient air may be mixed with the fuel as an oxidant.

### **2.8.4 Primary Tests**

**2.8.4.1** The AMA/FIMNA may require tests of fuels to be administered before, or at the time of delivery to, an event at which such fuels are to be used.

**2.8.4.2** Fuel companies supplying fuels to participating teams must submit ten litres (2 x 5 L) to the laboratory appointed by the AMA/FIMNA for analysis in accordance with the specification. Providing the fuel is within the specification, a certificate containing a test report number will be issued to the fuel company. The fuel company must provide a copy of the test report number to the appropriate rider/teams before they take part in a race. Contact for fuel analysis [technicaldirector@motoamerica.com](mailto:technicaldirector@motoamerica.com)

### **2.8.5 Fuel Sampling and Testing**

- 1) The MotoAmerica Technical Director has the sole responsibility for the administration and supervision during the taking of fuel samples.
- 2) The preferred fuel test method is gas chromatography or GC Fingerprint method.

Gas chromatography (GC) is an analytical technique for separating compounds based primarily on their volatility and polarity. Gas chromatography provides both qualitative and quantitative information for individual compounds present in a sample. Gas chromatography is widely used for the analysis of fuels.

The GC Fingerprint is a comparison between the given reference and the fuel drawn from the competitor. With the fingerprint method any changes in composition and concentration of the fuel against the reference is detected. The separation is done with a non-polar column suitable for fuels analysis. The detection of the components is done with a flame ionisation detector.

- 3) If other test methods are required, fuel samples will be transported to the appointed laboratory by an official courier, using the appropriate containers.

- 4) Riders selected for fuel controls will be directed with their motorcycles to the inspection area.
- 5) Only new sample bottles will be used for the fuel samples.
- 6) The fuel to be tested will be transferred into three bottles (3 small sample containers), marked A, B and C, and identified by reference to the motorcycle from which the sample was taken. The bottles will be closed, sealed and labelled by the MotoAmerica Technical Director and/or the Fuel Analysts.
- 7) The Fuel Sample Declaration form will be filled out immediately, containing all information as shown on the sample sheet, including the riders' name and race number, date and place of fuel sampling. A responsible team member will sign this declaration, after verifying that all the information is correct.
- 8) Sample A and B will be given to the appointed laboratory staff, present at the event for analysis or be sent to the respective laboratory by the organiser if no trackside laboratory is available. Sample B will be kept by the laboratory staff as a retained sample in case of a dispute. All samples will be accompanied by a copy of the Fuel Sample Declaration form. Costs for the analyses of sample A and B will be paid by MotoAmerica.
- 9) Sample C will be handed over to the AMA/FIMNA for safeguarding in case of protests and/or requirement of a counter-expertise by the AMA/FIMNA appointed laboratory, accompanied by a copy of the Fuel Sample Declaration form. Costs for the analyses of sample C will be paid by the team concerned.
- 10) As soon as possible after receipt of the samples and completing the testing, the Fuel Analyst/AMA/FIMNA appointed laboratory will report the results of the fuel sample analyses directly to the MotoAmerica Technical Director.
- 11) In the case of non-conformity, the MotoAmerica Technical Director must notify the results to MotoAmerica, the Race Direction and the rider/team representative concerned. Failure of the sample to correspond to the controlled fuel will result in the disqualification of the competitor. The result of the competitor's fuel sample analysis ("A" or "B" sample) more favorable to the competitor will be taken into account.
- 12) Within 48 hours of the receipt of the notification of the results of the test of sample A and/or B, the team must notify MotoAmerica and the MotoAmerica Technical Director if a counter-expertise is required (or not required) for sample C.
- 13) The Race Direction will take a decision at the Superbike, Supersport and Superstock event immediately following the notification of the results of the final expertise. Any appeal against the decision of the Race Direction will be heard by the FIMNA Stewards appointed for the Superbike, Supersport and Superstock event at which the Race Direction decision is taken. This will take place after the C sample has been analysed.

## **2.8.6 Fuel Storage**

Fuel must only be stored in metal, sealable containers in the competitor's pit.

Fire fighting equipment, protective devices and staff must conform to the requirements imposed by the local authorities and by-laws.

The organiser must have fire extinguishers of a size and type approved by the local by-laws, available to each competitor in the pit area.

## **2.8.7 Coolants**

The only liquid engine coolants permitted other than lubricating oil shall be water or water mixed with ethyl alcohol.

## **2.9 PROTECTIVE CLOTHING AND HELMETS**

**2.9.1** Riders must wear a complete leather suit with additional leather padding or other protection on the principal contact points, knees, elbows, musters, hips etc.

**2.9.2** Linings or undergarments must not be made of a synthetic material which might melt and cause damage to the riders' skin.

**2.9.3** Riders must also wear leather gloves and boots, which with the leather suit provide complete coverage from the neck down.

**2.9.4** Leather substitute materials may be used, providing they have been checked by the MotoAmerica Technical Director.

**2.9.5** Use of a back protector is highly recommended.

**2.9.6** Riders must wear a helmet which is in good condition, provides a good fit and is properly fastened.

**2.9.7** Helmets must be of the full face type (integral) and conform to one of the recognized international standards:

- Europe ECE 22-05 'P'
- Japan JIS T 8133 :
- USA SNELL M 2010

**2.9.8** Visors must be made of a shatterproof material.

**2.9.9** Disposable "tear-offs" are permitted.

**2.9.10** **The riders clothing must include their name, emergency contact, and blood type adhered to the left-side lining adjacent to the main zipper.**

**2.9.11** Any question concerning the suitability or condition of the riders clothing and/or helmet shall be decided by the MotoAmerica Technical Director, who may, if he so wishes, consult with the manufacturers of the product before making a final decision.

## **2.10 PROCEDURES FOR TECHNICAL CONTROL**

A rider is at all times responsible for his motorcycle.

**2.10.1** At each circuit the Technical Checking Area consisting of the *parc fermé* and the inspection area must be clearly defined:

### **a) Parc fermé**

The *parc fermé* is a restricted access area sealed with fences or other physical divisions with one or more gates.

The gates and the area are under the control of marshals when the *parc fermé* is in use (e.g. after practice/race).

The *parc fermé* area must be sufficiently large to give shelter to all participating motorcycles.

The only persons allowed to enter the *parc fermé* are the:

- MotoAmerica Technical Director and Technical Staff
- Race Direction Members
- FIMNA Stewards
- Tire Manufacturer's staff
- Riders and Team Managers of motorcycles staying in the *parc fermé*
- Up to 3 Team Mechanics until dismissed by the technical stewards

No other persons have the right to enter and stay in the *parc fermé* unless invited by the MotoAmerica Technical Director.

### **b) Inspection area**

The inspection area is a sensitive area where motorcycles are disassembled and inspected and technical meetings are held. Therefore, the inspection area is highly restricted.

The following persons are allowed to remain in the inspection area:

- The MotoAmerica Technical Director and Technical Staff
- The Race Direction Members

- The FIMNA Stewards
- The Riders, Team managers or their representatives of the inspected motorcycles
- For disassembling operations, up to 3 mechanics per motorcycle may be present

Any other persons may enter or stay in the inspection area at the sole discretion of the MotoAmerica Technical Director. In case of an engine inspection, the inspected entrant has the right to request a reserved area where other entrants cannot watch closely.

In the inspection areas, under the control of the Technical Manager and the supervision of the MotoAmerica Technical Director, suitable equipment will be installed to conduct the various tests, e.g.

- i) Equipment for measuring the noise of the motorcycle
- ii) Weighing scales with check weights for calibration purposes
- iii) Instruments for measuring engine capacity
- iv) Rulers and degree discs and gauges for measuring other dimensions

**2.10.2** The technical control procedure will be carried out in accordance with the schedule set out in these Regulations. The Technical Stewards must be available throughout the event to check motorcycles and equipment as required by the MotoAmerica Technical Director.

**2.10.3** Presentation of a motorcycle will be deemed as an implicit statement of conformity with the technical regulations. A rider's presence at the technical control is not mandatory.

**2.10.4** The motorcycle will be inspected under the name of the rider.

**2.10.5** For each motorcycle the Technical Stewards will prepare a technical control card on to which will be recorded, amongst other information, the team presenting the motorcycle and the rider.

**2.10.6** The Technical Stewards must inspect the motorcycle for obvious safety omissions and the MotoAmerica Technical Director may, at his discretion, choose to check the motorcycles for technical compliance with all other aspects of these Regulations.

**2.10.7** The MotoAmerica Technical Director will refuse any motorcycle that does not have a correctly-positioned positive transponder attachment. The transponder must be fixed to the motorcycle in the position and orientation as shown in the Timekeeping information given to teams pre-season and available at each event. Positive attachment of the transponder bracket consists of a minimum of tie-wraps, but preferably by screw or rivet. **Velcro or adhesive alone will not**

**be accepted. The transponder retaining clip must also be secured by a tie-wrap.**

**2.10.8** At the conclusion of the check, the Technical Stewards will place a small sticker on the motorcycle indicating that it has passed the safety checks.

**2.10.9** The Technical Manager will prepare a report on the results of technical control which, will be submitted to the Event Management Committee via the MotoAmerica Technical Director.

**2.10.10** The Technical Stewards must re-inspect any motorcycle that has been involved in an accident. This would normally be carried out at the inspection area.

**2.10.11** The Technical Stewards must be available, based on instructions from the MotoAmerica Technical Director, to re-inspect any motorcycle for technical compliance during the meeting or after the race and to supervise inspection of a motorcycle following a protest on a technical matter.

**2.10.12** At the end of Superpole 1, the Technical Manager will ensure that the classified motorcycles are placed in the parc fermé for a period of at least 30 minutes after the end of the session.

At the end of Superpole 2, the Technical Manager will ensure that classified motorcycles are placed in the parc fermé for a period of at least 30 minutes after the end of the session.

At the end of the races, the Technical Manager will ensure that all classified motorcycles are placed in the parc fermé for a period of at least 30 minutes from the end of the race (unless held longer at the discretion of the Technical Director) with the following exception;

At the end of Superbike Race 1 (one) the machines will be allowed to return to their pits where following confirmation of tire stickers by the Technical Director or his approved staff the wheels may be removed. Data may be downloaded, NO other work may be carried out until 15 minutes after the end of Superbike Race 1 (see art 3.4.3). The motorcycle must remain in a visible area during this period. The motorcycles must be checked for compliance according to the Verification Guidelines (Art.2.10), and any other technical requirement if requested by the MotoAmerica Technical Director.

Competitors must retrieve their motorcycles within approximately 30 minutes after the motorcycle entered the parc fermé, except for those motorcycles chosen for disassembly. After this time limit, the parc fermé officials will no longer be responsible for the motorcycles left behind.

**2.10.13** The MotoAmerica Technical Director may require a team to provide such parts or samples as he may deem necessary.

**2.10.14** If a motorcycle is involved in an accident, the MotoAmerica Technical Director or his appointed staff must check the motorcycle to ensure that no defect of a serious nature has occurred. However, it is the responsibility of the rider or the team to present his motorcycle for this re-examination together with helmet and clothing.

If the helmet is clearly defective, the Technical Manager must arrange to retain this helmet. The Medical Director must send this helmet, together with the accident and medical report (and pictures and video, if available) to the AMA/ FIMNA and/or the Federation of the rider.

**2.10.15** Noise may be checked after Superpole as well as after the race. Noise may be checked at any time of the event by request of the MotoAmerica Technical Director. On request of rider, team or mechanic, noise of their own motorcycles can be checked at any time during the event.

**2.10.16** The random weight check during practices will be held with minimum disturbance to the riders.

The MotoAmerica Technical Director has the final authority in case of a dispute on the conformity of the parts in question and for their acceptance.

## **2.11 VERIFICATION GUIDELINES FOR TECHNICAL STEWARDS**

### **2.11.1** Verification for the classes

- Make sure all necessary measures and administrative equipment are in place at least 1 hour before the Technical control is due to open.
- Decide who is doing what and note decisions. "Efficiency" must be the watchword. Always keep cheerful and remember the reasons for Technical controls: SAFETY AND FAIRNESS.
- Be well informed. Make sure MotoAmerica has supplied you with all technical "updates" that may have been issued subsequent to the printing of the Technical Regulations. Copies of all homologation documents must be in your possession.
- Inspection must take place under cover with a large enough area (min. surface 100 sq. metres).
- Weighing apparatus must be accurate and practical. The scale must be certified in the current year.

- Rules regarding noise level and measurement must be respected.
- The scales and noise meter will be available to the teams or riders for pre-race checking in the technical control area.

### **In general**

The motorcycles will not be required for weight and/or noise check at the pre-race technical inspection.

Noise test must take place in a clear area adjacent to the Technical control at least 5 metres from any possible noise reflecting obstruction.

The riders and teams must be aware that the weight and noise may be checked at random during practice in the pit-lane, at the end of Superpole and at the end of each race.

Claiming that the noise and weight were not officially controlled before the race will not be grounds for appeal. Conformity of the rules is the responsibility of the rider and the team (or of the participants).

The MotoAmerica Technical Director reserves the right to spot check the weight and noise of any motorcycles on pit row during free practice and official practice. This can occur at any time during the free practice and in the first forty minutes of any official (timed) practice. This will be carried out with the least possible inconvenience to the rider or the team.

Motorcycles arriving later than the first free practice must be controlled in the technical control area.

At the conclusion of the inspections, a small sticker or coloured mark will be placed on the motorcycle indicating that the motorcycle had passed inspection

The MotoAmerica Technical Director/Technical Manager must re-inspect any motorcycle that has been involved in an accident.

The Technical Stewards must be available, based on instructions from the MotoAmerica Technical Director or the Technical Manager, to re-inspect any motorcycle for compliance during the meeting.

### **Dry Superpole**

Each motorcycle which completed the Superpole may be checked.

The minimum checks are weight and noise.



The MotoAmerica Technical Director may request other checks.

### **Superbike/STK 1000 Race 1**

The first five motorcycles plus one at random from six through fifteen can be checked for the following compliance points:

- Weight: The weight will be checked in the condition that the motorcycle has finished the race. No elements can be added to the motorcycle neither fuel, oil, water nor tires.
- Noise
- Throttle bodies / injection: Homologation points

The MotoAmerica Technical Director may request other checks.

### **Superbike/STK 1000 Race 2**

The first ten motorcycles plus one at random from eleven through fifteen can be checked for the following compliance points:

- Weight: The weight will be checked in the condition that the motorcycle has finished the race. No elements can be added to the motorcycle neither fuel, oil, water nor tires.
- Noise.
- Throttle bodies/injection: Measurement and inspection of both inlet and outlet tract. (Homologation points)
- Engine: Any engine, chosen at random, can be checked internally for capacity and compliance with the regulations.

The random choice can be determined by the finishing positions selected prior to the race by the Technical Manager. The MotoAmerica Technical Director may at his absolute discretion require the control of any additional motorcycle and other checks.

The MotoAmerica Technical Director may require a team to provide parts or samples, as he may deem necessary to confirm compliance with the rules.

The MotoAmerica Technical Director may request other checks.

### **Supersport & Superstock 600 Races**

The first ten motorcycles plus one at random from eleven through fifteen can be checked for the following compliance points:

- Weight: The weight will be checked in the condition that the motorcycle has finished the race. No elements can be added to the motorcycle neither fuel, oil, water nor tires.
- Noise.
- Throttle bodies /injection: Measurement and inspection of both inlet and outlet tract.
- Engine: One engine and up to a maximum of three engines, chosen at random, can be checked internally for capacity, cams, valve size, timing, etc.
- Tire, air box and electric starter – compliance.

The random choice can be determined by the finishing positions selected prior to the race by the Technical Manager. The MotoAmerica Technical Director may at his absolute discretion require the control of any additional motorcycle and other checks.

### **2.11.2 Timetable**

The Technical Stewards must be present and available during the opening hours of the Technical control area. The MotoAmerica Technical Director and the Technical Manager will instruct the Technical Stewards to verify motorcycles for compliance with technical and safety rules.

See final instructions for event specific timetable.

### **2.11.3 Equipment list**

- Revolution meter
- Sound meter and calibrator
- Slide calliper
- Depth gauge
- Steel measuring tape
- Seals
- Weighing apparatus (scales) with calibration weights
- Tools for measuring engine capacity
- Tools for measuring valve lift

- Weighing apparatus for investigation of valve weights
- Color for marking parts
- Magnet for materials testing
- Computer with Homologation Documents

#### **2.11.4 Documents list**

- Regulations of the CURRENT year.
- Homologation documents
- Homologations Information
- Technical control forms
- Writing materials

## **2.12 SOUND LEVEL CONTROL**

### **Sound limits in force:**

The maximum sound level shall be measured at a mean piston speed of 11 m/sec. The fixed RPM specified in Art. 2.12.6 may be used.

**2.12.1** With the microphone placed at 50 cm from the exhaust pipe at an angle of 45° measured from the center-line of the exhaust end and at the height of the exhaust pipe, but at least 20 cm above the ground. If this is not possible, the measurement can be taken at 45° upwards.

**2.12.2** During a sound test, motorcycles not equipped with a gear-box neutral must be placed on a stand.

**2.12.3** The silencers will be marked when they are checked and it is not allowed to change them after the verification, except for any spare silencer which has also been checked and marked.

**2.12.4** The rider shall keep his engine running out of gear and shall increase the engine speed until it reaches the specified Revolutions Per Minute (RPM). Measurements must be taken when the specified RPM is reached.

### **2.12.5 Noise control**

Due to the similarity of the piston stroke in different engine configurations within the capacity classes, the noise test will be conducted at a fixed RPM. For reference only, the mean piston speed at which the noise test is conducted is calculated at 11 m/sec.

	2 cylinders	3 cylinders	4 cylinders
600cc	5,500 RPM	6,500 RPM	7,000 RPM
750cc	5,500 RPM	6,000 RPM	7,000 RPM
over 750cc	5,000 RPM	5,000 RPM	5,500 RPM

The maximum sound level for engines with more than one cylinder will be measured on each exhaust end.

A motorcycle which does not comply with the maximum sound limits may be presented several times at pre-race control.

The surrounding sound must not exceed 90 dB/A within a 5 metres radius from the power source during tests.

Apparatus for noise control must be to international standard IEC 651, Type 1.

The sound level meter must be equipped with a calibrator for control and adjustment of the meter during periods of use.

The "slow response" setting must always be used.

### **2.12.7 Sound control after the competition**

In a competition which requires a final examination of motorcycles before the results are announced, this examination must include a sound control measurement of at least the first three motorcycles listed in the final classification. At this final test, there will be a 3 dB/A tolerance.

### **2.12.7 Noise control during a competition**

In a competition which requires noise control tests during the event, motorcycles must comply with the noise limits without the tolerance in Article 2.11

### **2.12.8 GUIDELINES FOR USE OF SOUND LEVEL METERS**

The Technical Stewards must arrive in sufficient time for discussions with the MotoAmerica Technical Director and other Technical Stewards in order that a suitable test site and testing policy can be agreed.

Sound level measuring equipment must include a compatible calibrator, which must be used immediately before testing begins and always just prior to a re-test if a disciplinary sanction may be imposed.

Two sets of equipment must be available in case of failure of tachometer, sound level meter or calibrator during technical control.

Tests may take place in rain or excessively damp conditions. Motorcycles considered excessively noisy must be individually tested if conditions allow.

In other than moderate wind, motorcycles must face forward in the wind direction. (Mechanical noise will blow forward, away from microphone).

'Slow' meter response must be used.

'A' weighted setting on sound level meter.

No rounding down of the meter reading, that is: 110.9 dB/A = 110.9 dB/A.

### **2.12.9 Corrections**

Type 1 meter: deduct 1 dB/A

### **2.12.10 Precision of the method (tolerances)**

All corrections are accumulative. Action and decisions will depend on the Sporting Discipline concerned, and decisions taken during prior discussions with the MotoAmerica Technical Director.



**AMA / FIM NORTH AMERICA ROAD RACING  
FUEL SAMPLE DECLARATION FORM**

FUEL SAMPLES TAKEN ON ..... /..... / ..... FOR LABORATORY ANALYSIS

RIDER N°:	Sample Can "A"	
	Can Label N°	Can Seal N°
SESSION:	Sample Can "B"	
	Can Label N°	Can Seal N°
RIDER NAME:	Sample Can "C"	
	Can Label N°	Can Seal N°

MOTORCYCLE MAKE: \_\_\_\_\_

TEAM: \_\_\_\_\_

The above listed details refer to fuel samples taken from the fuel tank of the motorcycle specified after the race while in the Check Area for a period of 60 minutes pending any protest.

Sample "A" and "B" will go to the laboratory appointed by the AMA/FIM North America for analysis. Sample "B" will be kept by the laboratory staff as a retained sample in case of a dispute.

Sample "C" will be safeguarded by the AMA/FIMNA in case of protests and/or counter-expertise is required.

As a responsible member of the team named on this sheet, I,

(print name): \_\_\_\_\_

have controlled the serial numbers of can seals and serial numbers of can labels and hereby certify the accuracy of the listed information.

Time: \_\_\_\_\_ (Signature)

Position in team: \_\_\_\_\_  
(OWNER/MANAGER/MECHANIC)

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### **3.4.3 Procedure and time limit for protests**

All protests must be submitted and signed only by the person directly concerned. Each protest must refer to a single subject only and the intention to protest must be notified to Race Direction or to MotoAmerica within 30 minutes of the publication of the results - which is analogous to the end of the race.

The protest must then be confirmed in writing or withdrawn within 1 hour at the latest after the publication of the results.

Following Superbike Race 1 the intention to protest other riders for technical breaches only must be submitted within 15 minutes of the end of the race. For sporting protests the time limits remain as above.

Protests must be handed to a responsible official (Race Direction, Technical Director) together with the protest fee or equivalent.

Teams and riders contracted to compete in the Championship may submit a letter of guarantee from MotoAmerica in lieu of payment.

A protest against the eligibility of a rider, team or a motorcycle to enter a class or event must be made before the start of the official practice.

A protest against a machine on technical control compliance grounds (**e.g.** weight, noise, materials, etc.) may be made after the start of official practice.